

KIC 003660828

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})
003660828-01	OBS	No	1.375572	131.977725	8.9	6.659	8.0	7.3	1.99	8501	0.60	20180.34

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003660828-01	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.

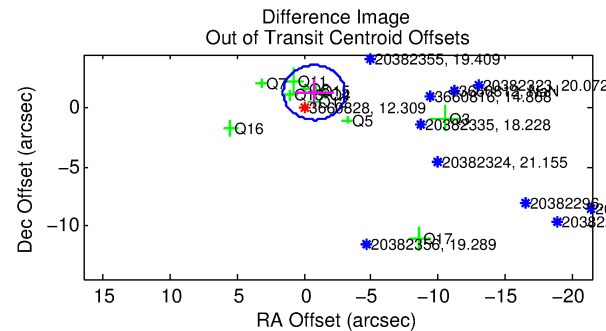
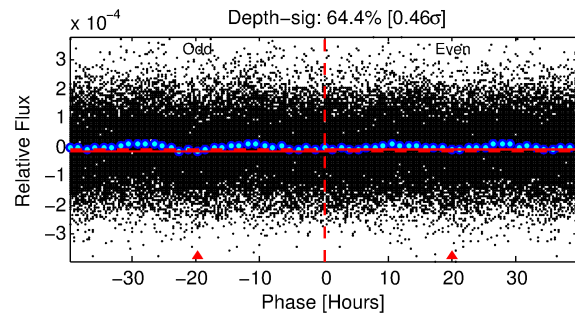
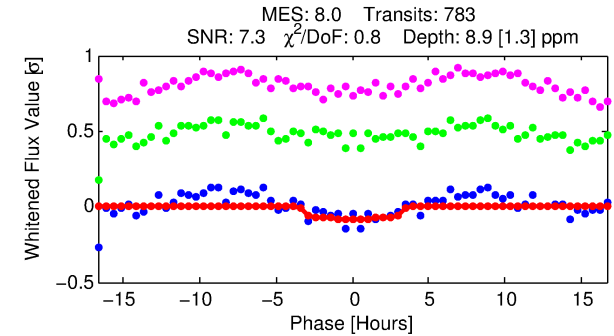
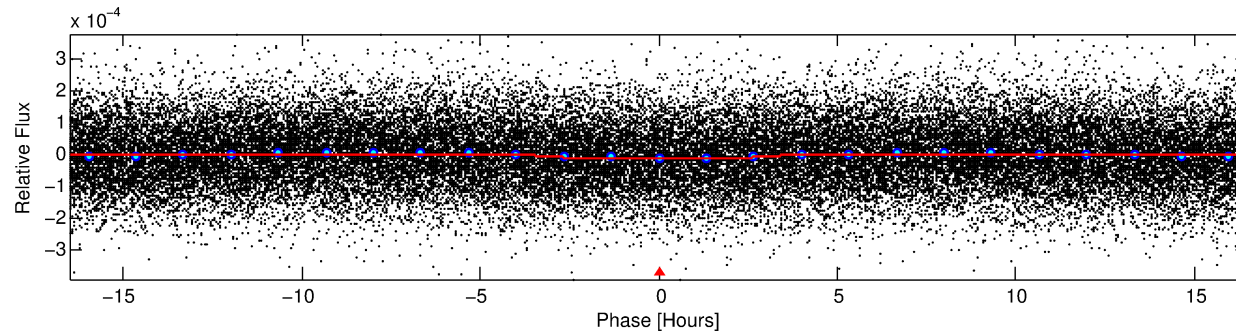
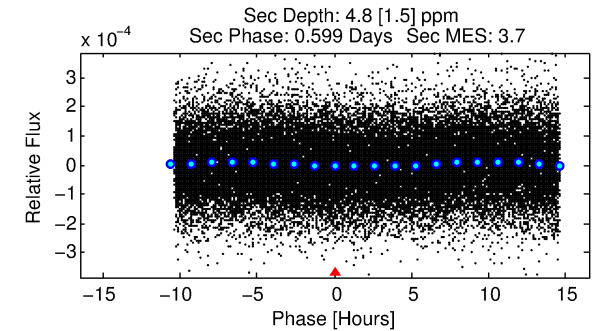
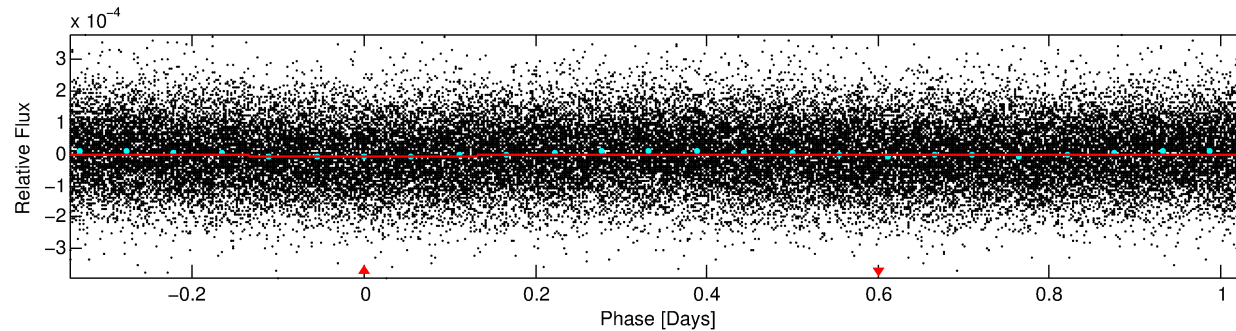
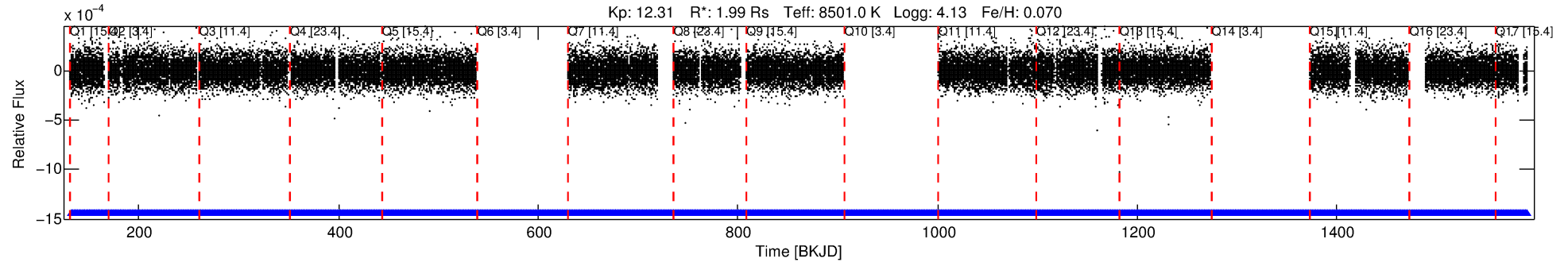
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003660828-01

No Significant Match Found

DV One-Page Summary

KIC: 3660828 Candidate: 1 of 1 Period: 1.376 d



DV Fit Results:

Period = 1.37557 [0.00003] d
Epoch = 131.9777 [0.0089] BKJD
Rp/R* = 0.0028 [0.0045]
a/R* = 1.69 [10.64]
b = 0.09 [104.92]
Seff = 20180.34 [6936.37]
Teff = 3039 [261] K
Rp = 0.60 [0.98] Re
a = 0.0303 [0.0061] AU
Ag = 6.61 [21.49] [0.26σ]
Teffp = 7536 [6107] K [0.74σ]

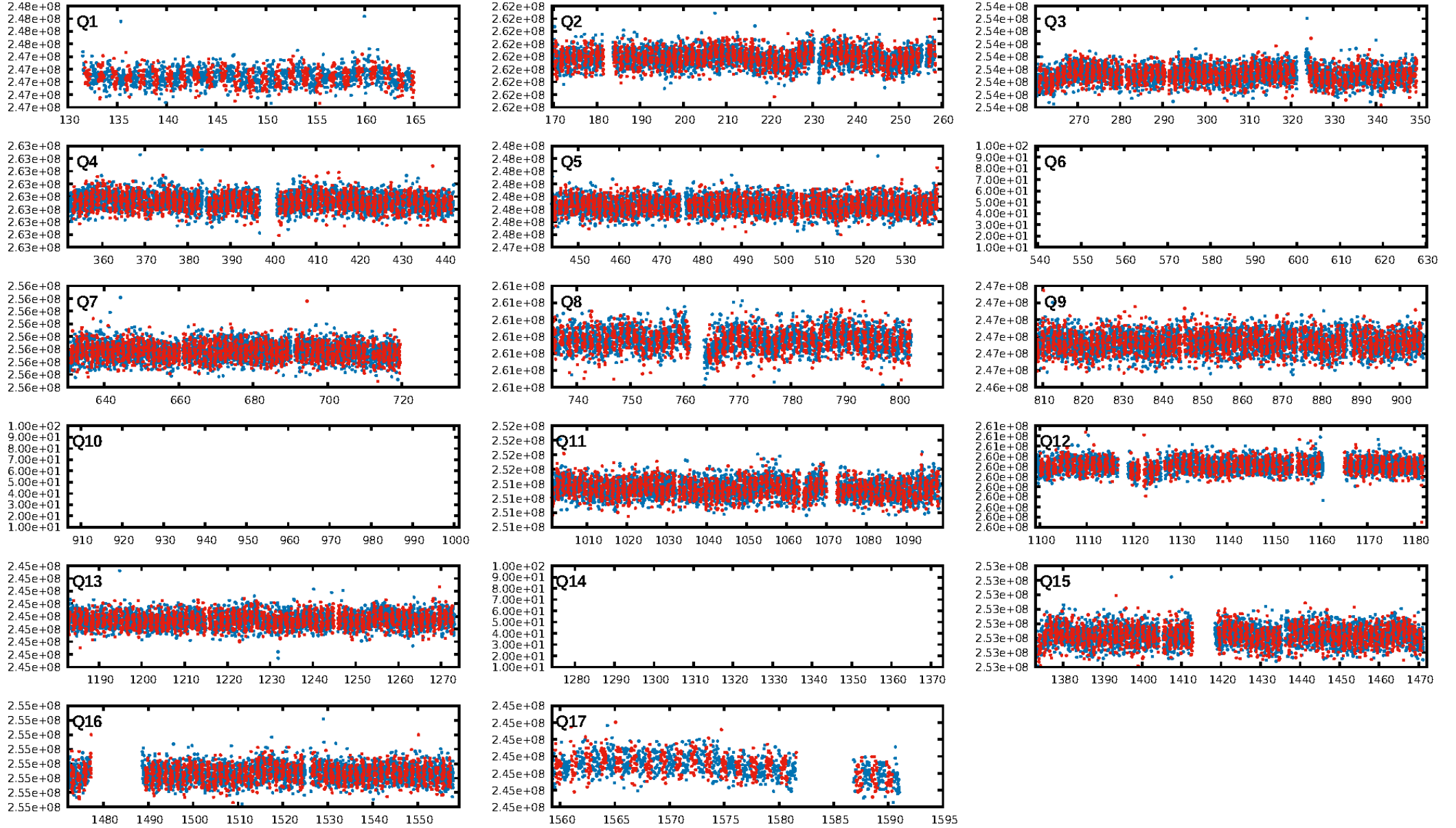
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.82e-11
RollingBand-fgt: 1.00 [739/739]
GhostDiagnostic-chr: 0.7682
Centroid-sig: 61.6%
Centroid-so: 1.197 arcsec [0.62σ]
OotOffset-rm: 1.461 arcsec [1.90σ]
KicOffset-rm: 1.454 arcsec [1.83σ]
OotOffset-st: 0/4/4/3 [11]
KicOffset-st: 0/4/4/3 [11]
DiffImageQuality-fgm: 0.45 [5/11]
DiffImageOverlap-fno: 1.00 [14/14]

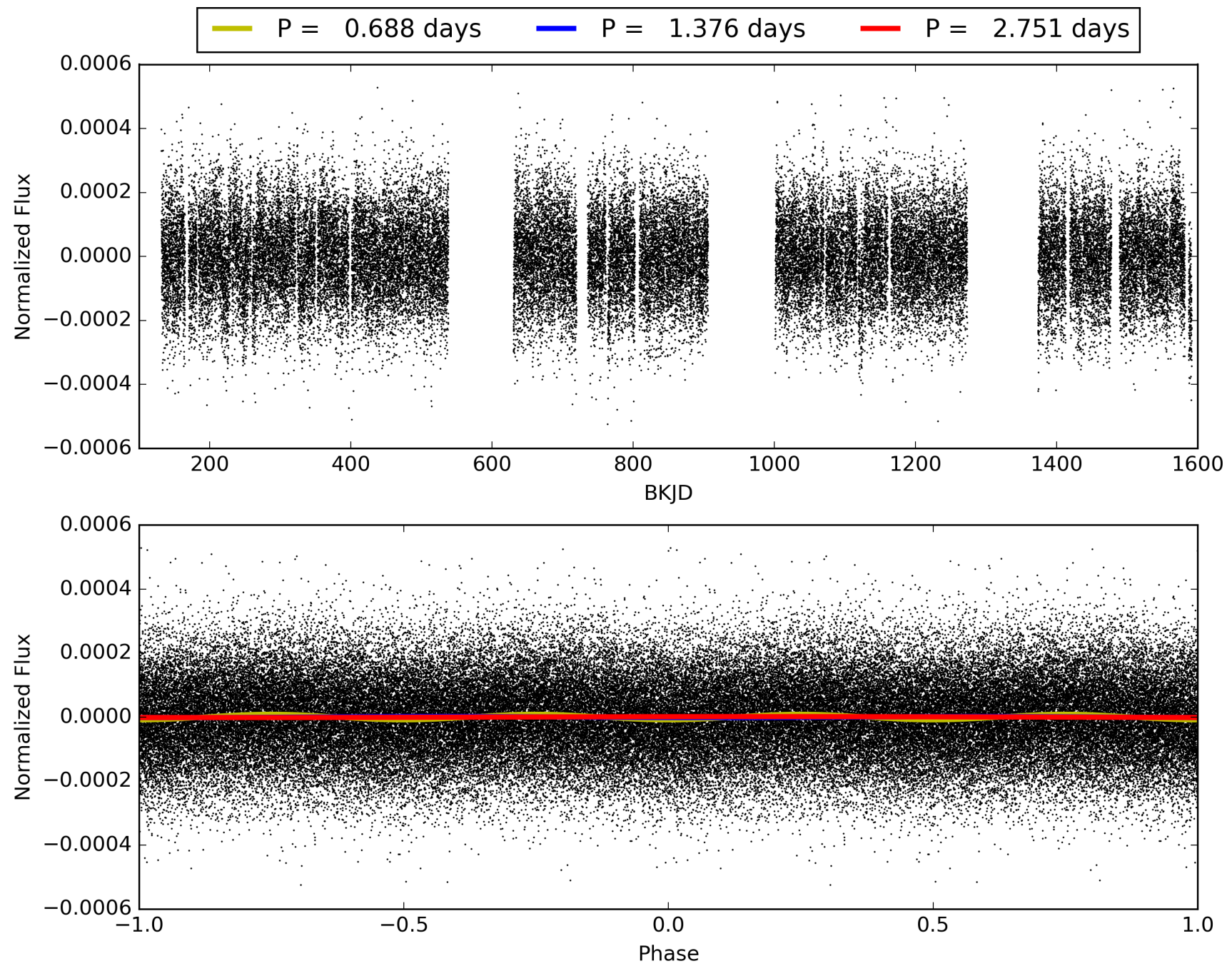
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 15:00:21 Z

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

TCE 003660828-01, PDC Light Curves

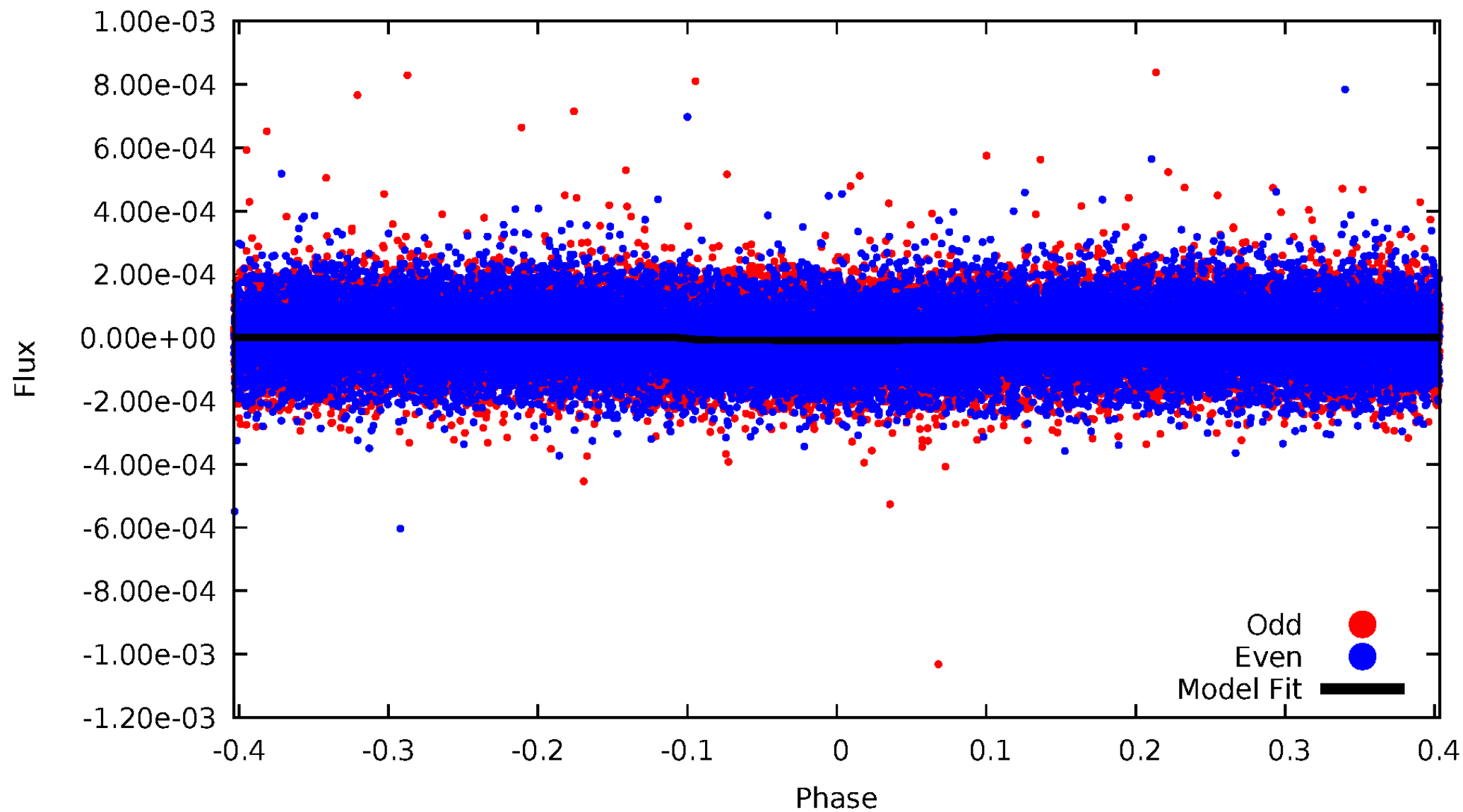


TCE 003660828-01



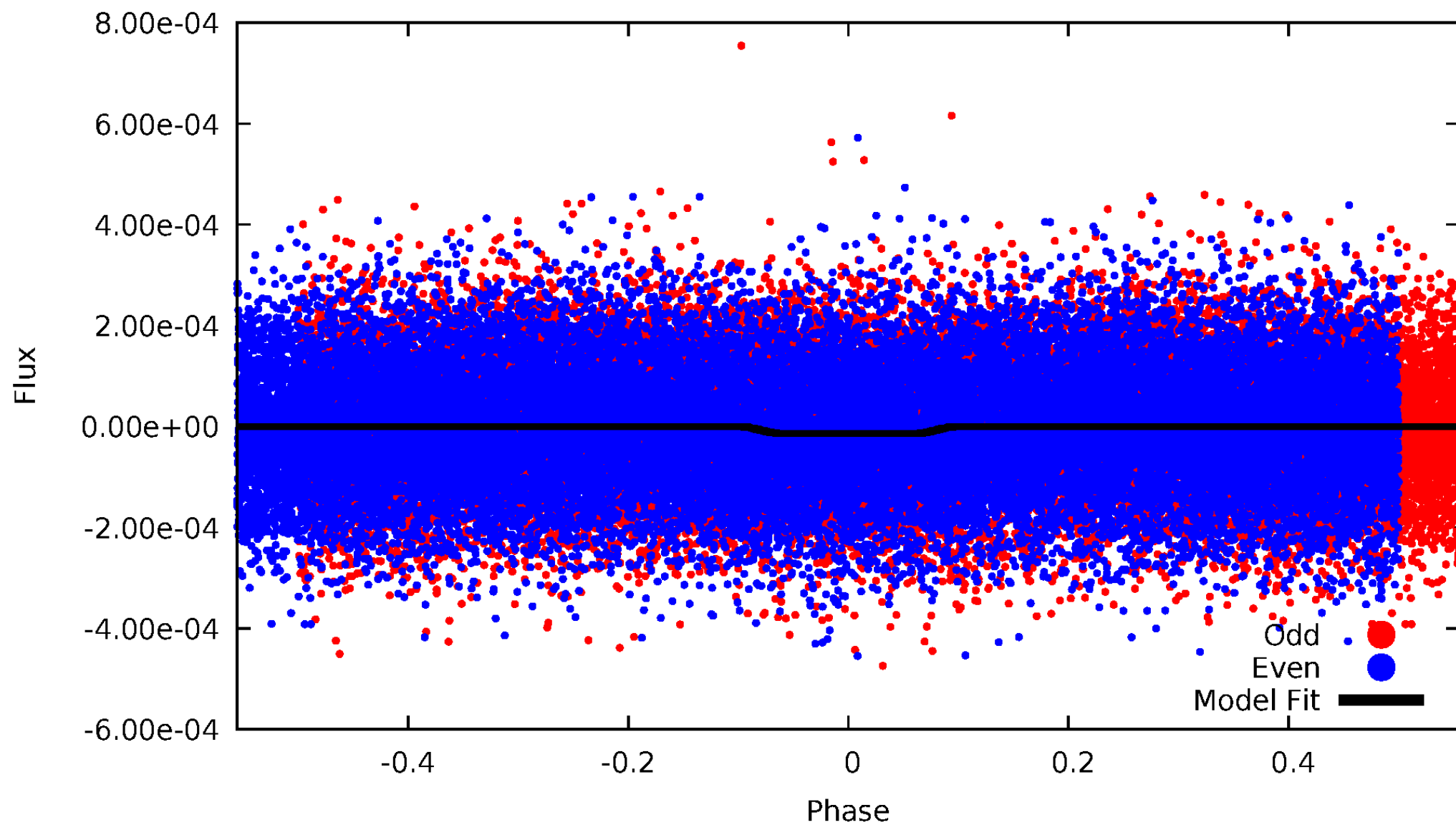
DV Odd/Even

TCE 003660828-01

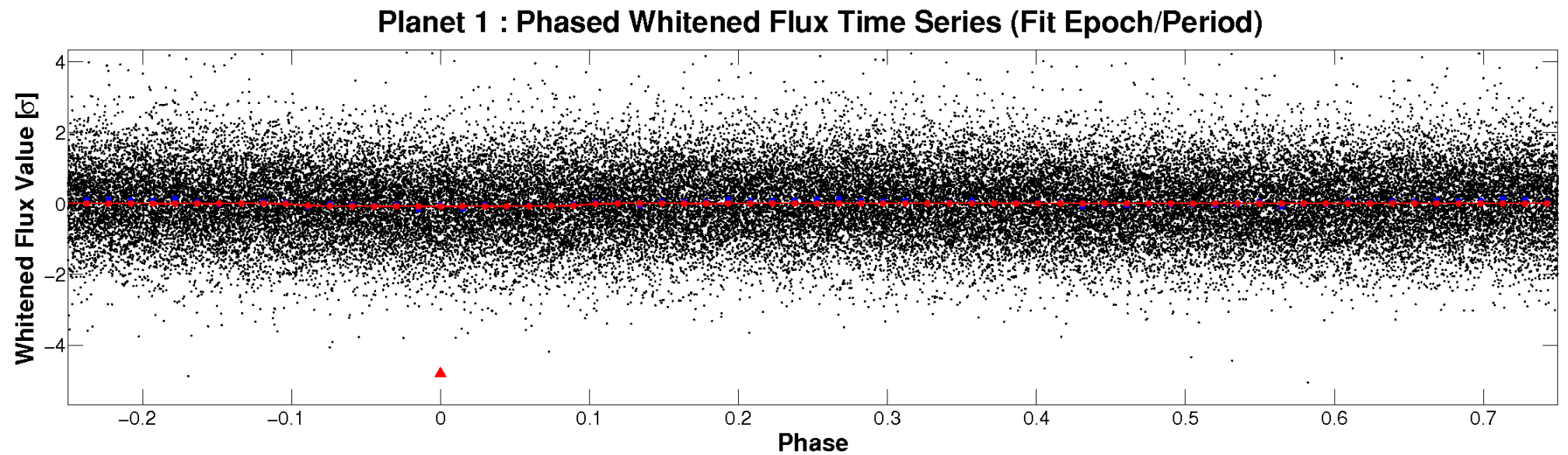
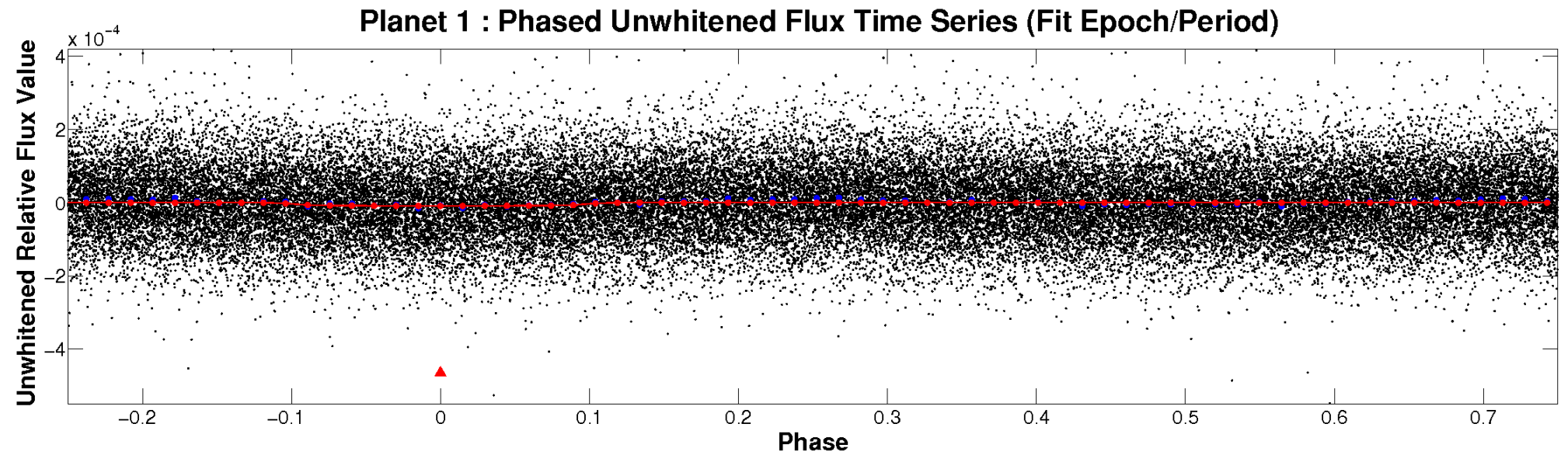


ALT Odd/Even

TCE 003660828-01

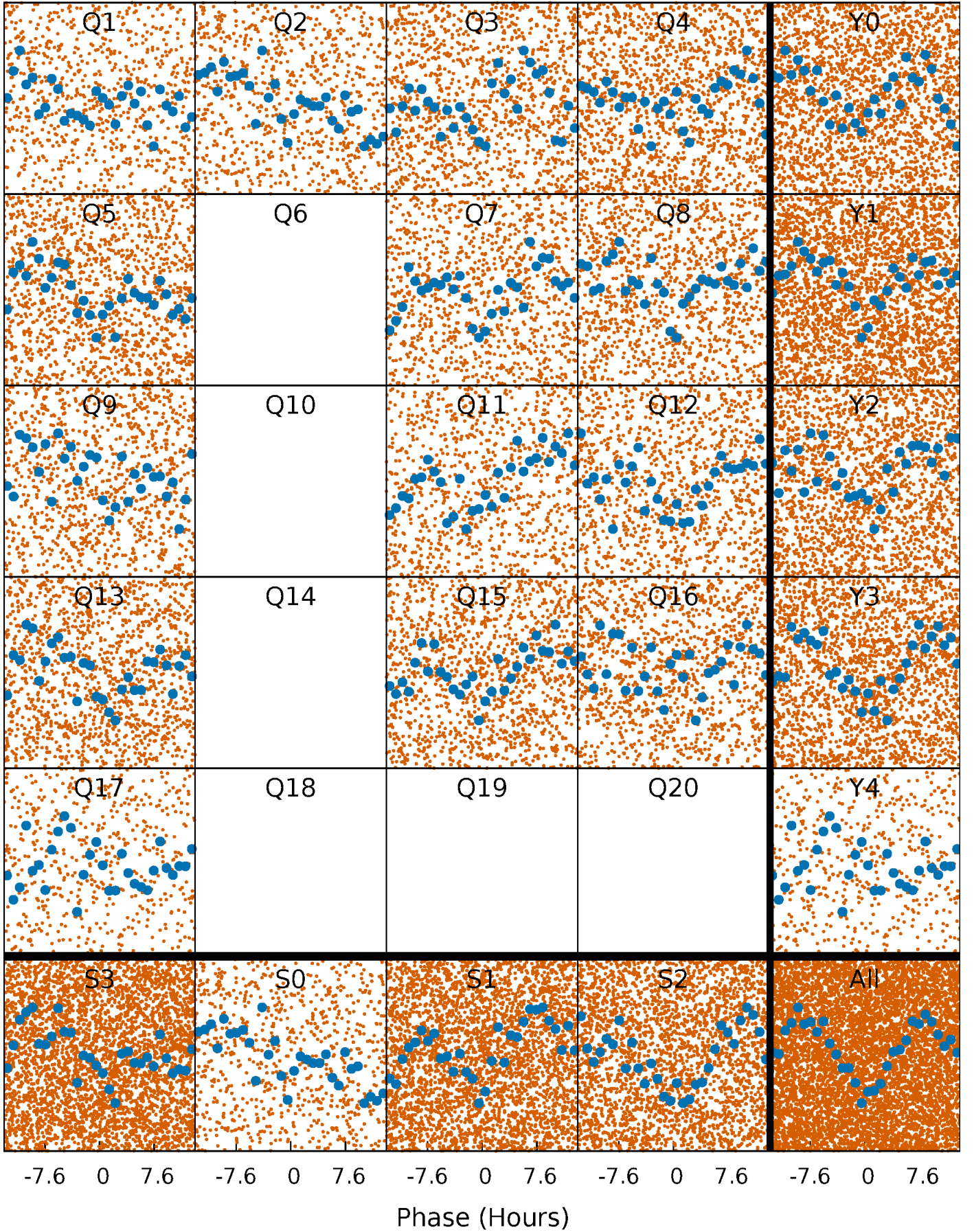


Non-Whitened Vs. Whitened Light Curve



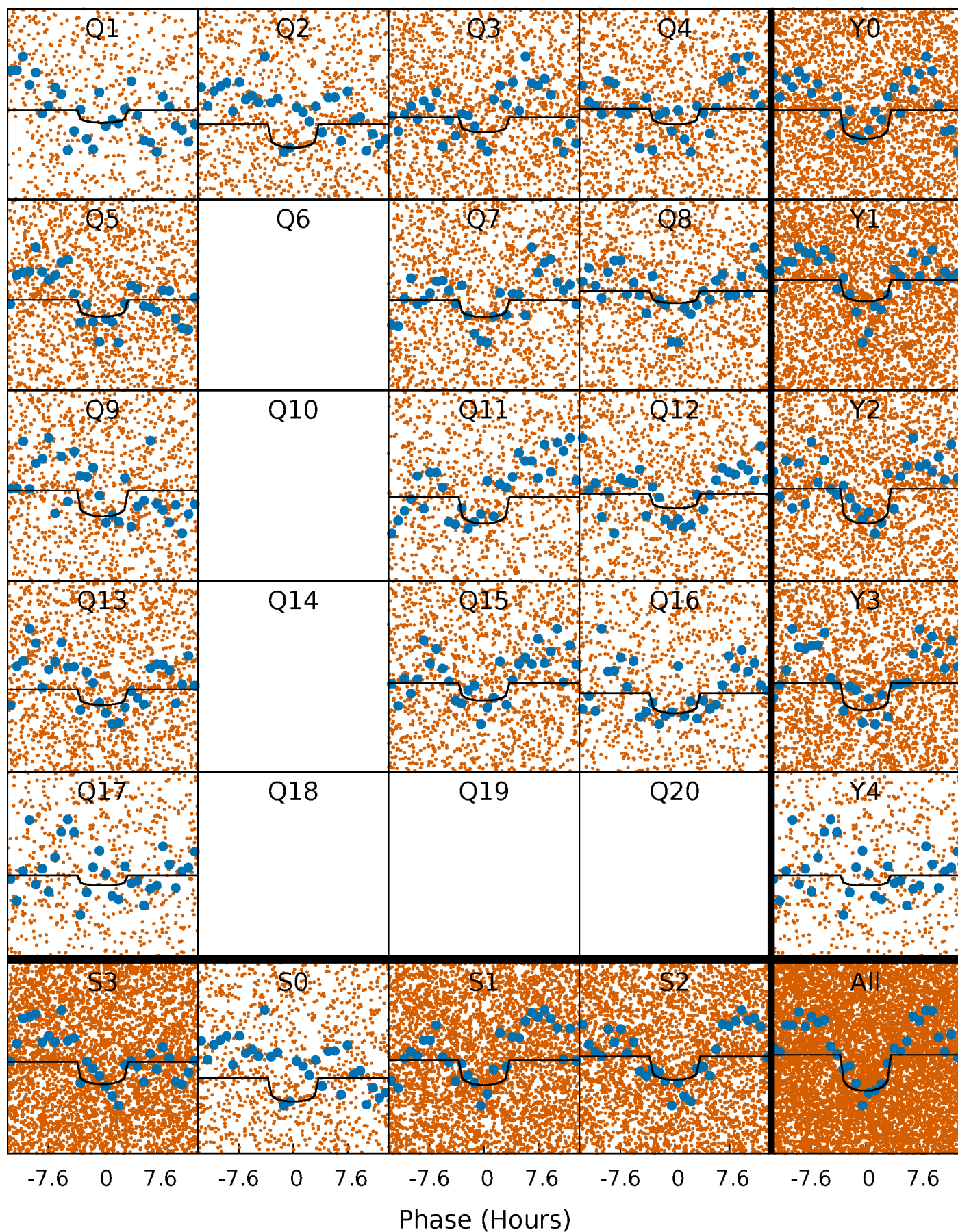
PDC Quarter-Phased Transit Curves

TCE 003660828-01 P= 1.375572 Days $T_0=131.977725$ (BKJD)



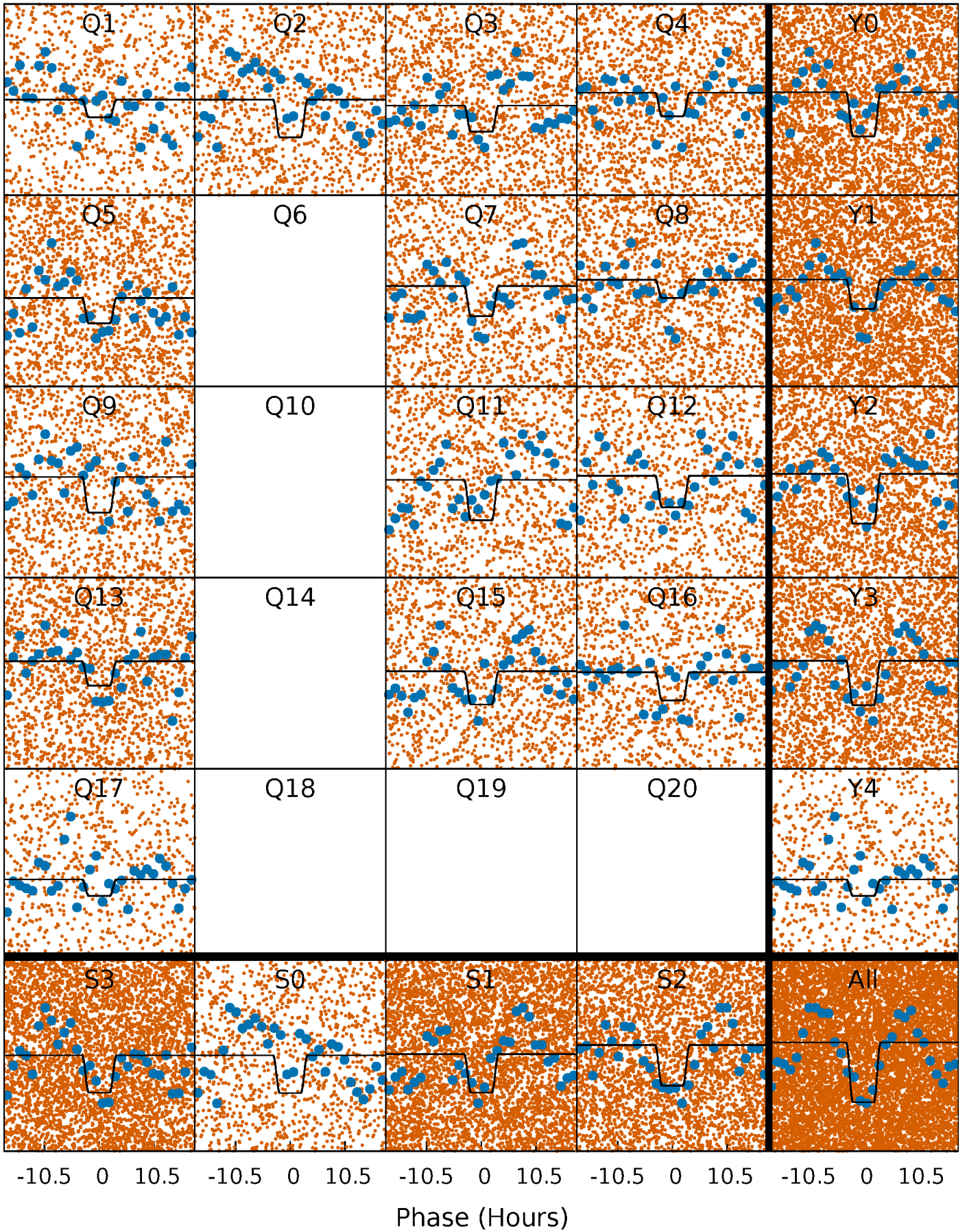
DV Quarter-Phased Transit Curves

TCE 003660828-01 P= 1.375572 Days $T_0=131.977725$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

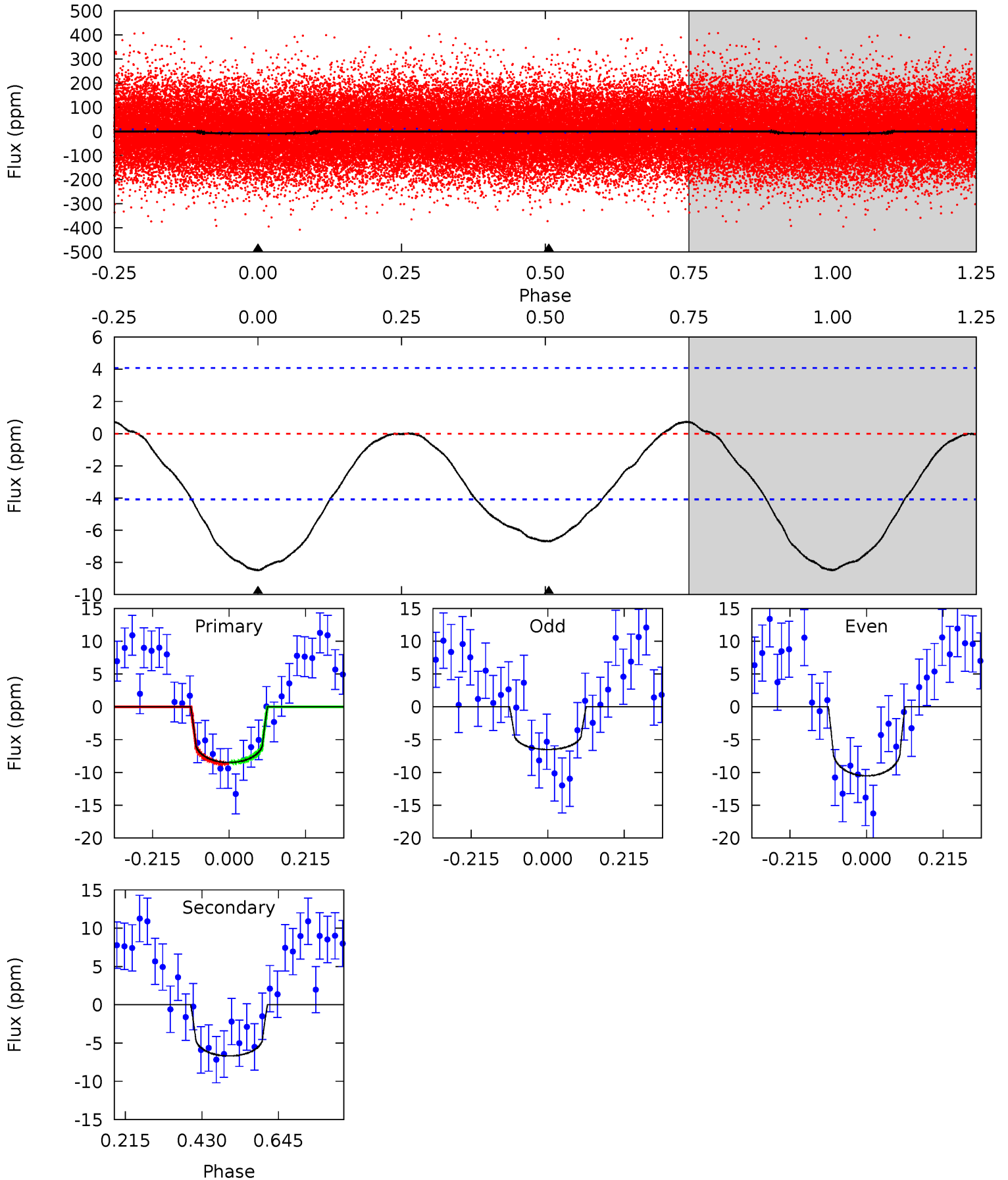
TCE 003660828-01 P= 1.375631 Days $T_0=131.957457$ (BKJD)



DV Model-Shift Uniqueness Test

003660828-01, P = 1.375572 Days, E = 130.602153 Days

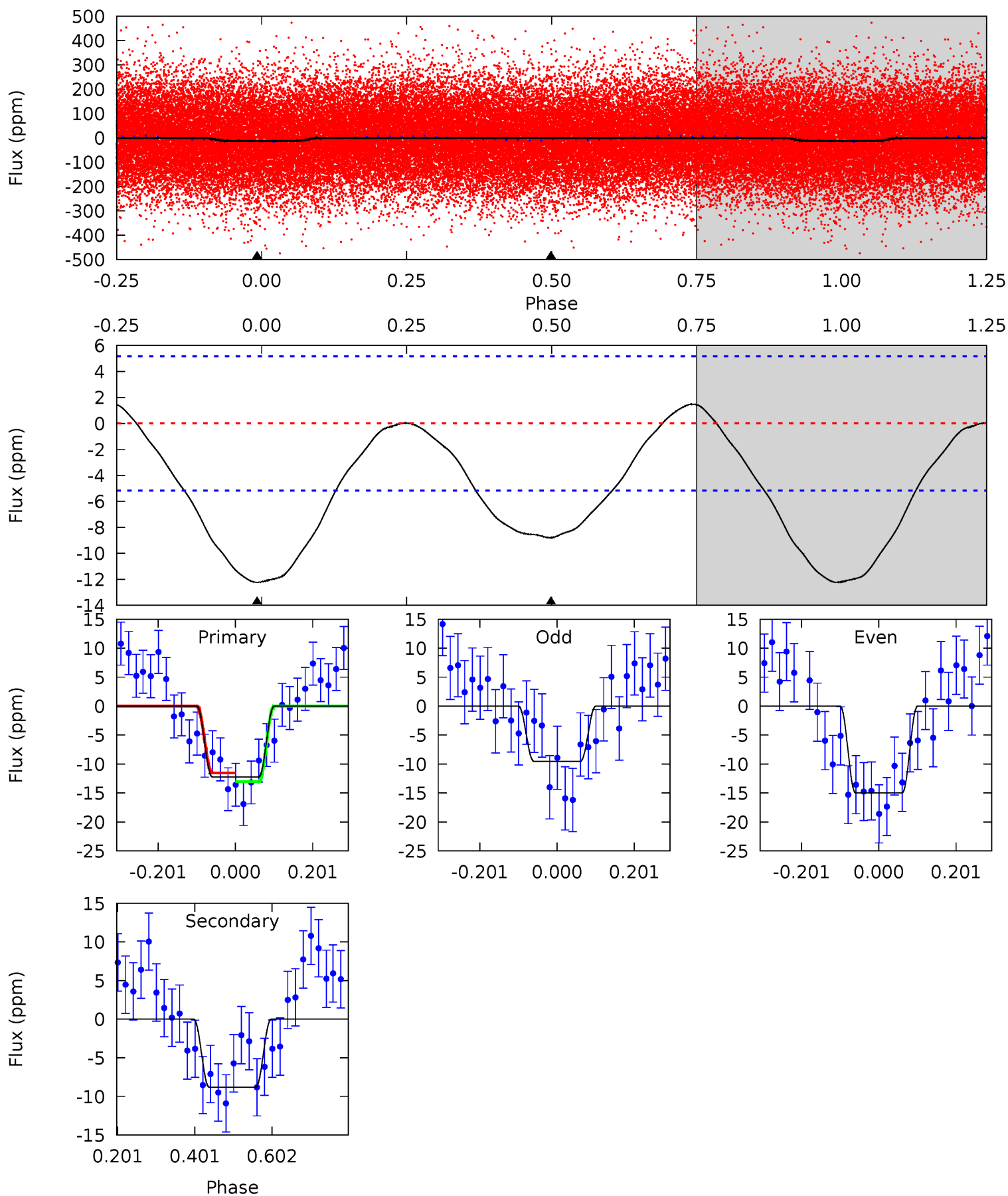
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.15	7.22	0	0	4.40	1.24	0.36	9.15	9.15	7.22	7.22	2.16	0.88	0.08	0.10



Alt Model-Shift Uniqueness Test

003660828-01, P = 1.375631 Days, E = 130.581826 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	7.53	0	0	4.42	1.28	0.66	10.5	10.5	7.53	7.53	2.34	0.88	0.11	0.64



Stellar Parameters For KIC 003660828

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8501^{+234}_{-402}	$4.132^{+0.112}_{-0.154}$	$0.070^{+0.250}_{-0.550}$	$1.987^{+0.485}_{-0.397}$	$1.953^{+0.363}_{-0.400}$	$0.351^{+0.213}_{-0.154}$
	+3%/-5%	+3%/-4%	+357%/-786%	+24%/-20%	+19%/-20%	+61%/-44%
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 003660828-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-7 ± 1	$0.91^{+0.85}_{-0.57}$	4254^{+282}_{-255}	6192^{+5830}_{-1731}	$3.862^{+25.075}_{-2.814}$
Alt.	-9 ± 1	$1.02^{+0.87}_{-0.66}$	4263^{+266}_{-275}	6285^{+7089}_{-1655}	$4.002^{+30.732}_{-2.766}$

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

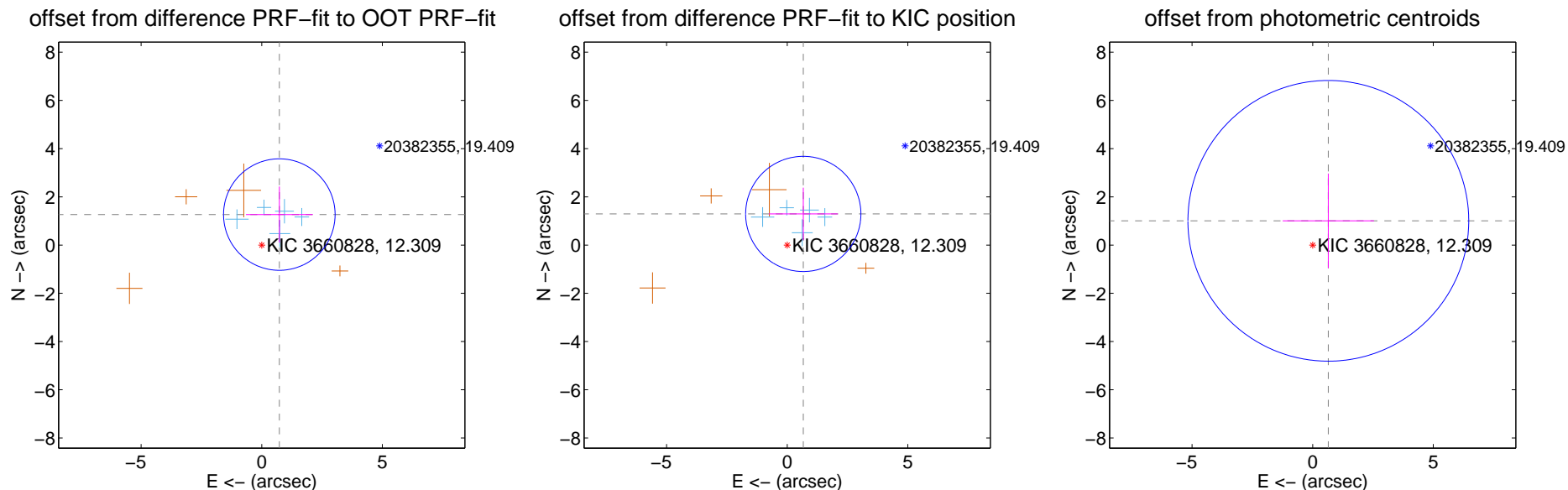
DV Centroid Data

Supplemental centroid analysis for 003660828-01. Kepler magnitude: 12.31. Transit SNR 7.30

There are 5 quarters with good PRF difference image offsets

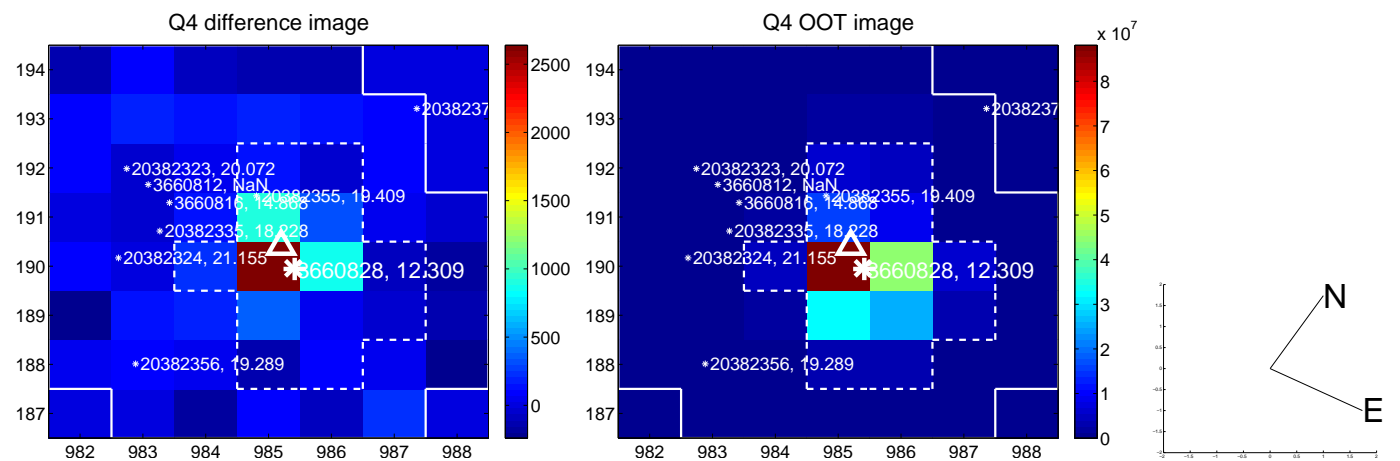
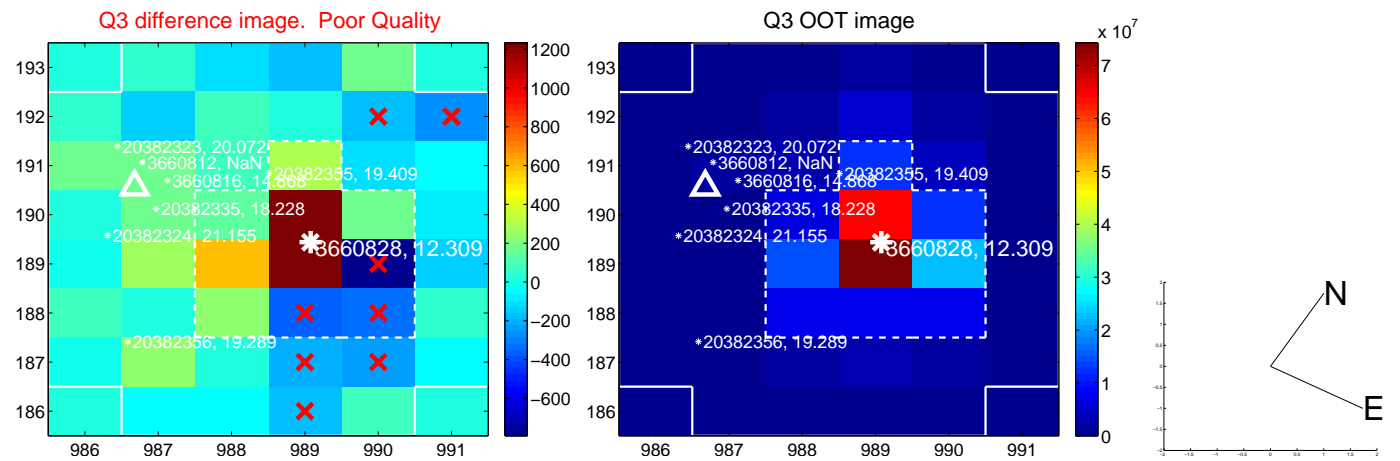
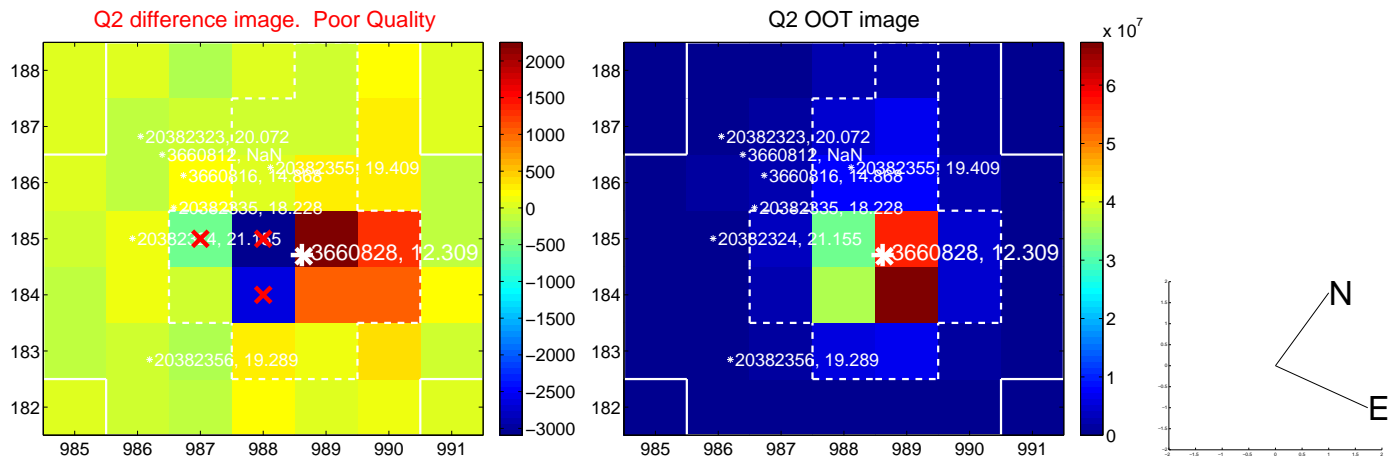
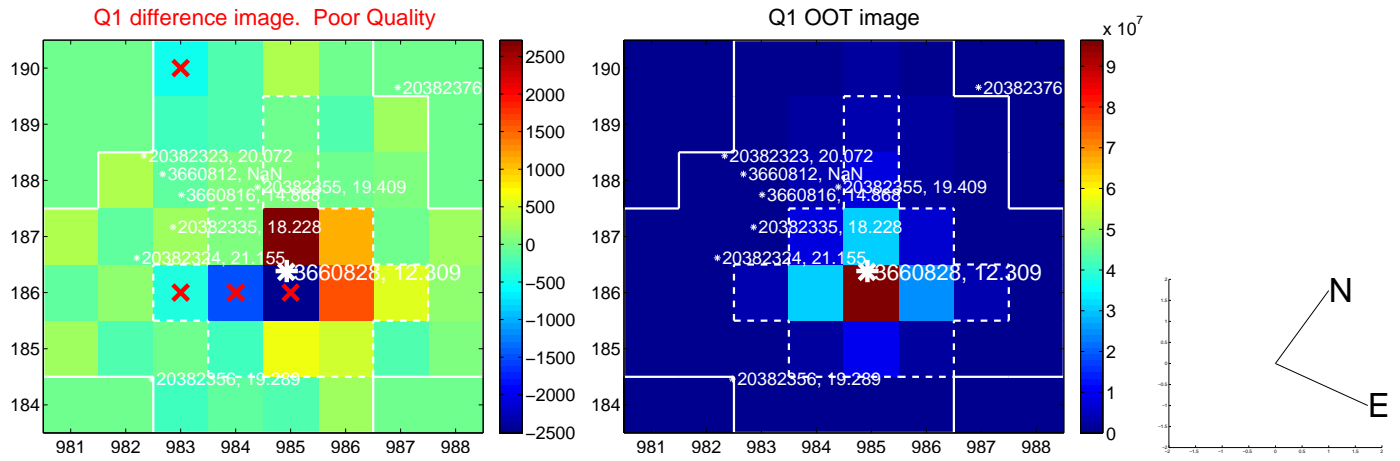
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.461 ± 0.771	1.90	-0.729 ± 1.386	1.265 ± 1.161
PRF-fit source offset from KIC position	1.454 ± 0.796	1.83	-0.666 ± 1.430	1.292 ± 1.088
photometric centroid source offset	1.20 ± 1.94	0.62	-0.65 ± 1.89	1.01 ± 1.96

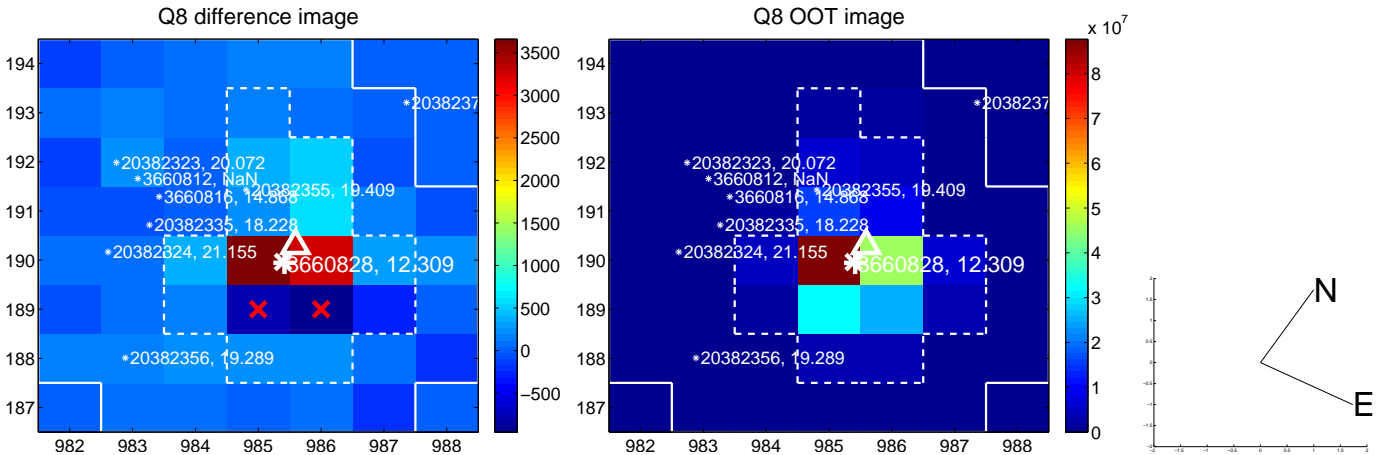
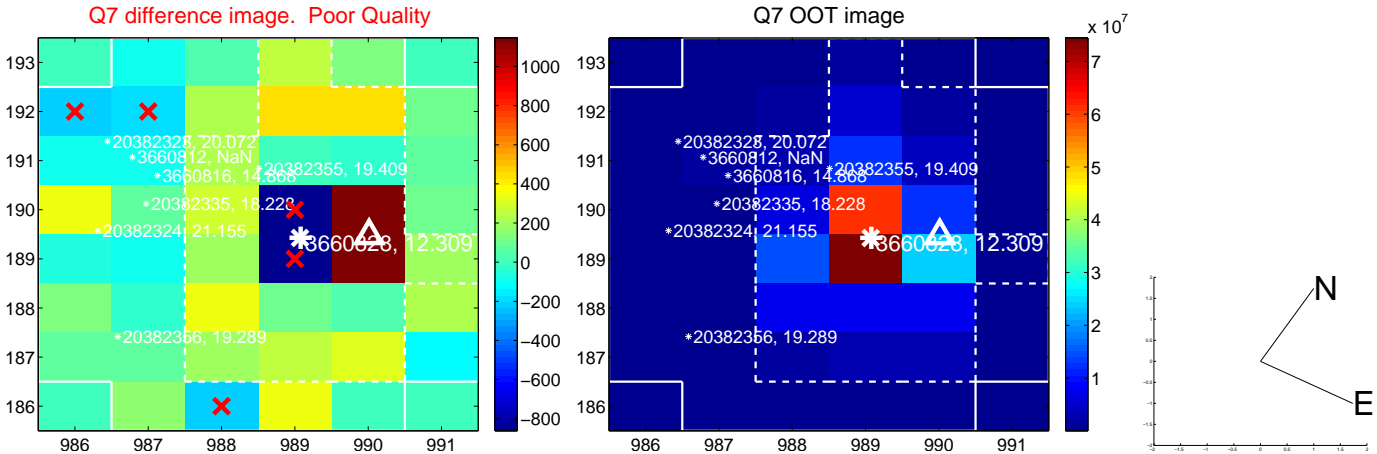
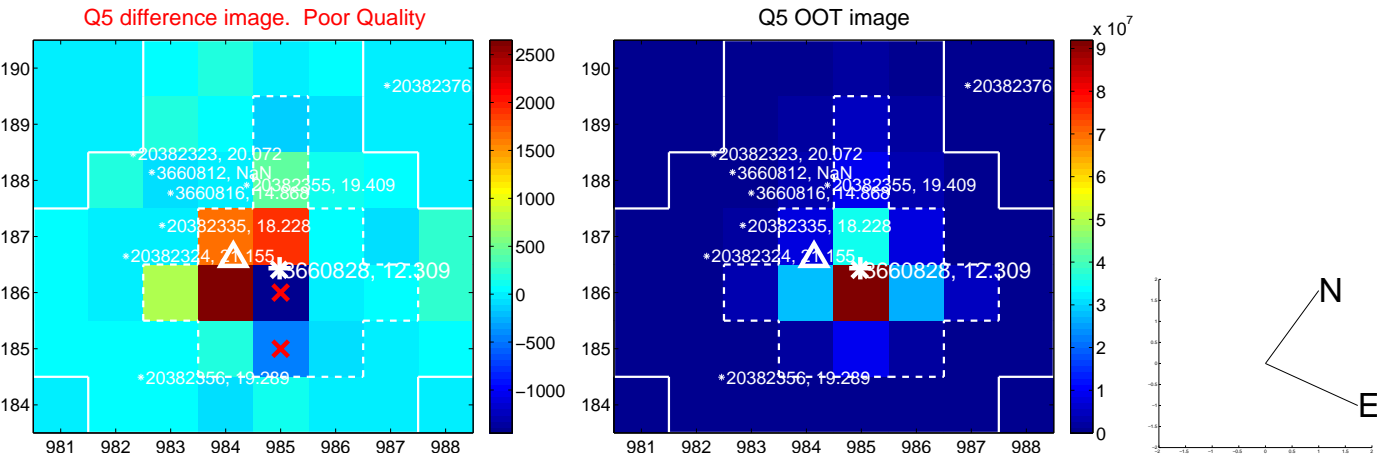


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

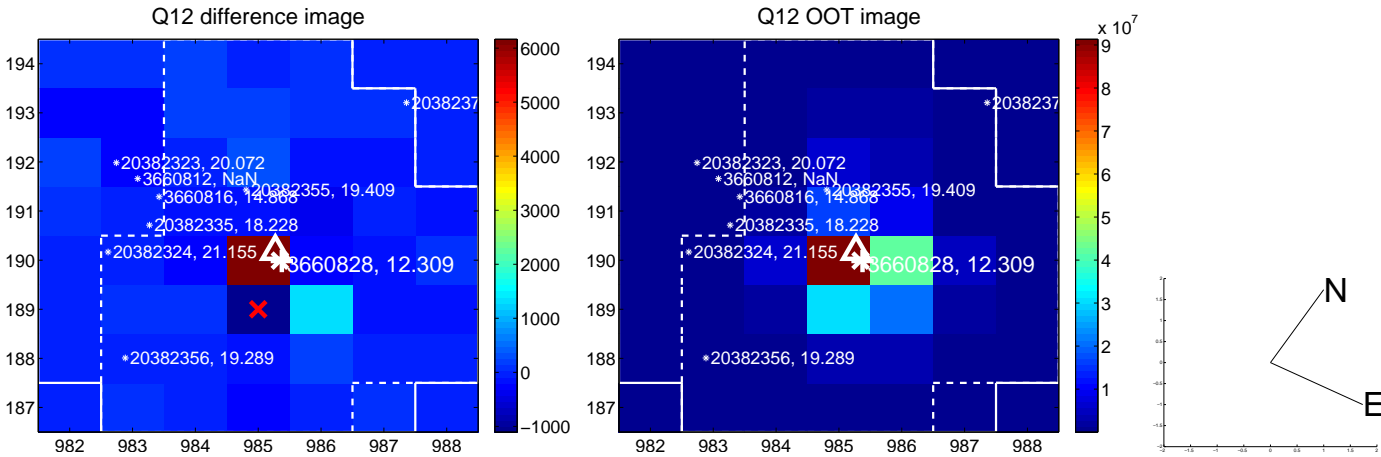
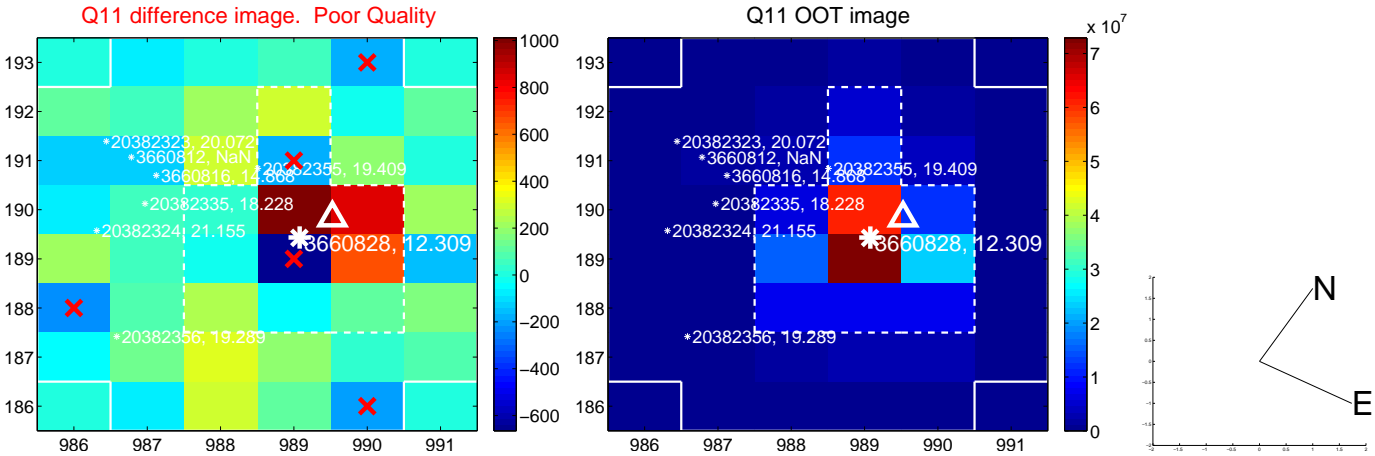
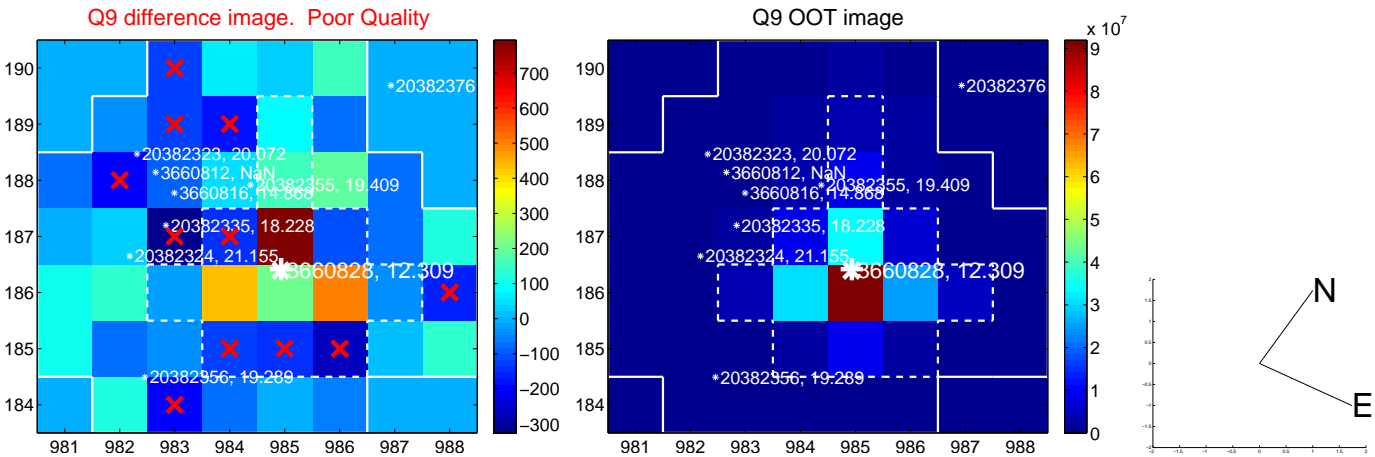
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



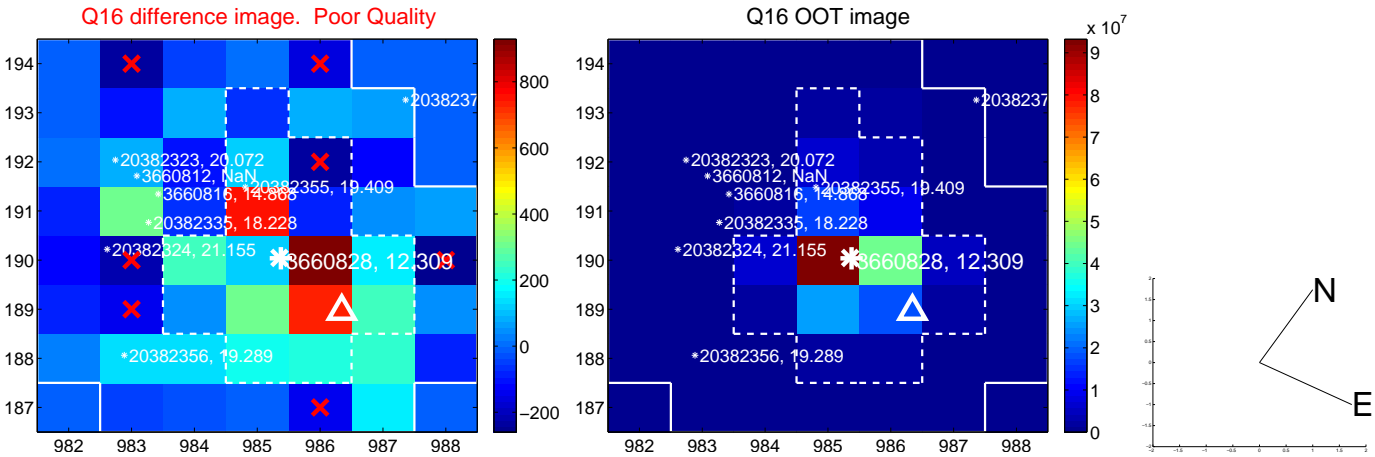
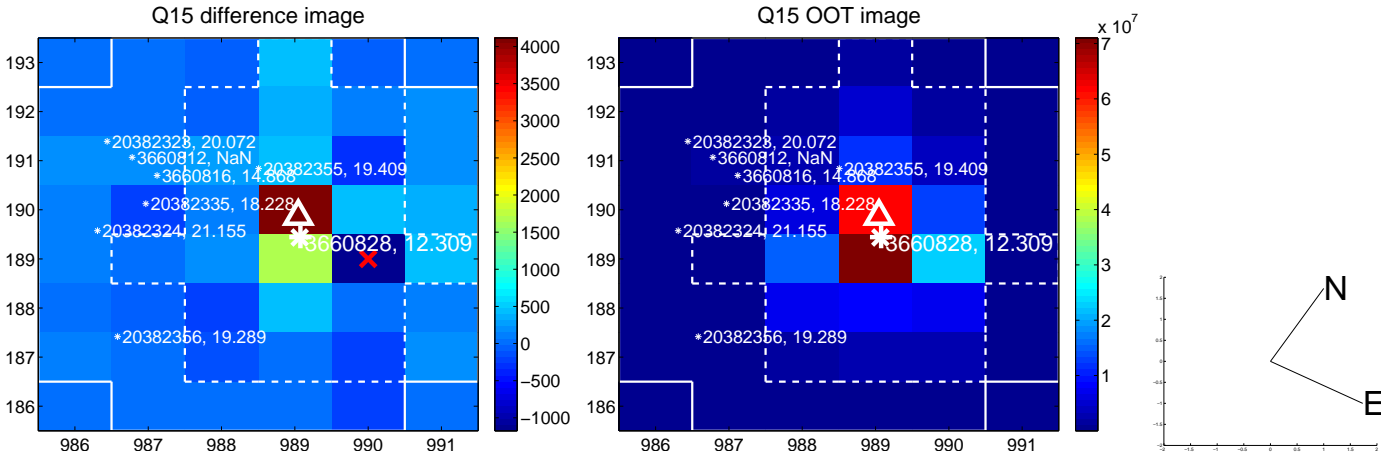
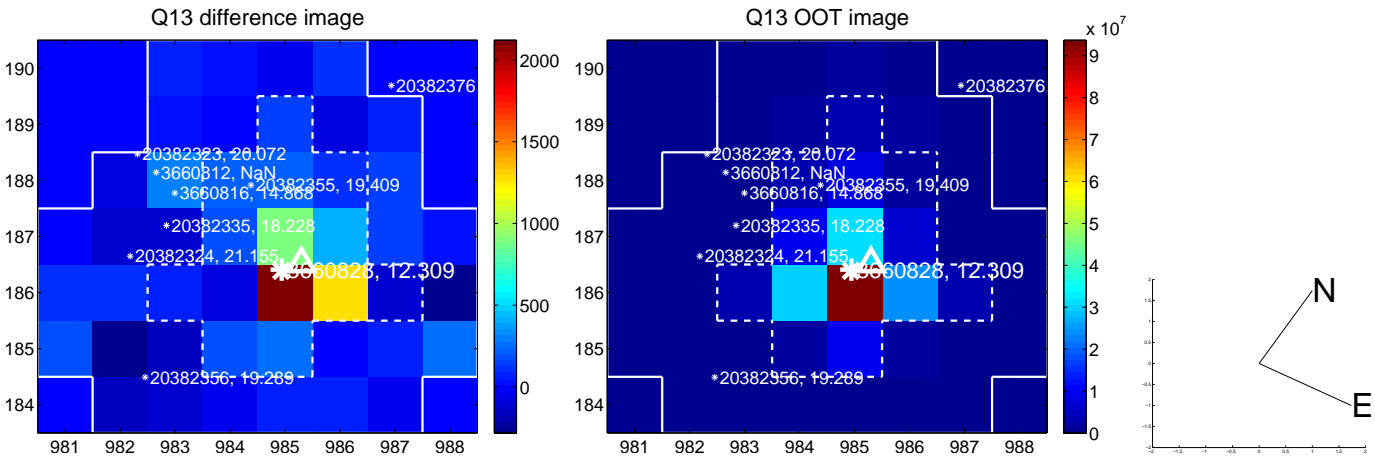
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



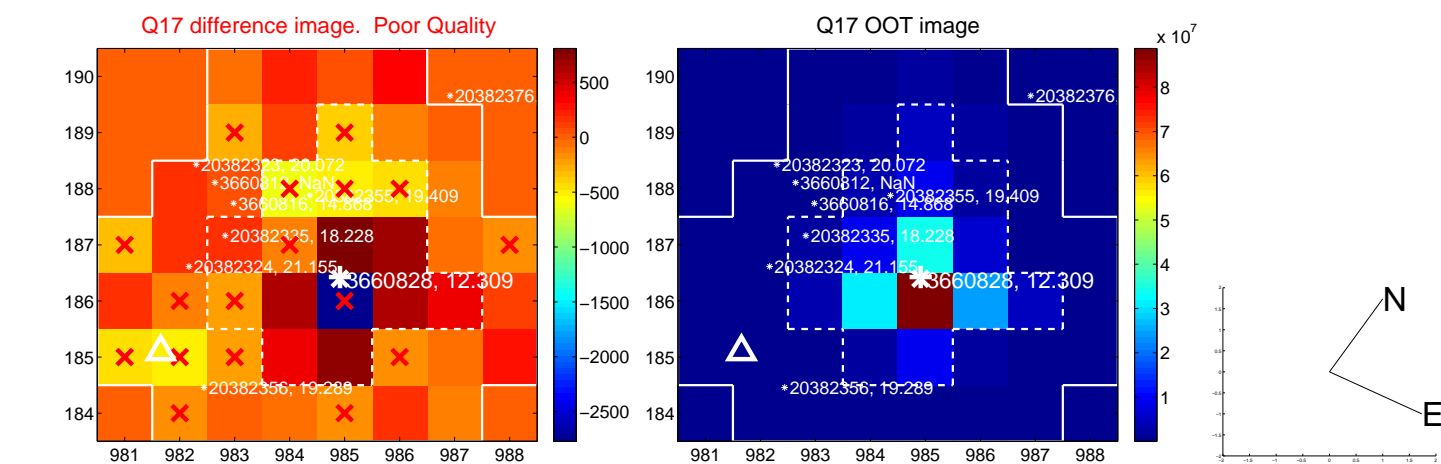
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



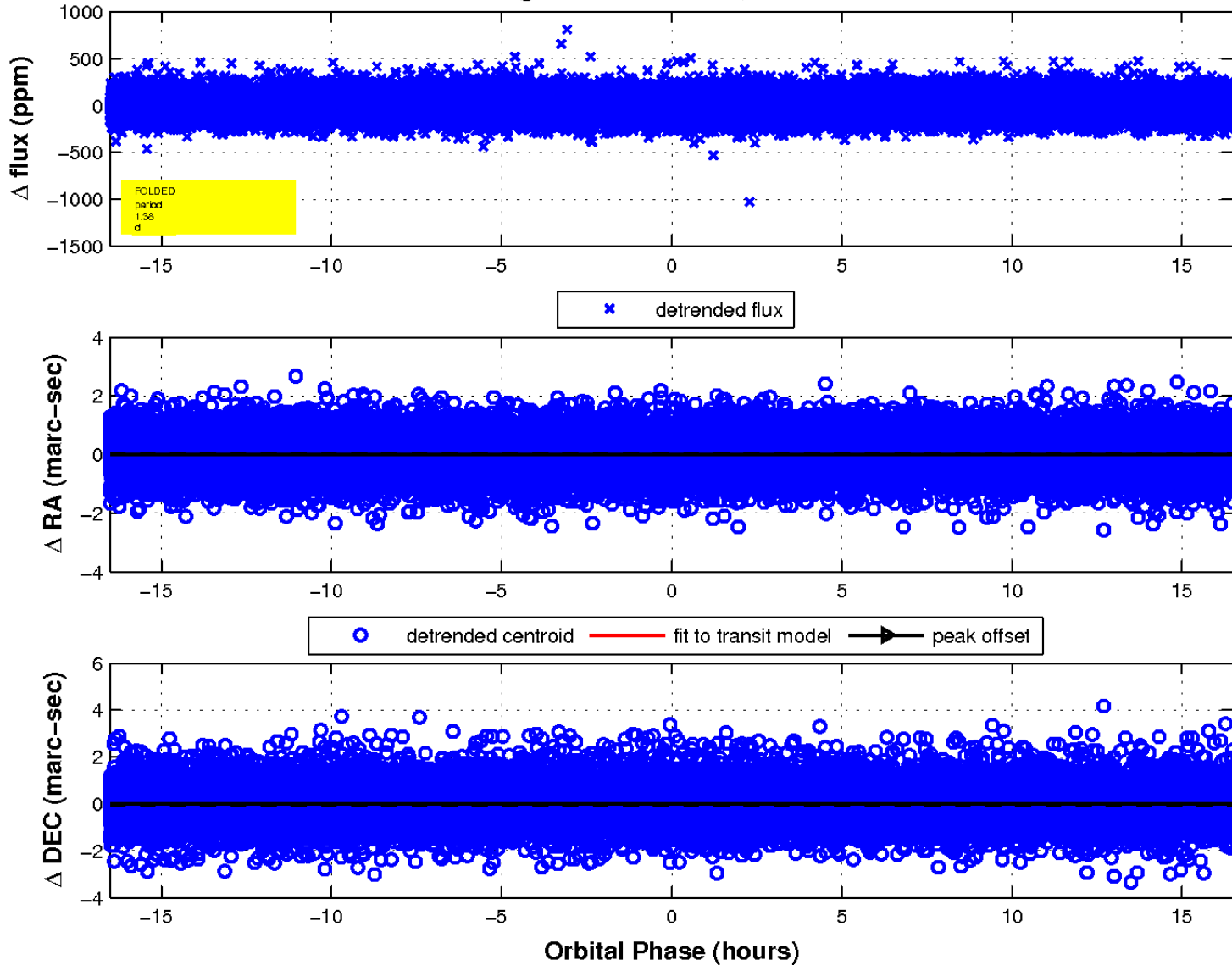
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

