

KIC 007377660

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})
007377660-01	OBS	No	2.025779	131.906289	1.9	18.633	8.3	1.4	2.80	6754	0.41	11365.30

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007377660-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_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.

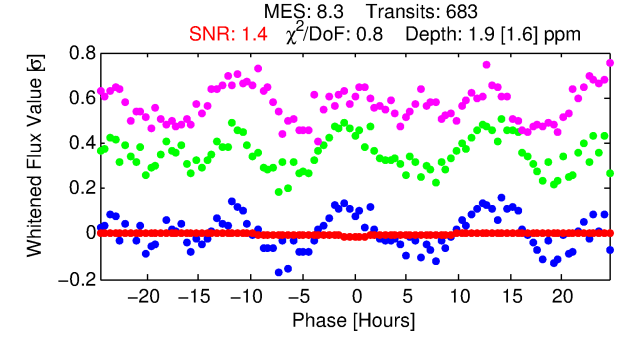
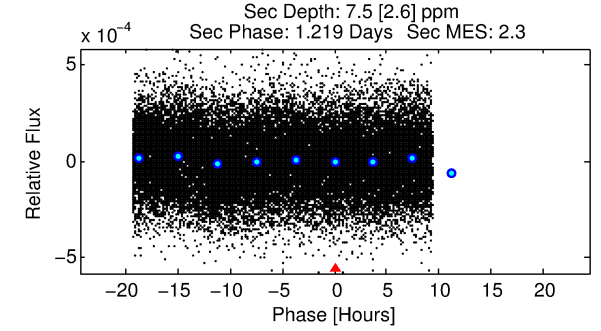
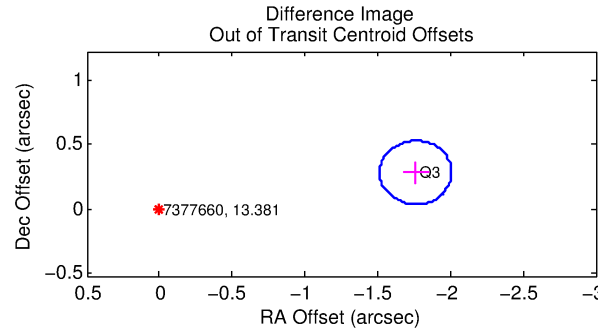
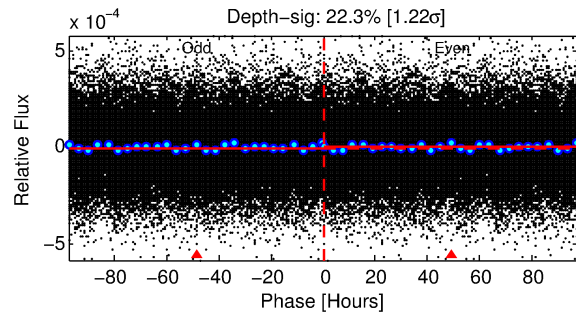
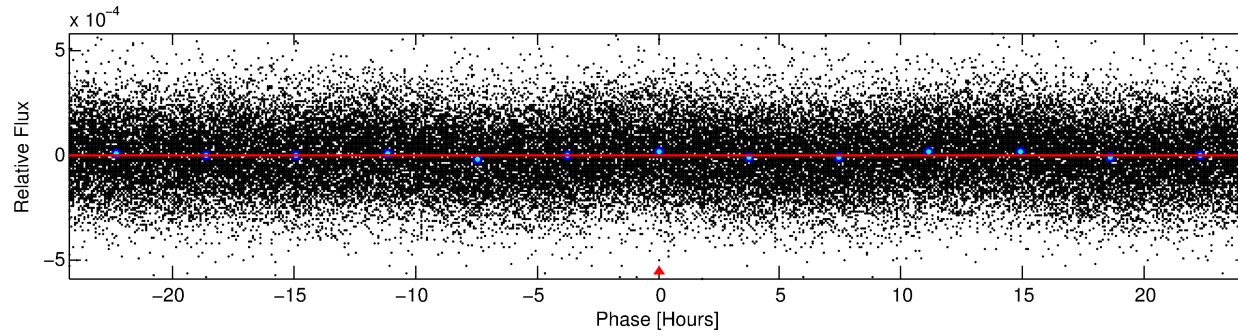
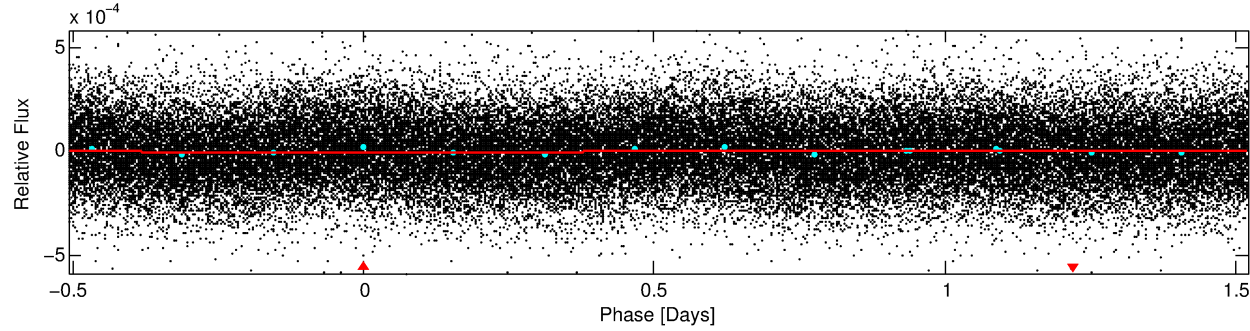
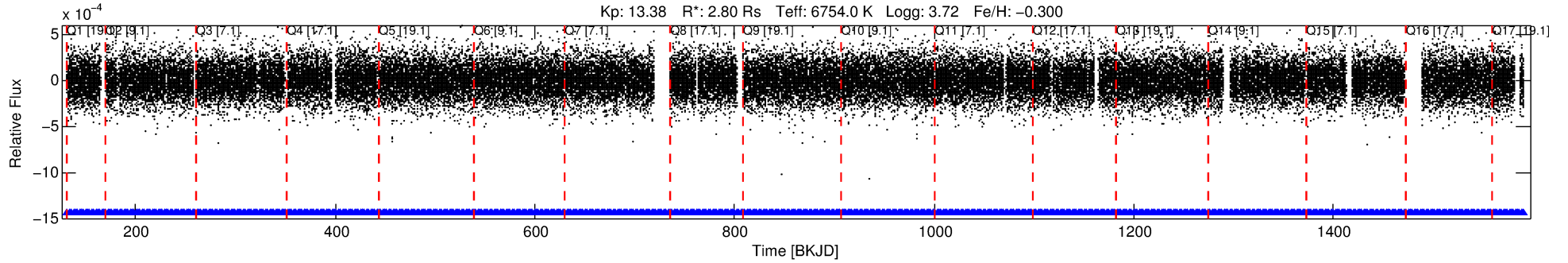
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007377660-01

No Significant Match Found

DV One-Page Summary

KIC: 7377660 Candidate: 1 of 1 Period: 2.026 d



DV Fit Results:

Period = 2.02578 [0.00036] d
Epoch = 131.9063 [0.0895] BKJD
Rp/R* = 0.0013 [0.0079]
a/R* = 1.05 [3.32]
b = 0.58 [40.19]
Seff = 11365.30 [6171.02]
Teq = 2633 [357] K
Rp = 0.41 [2.42] Re
a = 0.0358 [0.0121] AU
Ag = 31.92 [378.86] [0.08 σ]
Teffp = 9676 [28681] K [0.25 σ]

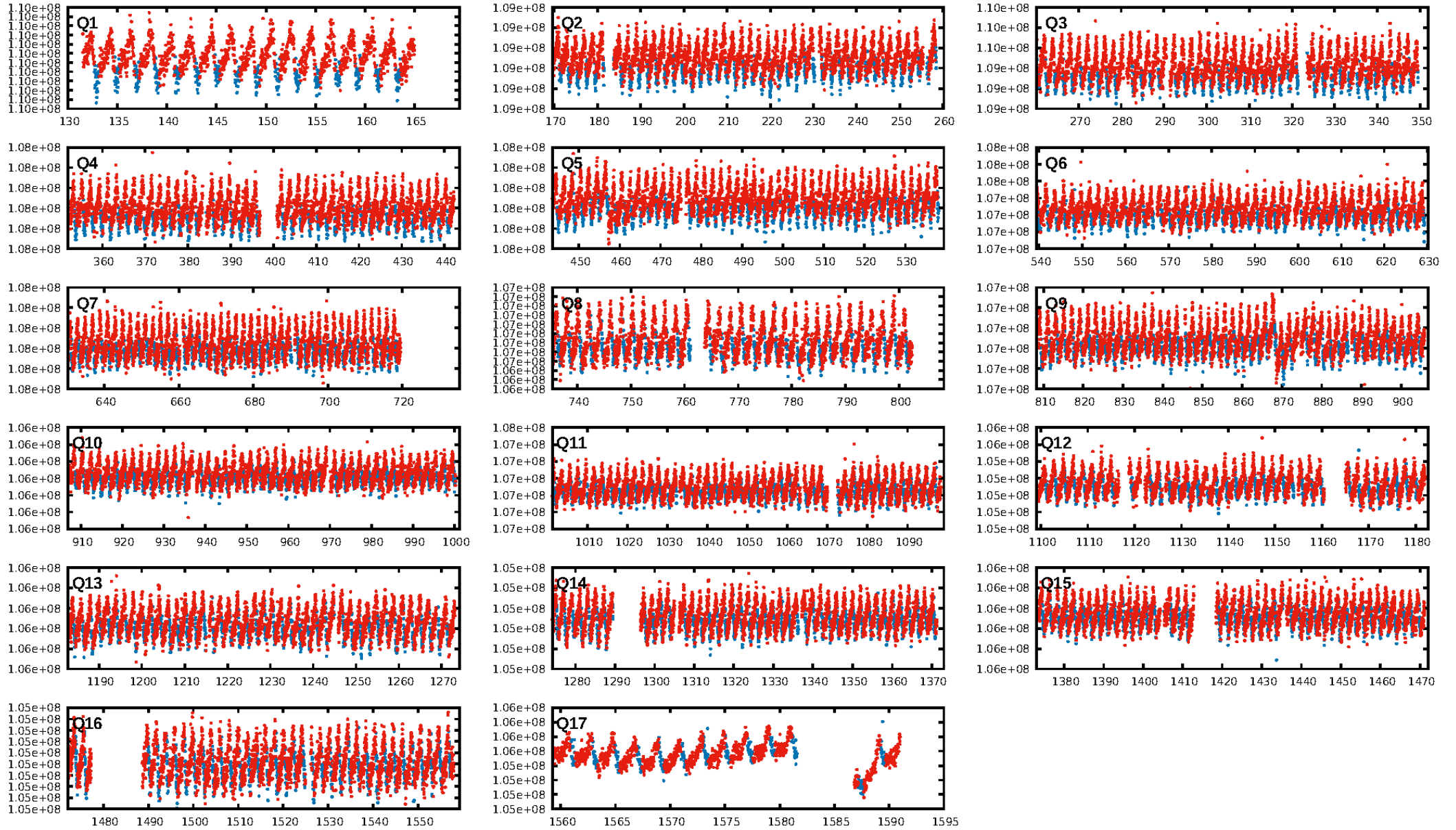
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [653/653]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.782 arcsec [21.57 σ]
KicOffset-rm: 1.851 arcsec [22.41 σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [17/17]

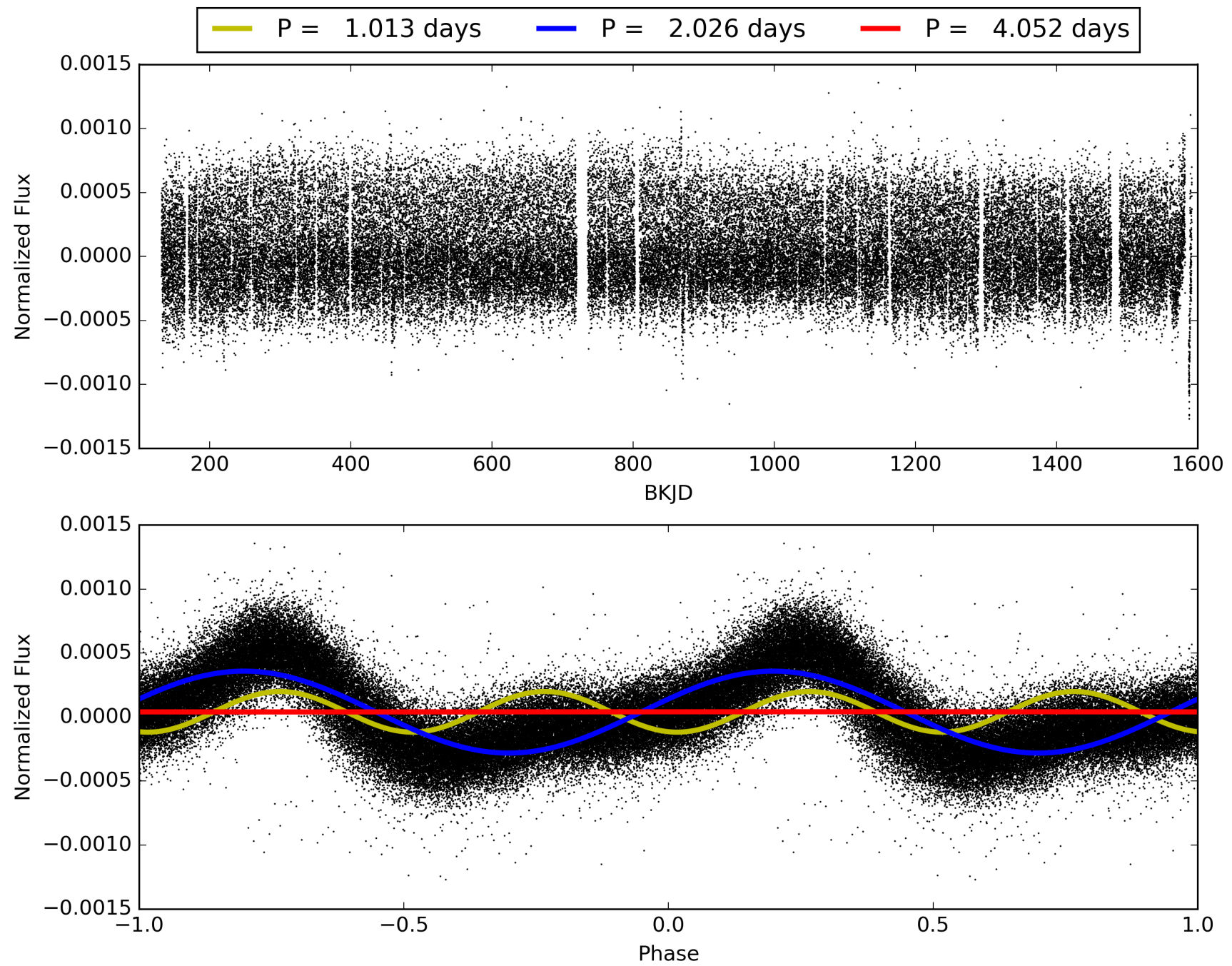
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:29:50 Z

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

TCE 007377660-01, PDC Light Curves

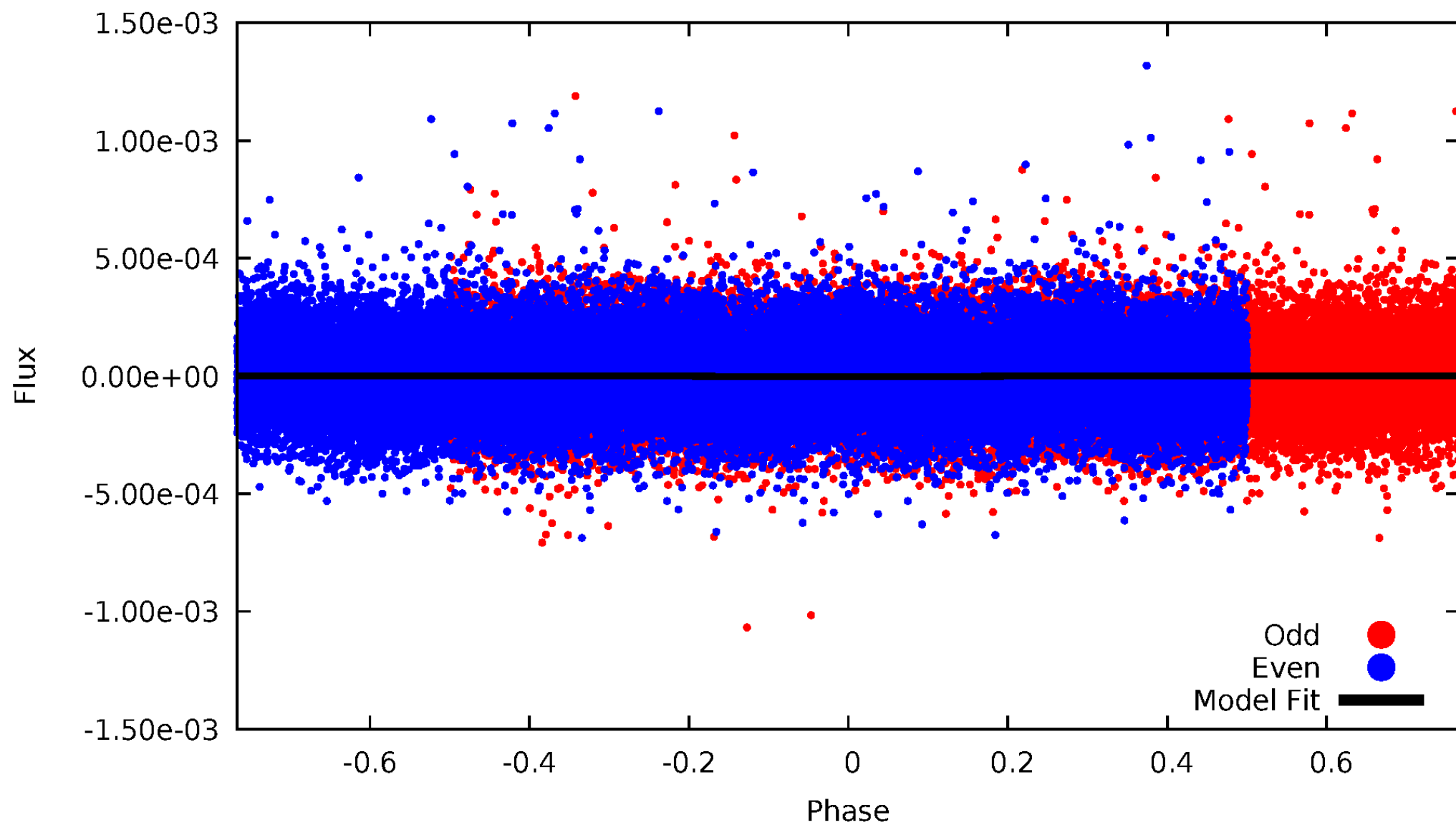


TCE 007377660-01



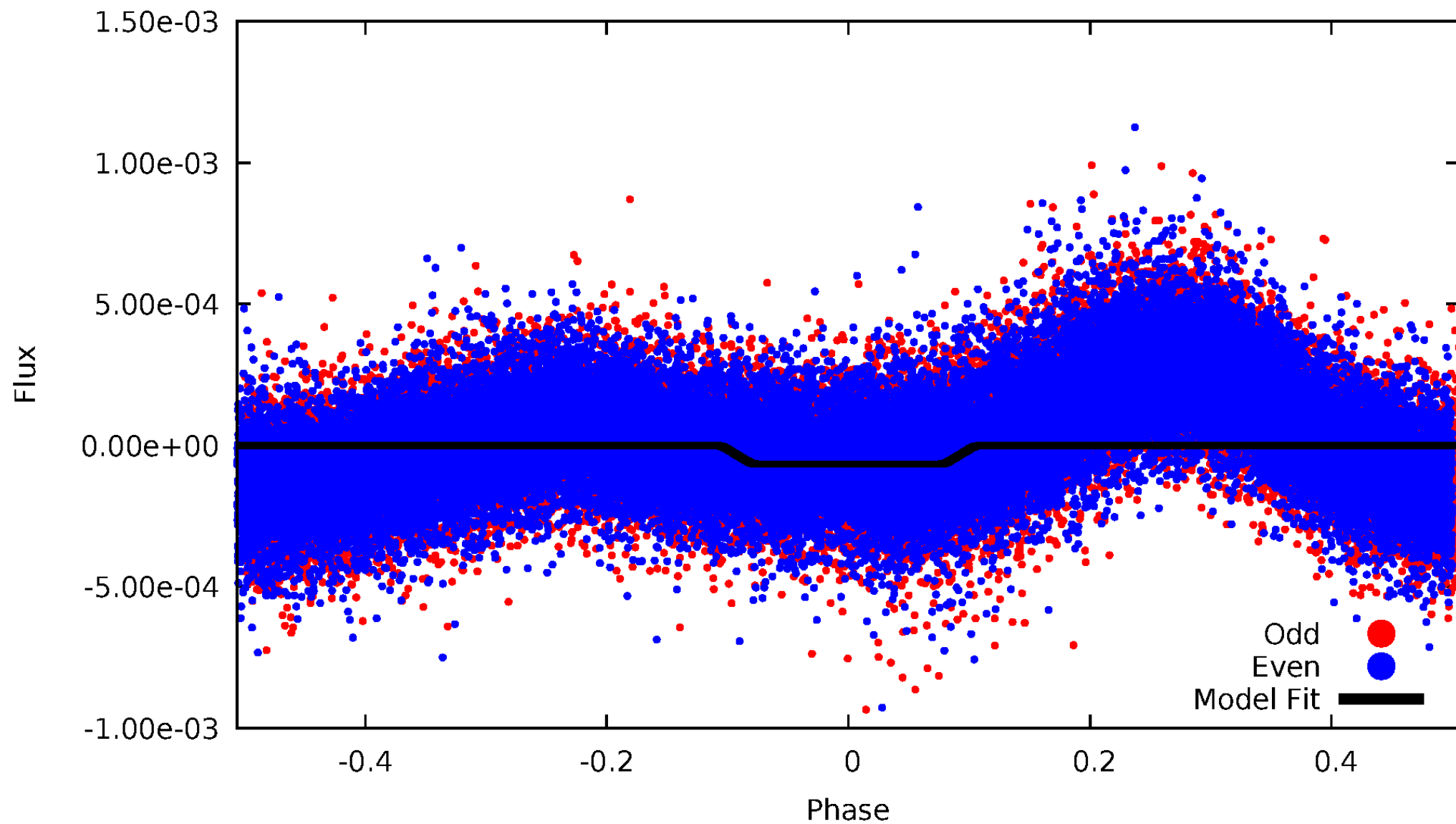
DV Odd/Even

TCE 007377660-01



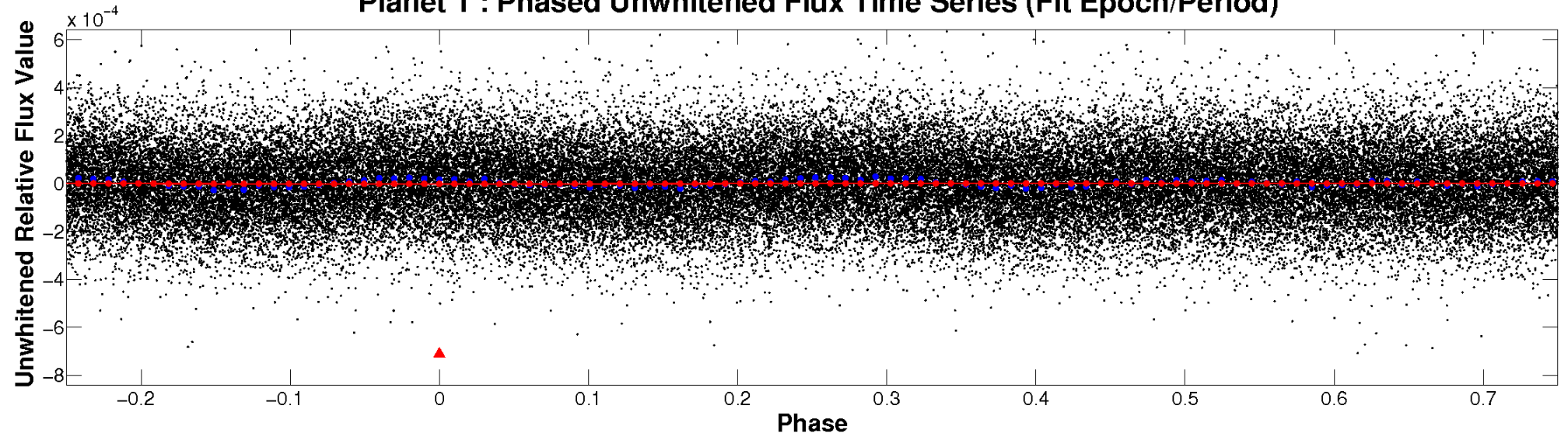
ALT Odd/Even

TCE 007377660-01

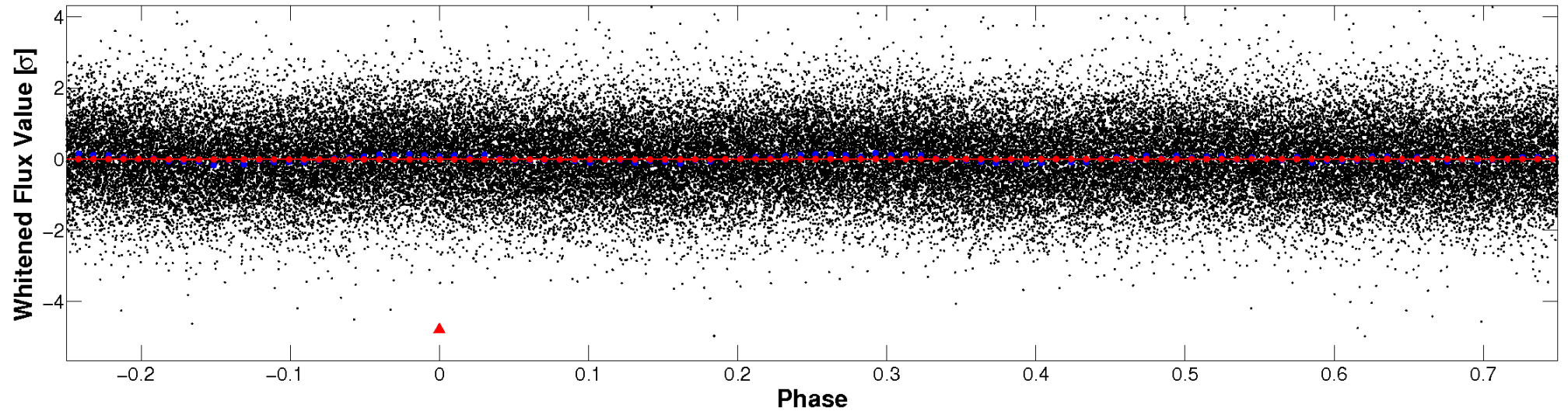


Non-Whitened Vs. Whitened Light Curve

Planet 1 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

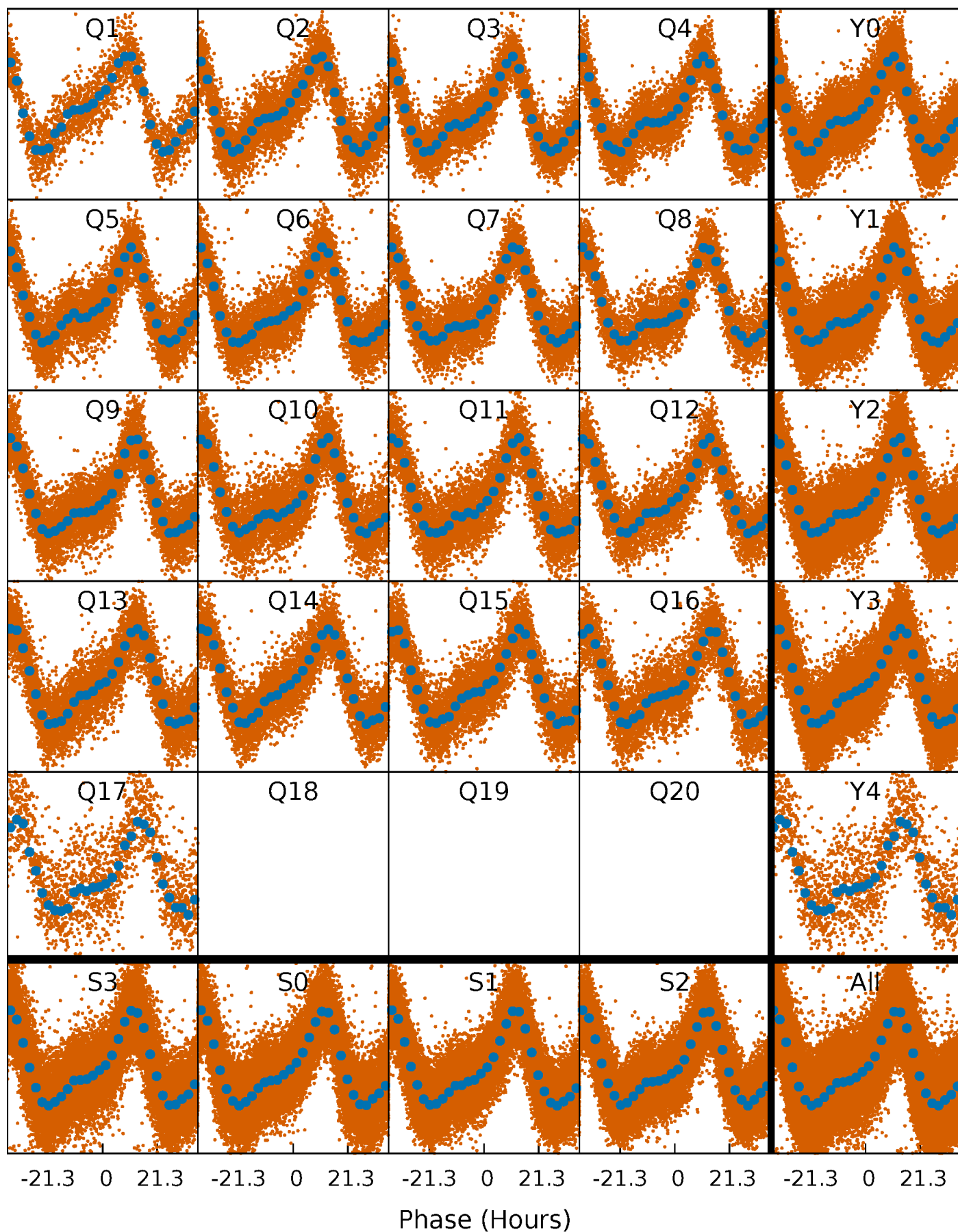


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



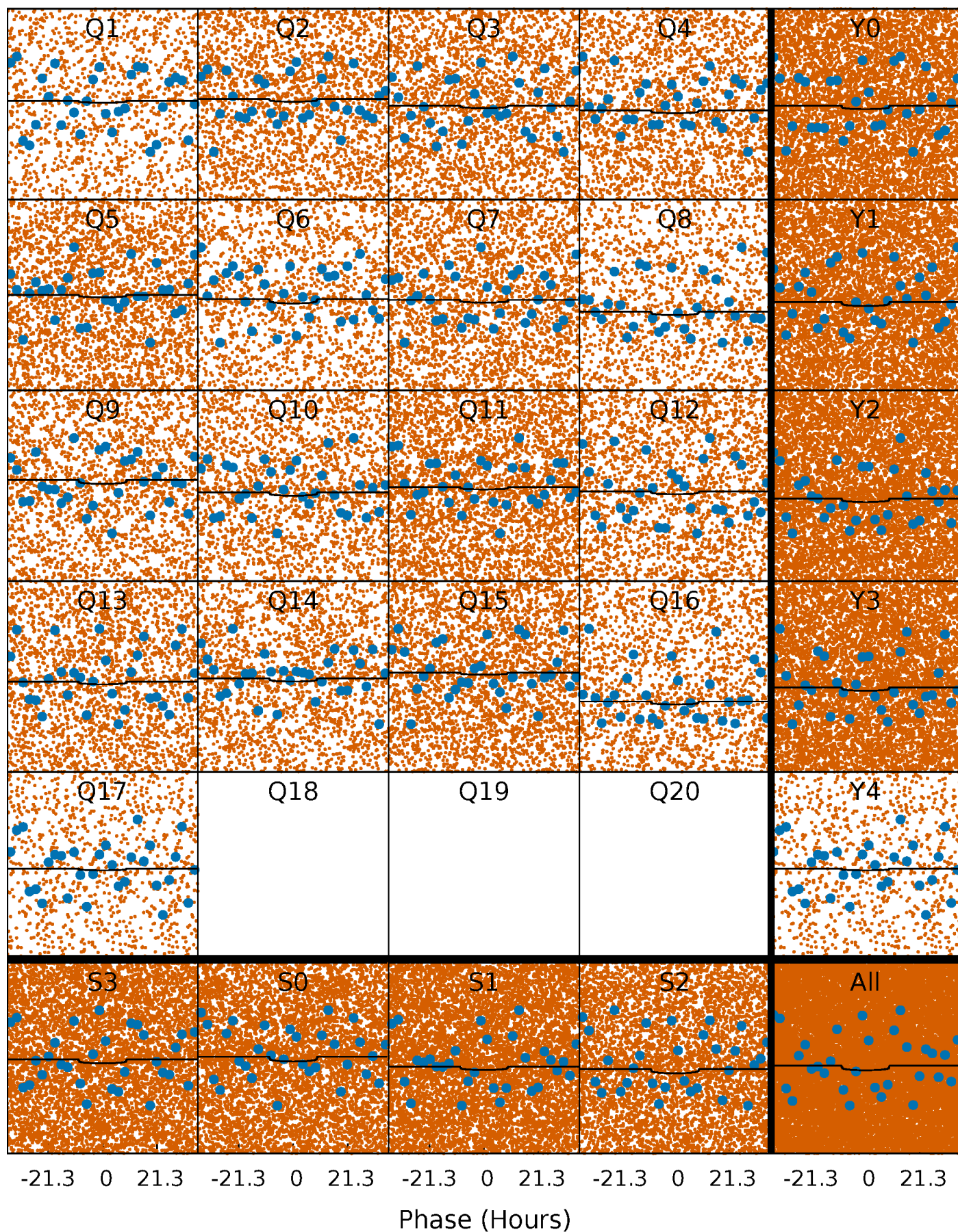
PDC Quarter-Phased Transit Curves

TCE 007377660-01 P= 2.025779 Days $T_0=131.906289$ (BKJD)



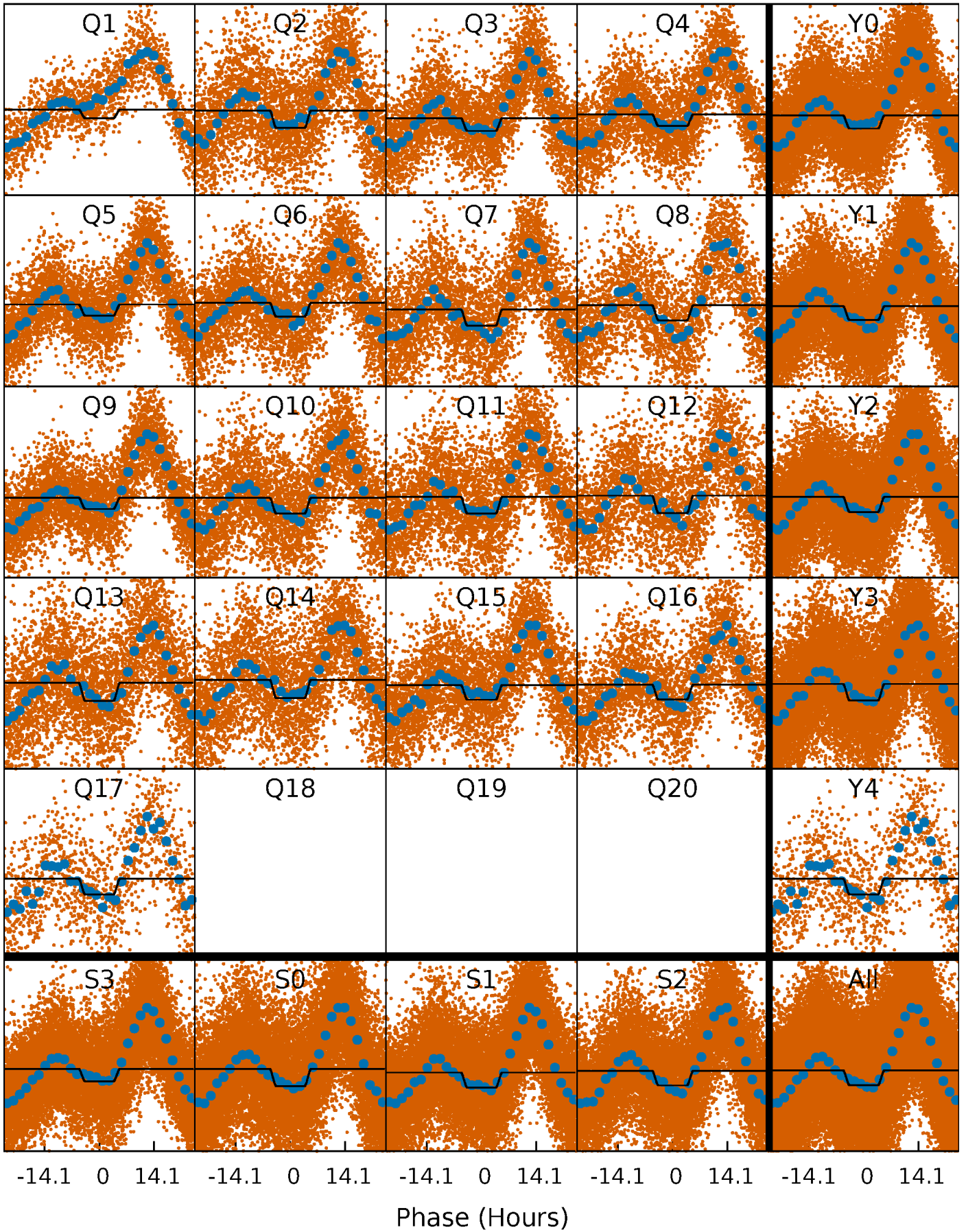
DV Quarter-Phased Transit Curves

TCE 007377660-01 P= 2.025779 Days $T_0=131.906289$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

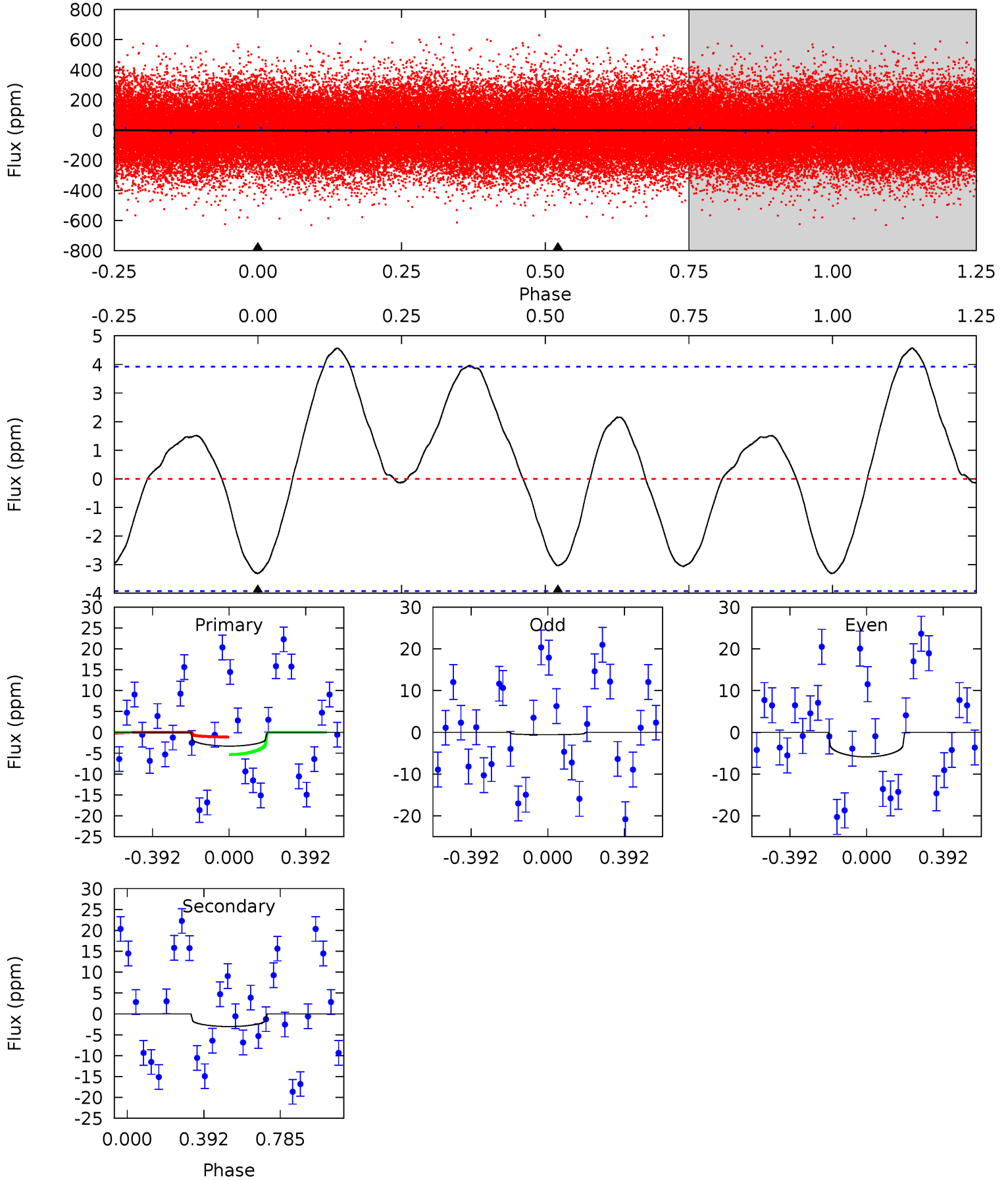
TCE 007377660-01 P= 2.025995 Days $T_0=131.831257$ (BKJD)



DV Model-Shift Uniqueness Test

007377660-01, P = 2.025779 Days, E = 129.880510 Days

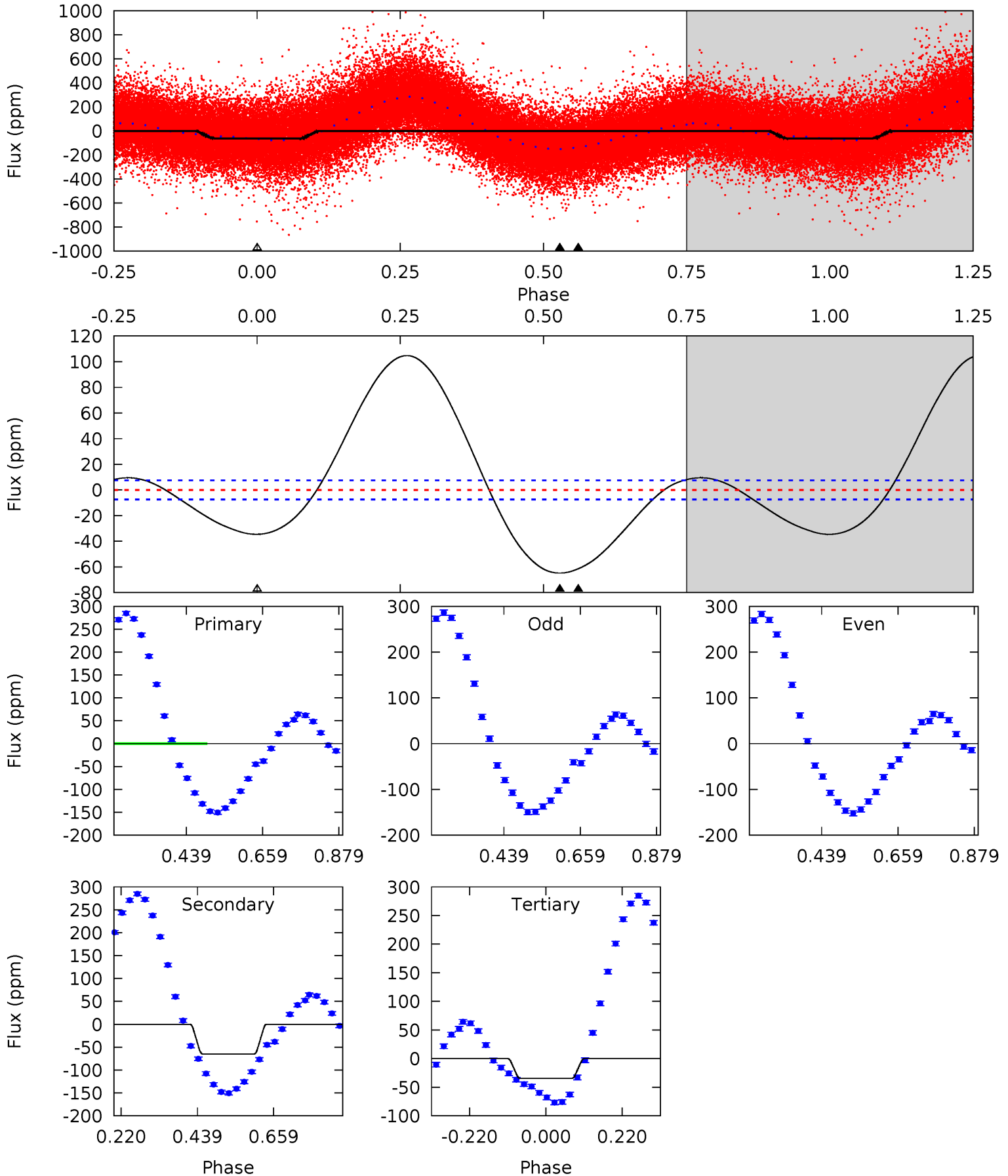
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.60	3.30	0	0	4.27	0.86	1.48	3.60	3.60	3.30	3.30	2.87	0.92	0.58	2.26



Alt Model-Shift Uniqueness Test

007377660-01, P = 2.025995 Days, E = 129.805262 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
36.1	38.1	20.3	0	4.40	1.23	28.7	15.8	36.1	17.8	38.1	0.54	1.06	0.62	6.25



Stellar Parameters For KIC 007377660

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6754^{+182}_{-222}	$3.719^{+0.304}_{-0.076}$	$-0.300^{+0.300}_{-0.250}$	$2.798^{+0.440}_{-1.026}$	$1.494^{+0.246}_{-0.301}$	$0.096^{+0.208}_{-0.029}$
	+3%/-3%	+8%/-2%	+100%/-83%	+16%/-37%	+16%/-20%	+217%/-30%
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 007377660-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-3 ± 1	$1.67^{+1.74}_{-1.09}$	3588^{+213}_{-307}	3635^{+2441}_{-6621}	$0.769^{+5.399}_{-0.594}$
Alt.	-65 ± 2	$2.88^{+2.00}_{-1.71}$	3593^{+223}_{-302}	5980^{+4333}_{-1403}	$5.489^{+27.958}_{-3.605}$

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 $A_{obs} \gg 1.0$

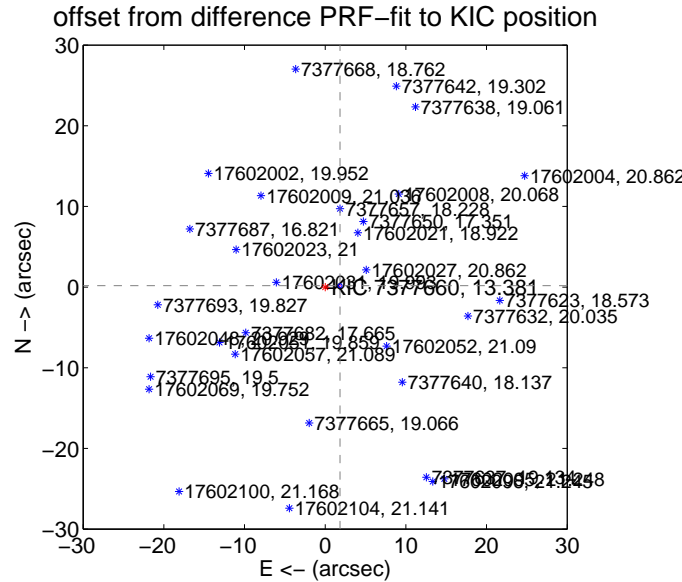
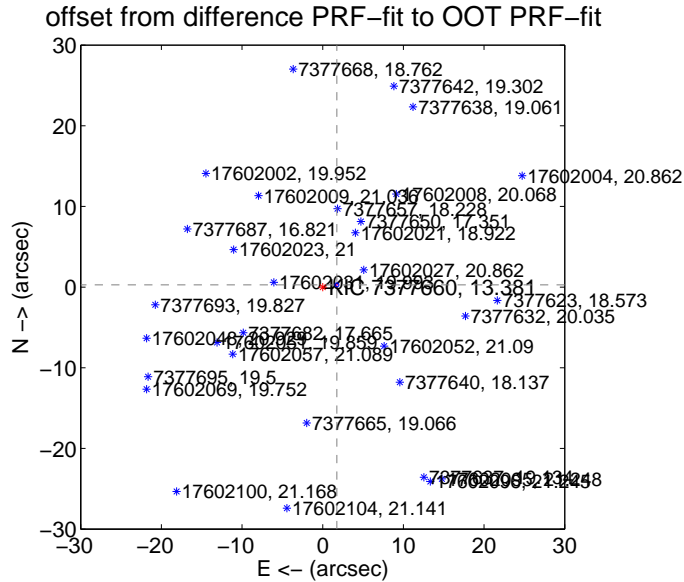
DV Centroid Data

Supplemental centroid analysis for 007377660-01. Kepler magnitude: 13.38. Transit SNR 1.39

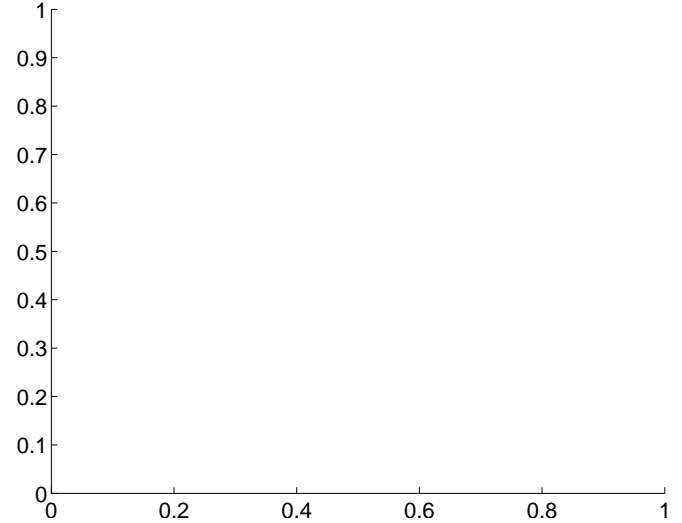
There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.782 \pm 0.083	21.57	-1.759 \pm 0.083	0.280 \pm 0.082
PRF-fit source offset from KIC position	1.851 \pm 0.083	22.41	-1.843 \pm 0.083	0.172 \pm 0.082
photometric centroid source offset	—	—	—	—

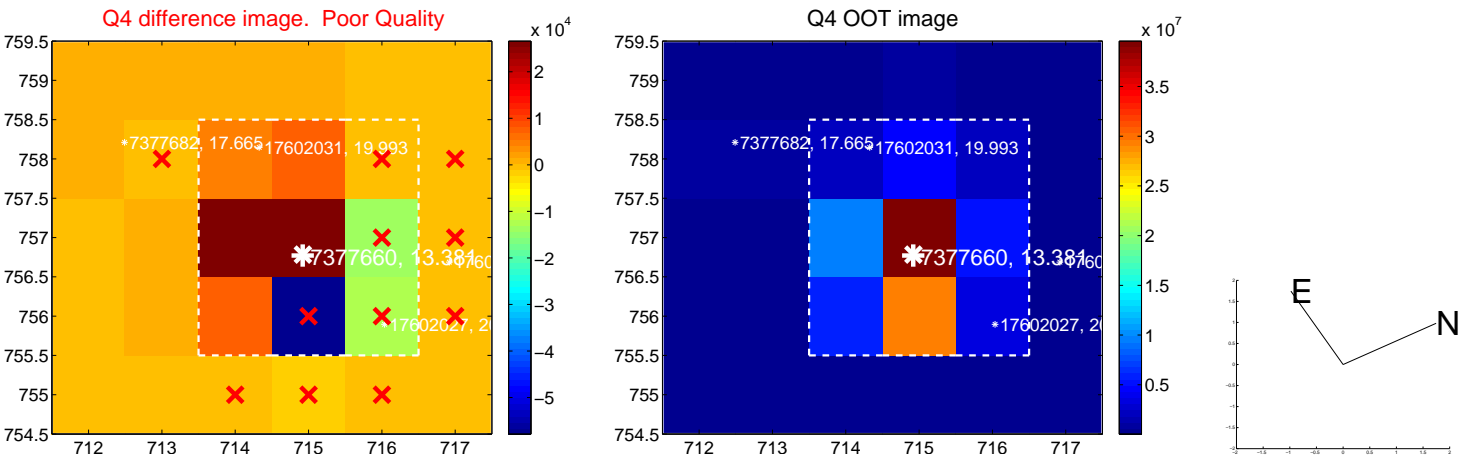
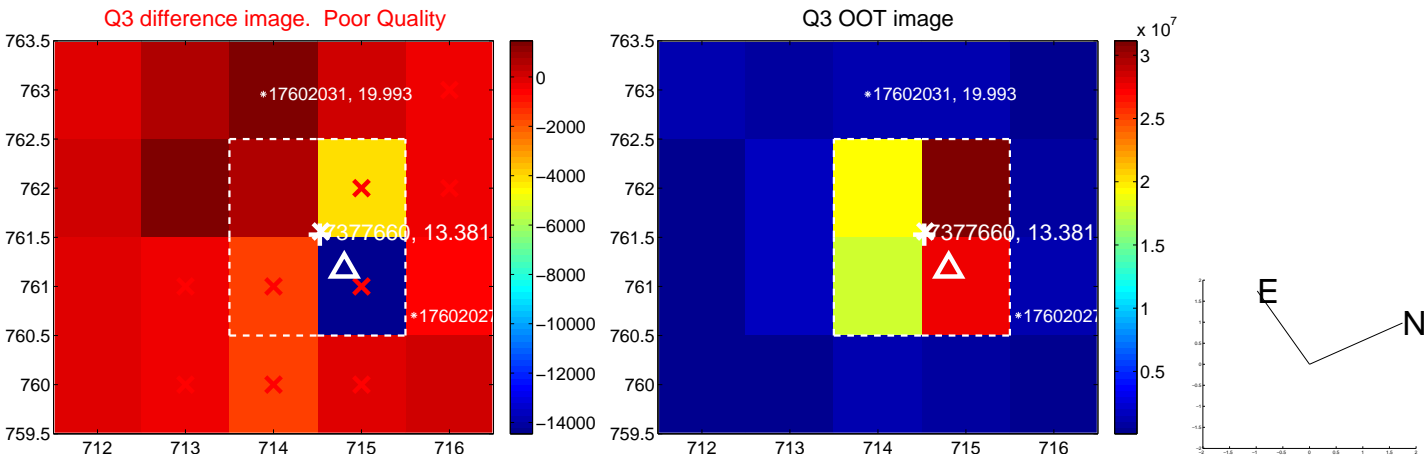
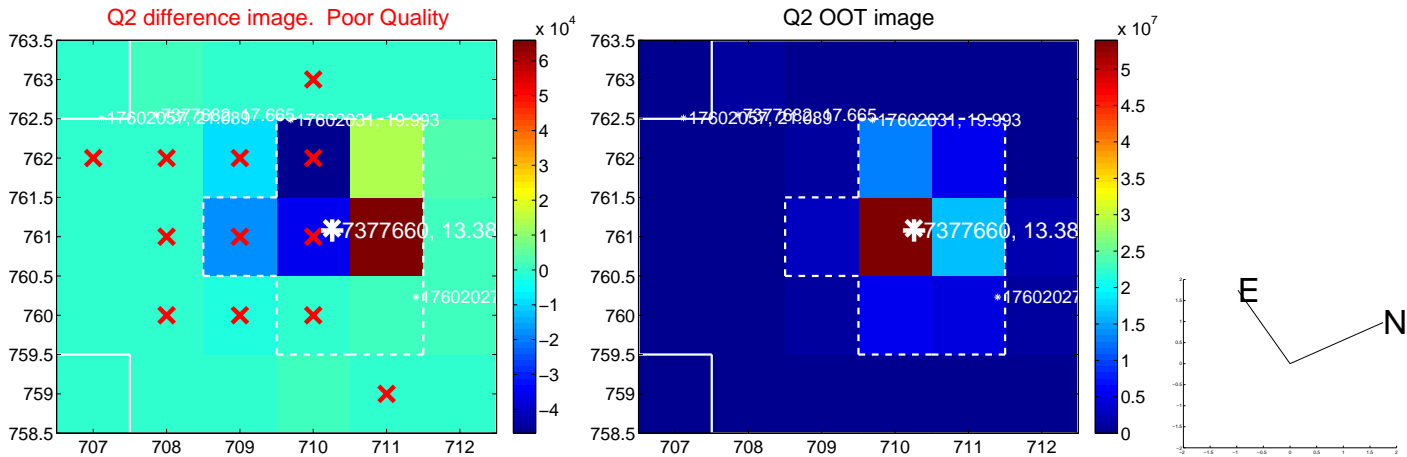
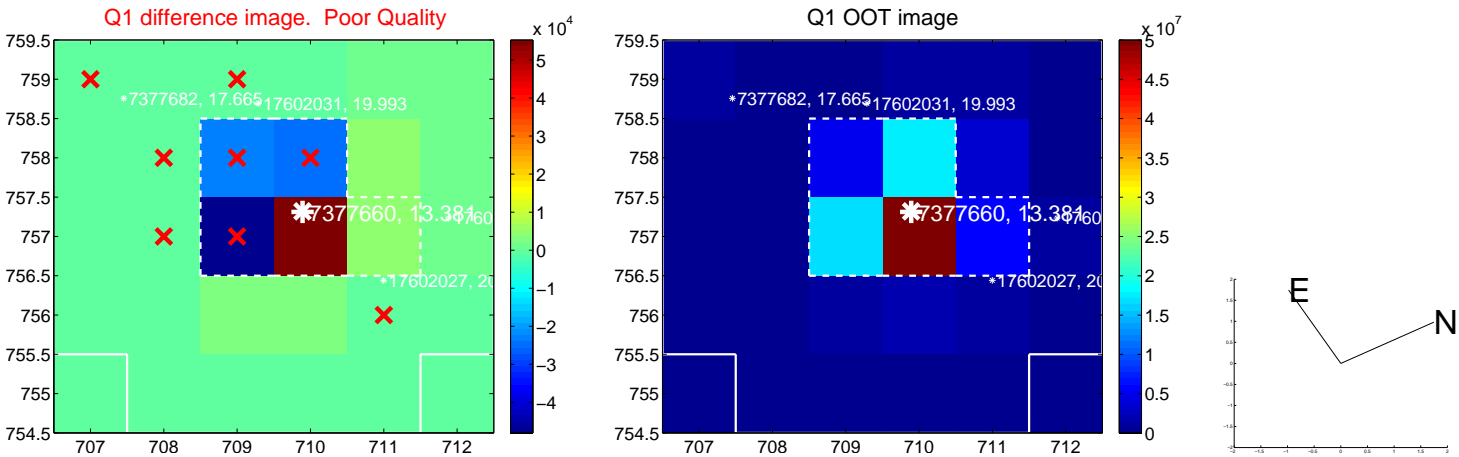


There are no photometric centroids

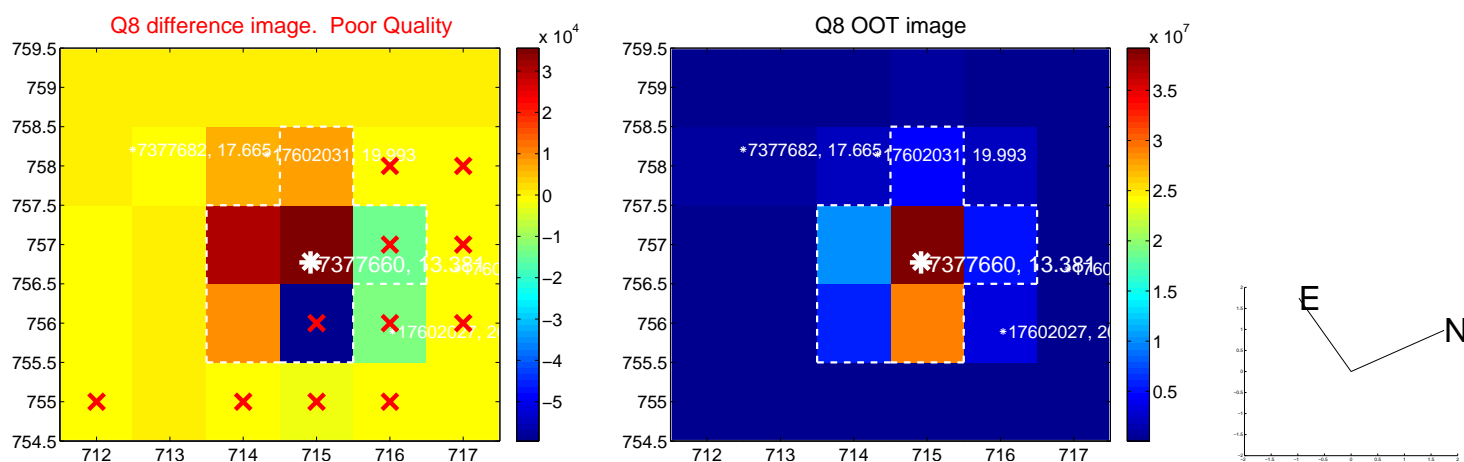
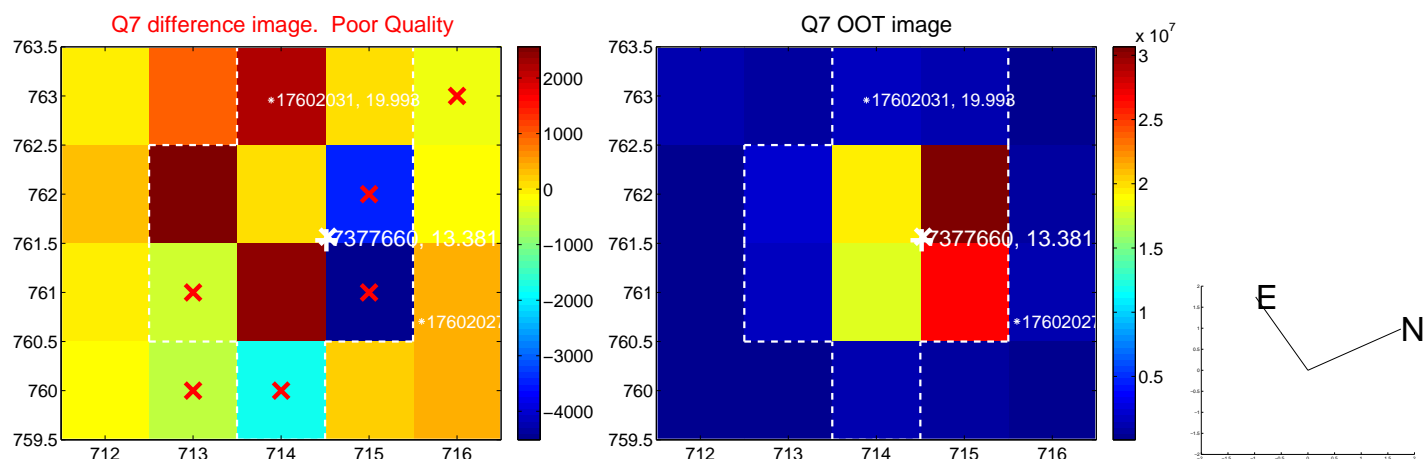
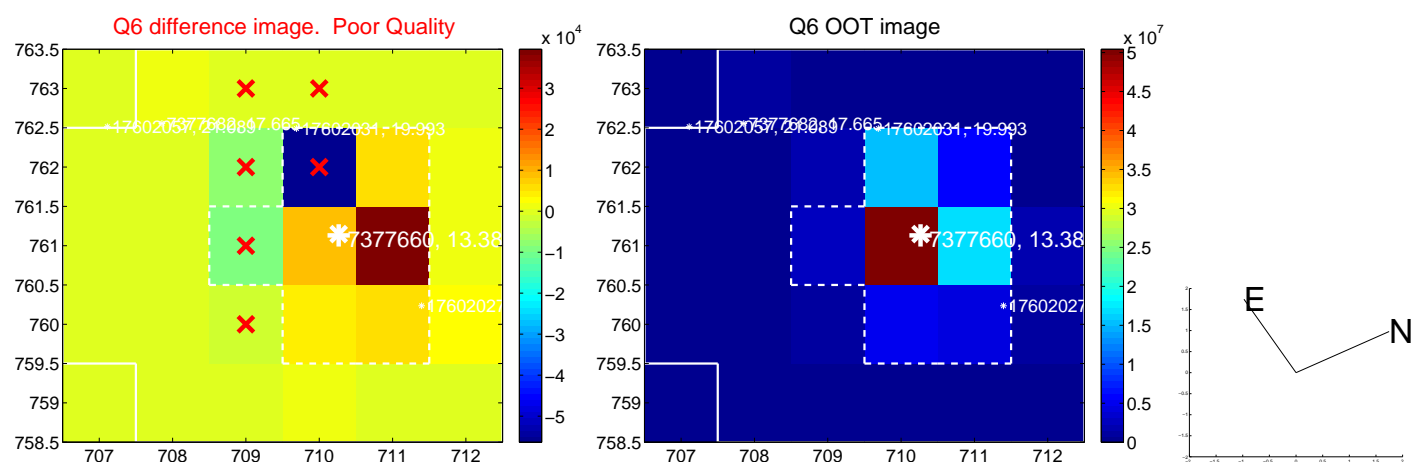
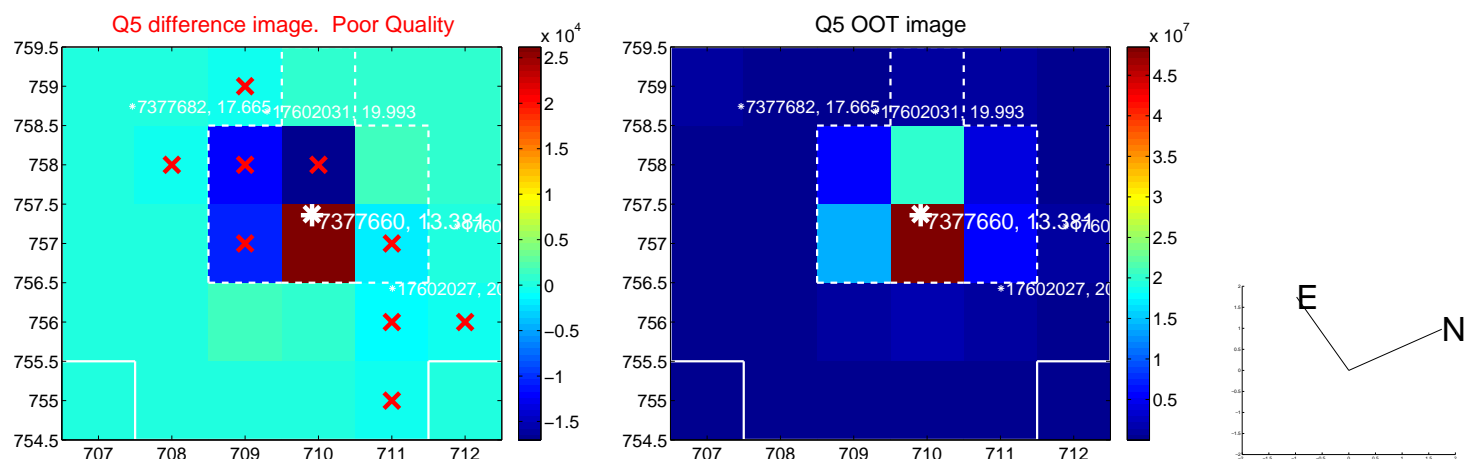


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

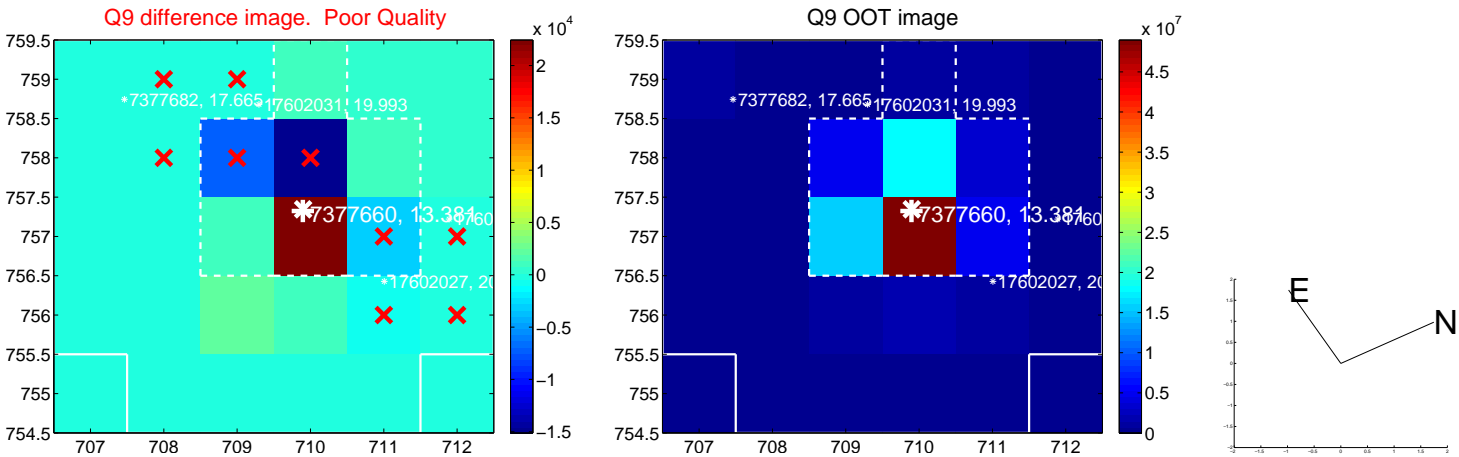
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



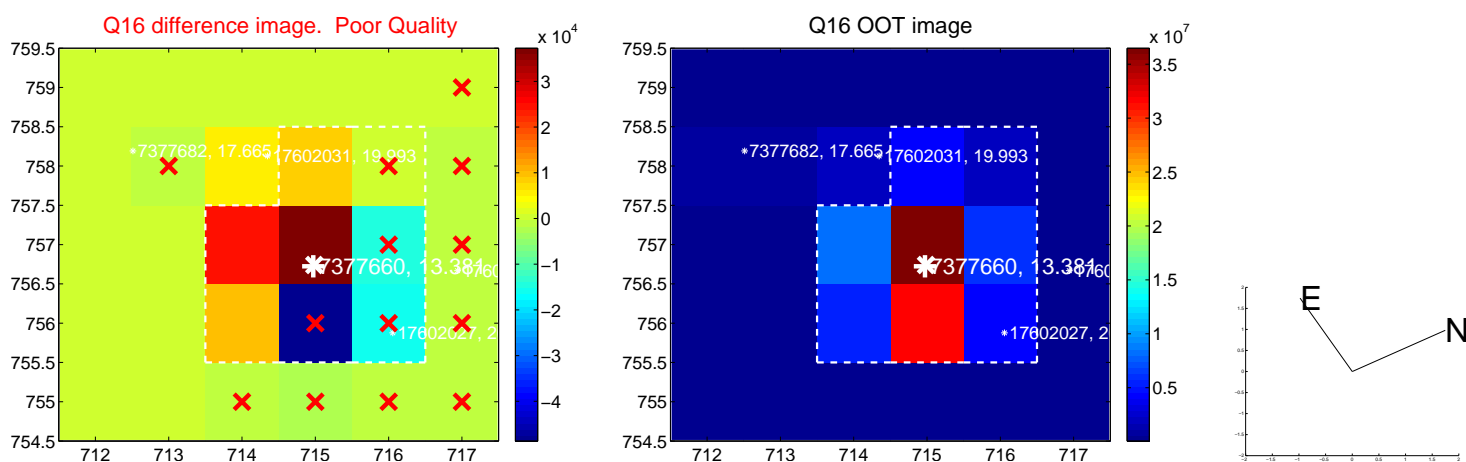
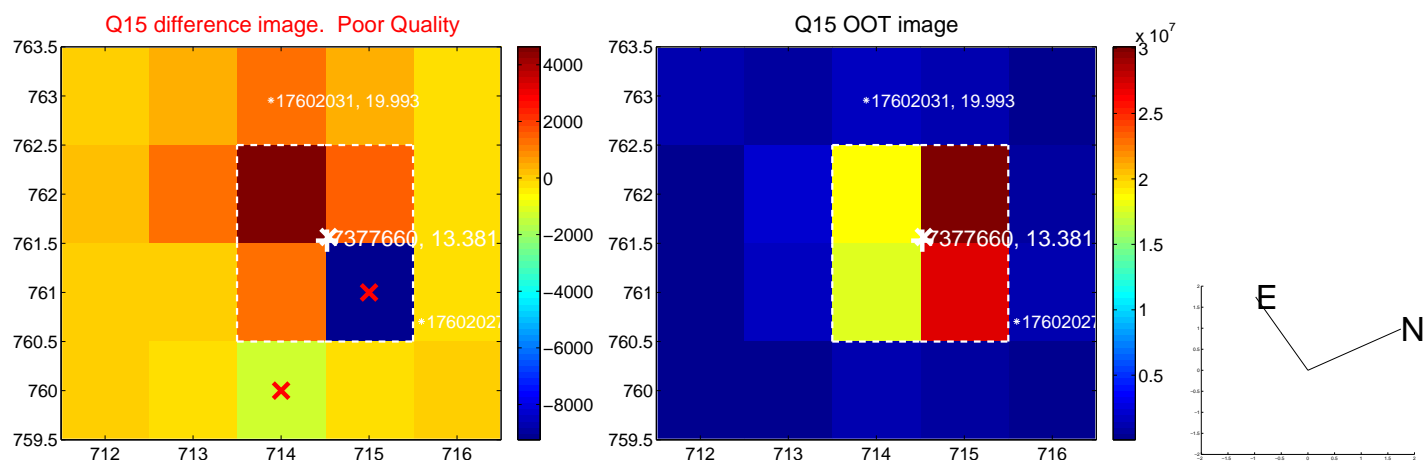
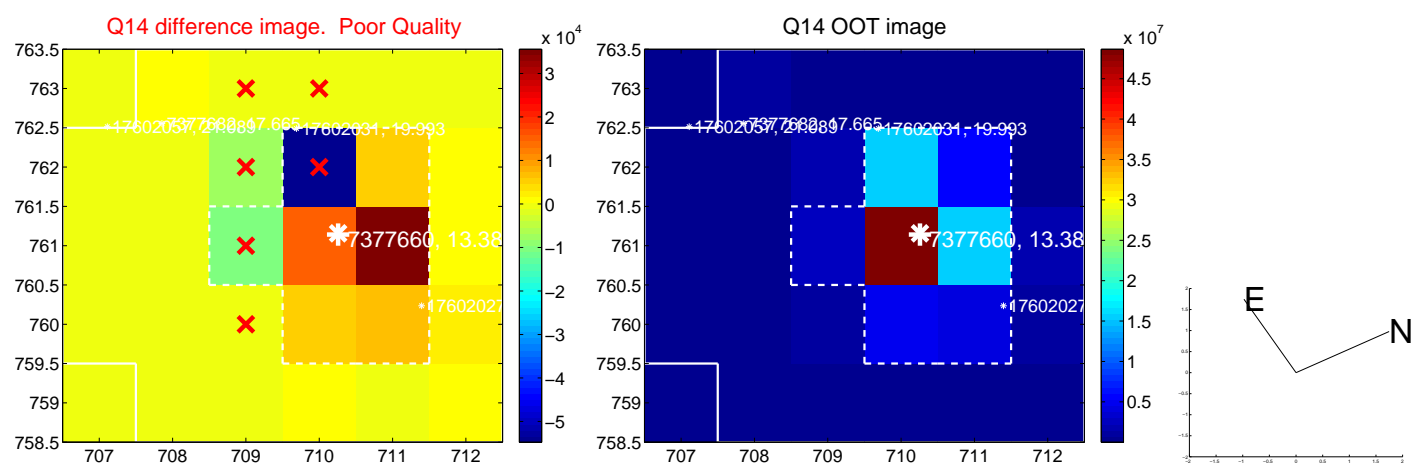
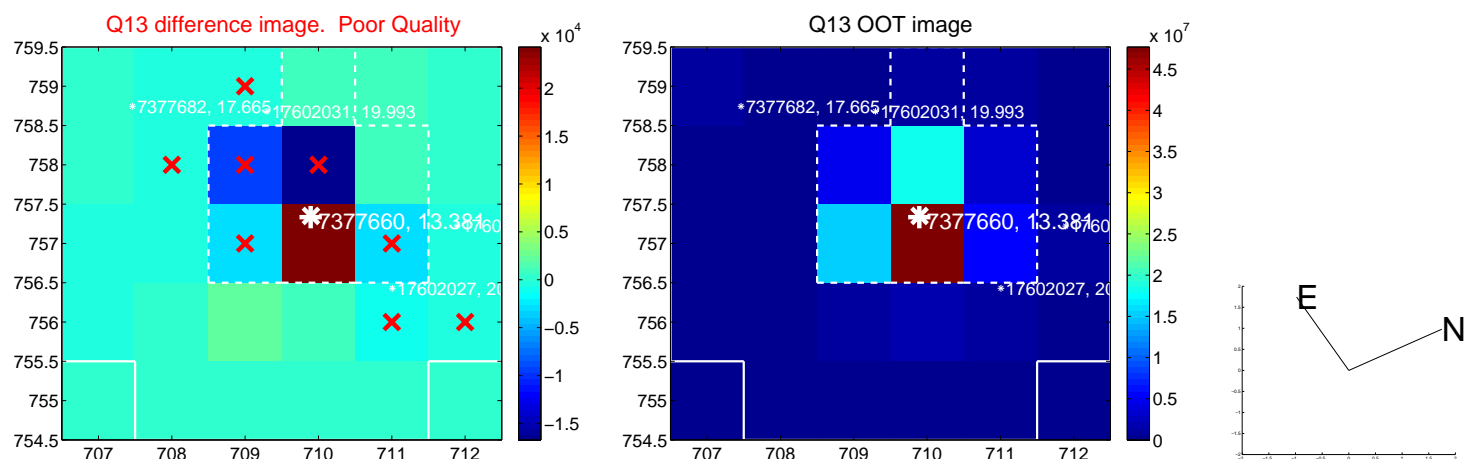
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



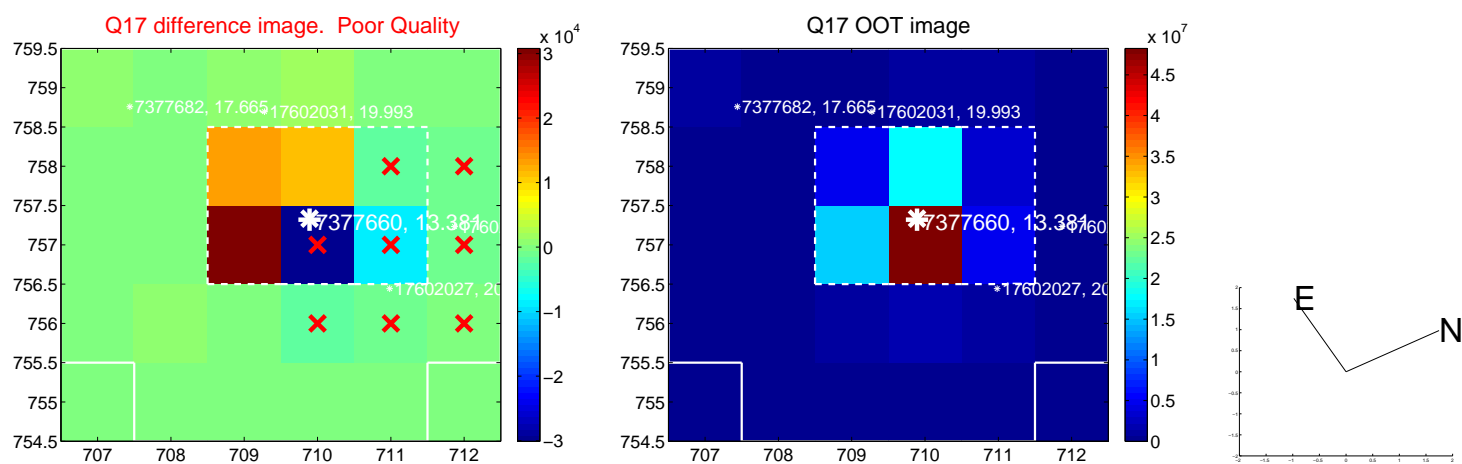
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



folded centroid time series figure for this object.



UKIRT Image

