

KIC 007117610

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})
007117610-01	OBS	No	0.567048	131.994159	0.0	2.928	10.7	0.0	0.83	5468	0.01	3222.25

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007117610-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—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.

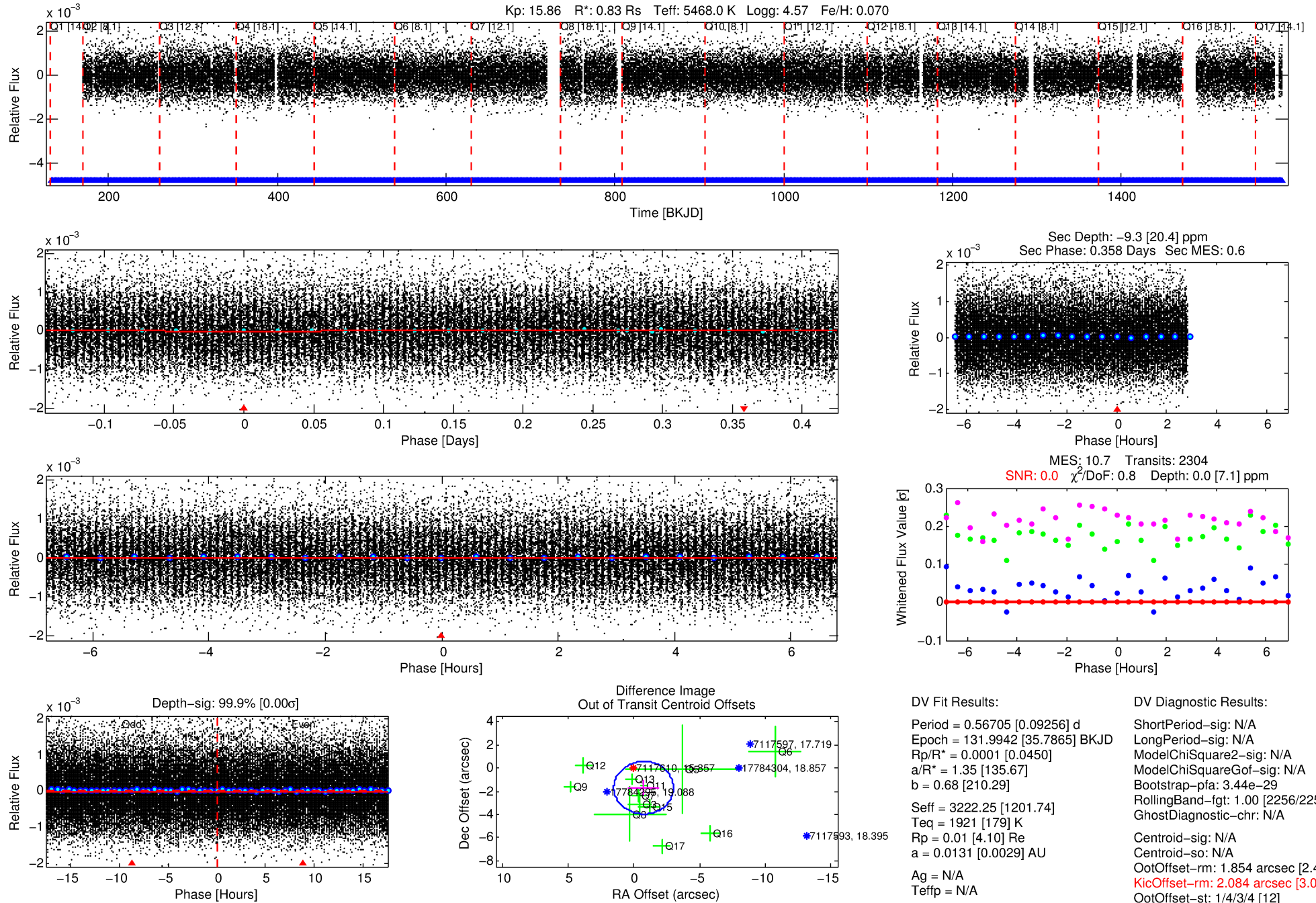
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007117610-01

No Significant Match Found

DV One-Page Summary

KIC: 7117610 Candidate: 1 of 1 Period: 0.567 d



DV Fit Results:

Period = 0.56705 [0.09256] d
Epoch = 131.9942 [35.7865] BKJD
Rp/R* = 0.0001 [0.0450]
a/R* = 1.35 [135.67]
b = 0.68 [210.29]
Seff = 3222.25 [1201.74]
Teq = 1921 [179] K
Rp = 0.01 [4.10] Re
a = 0.0131 [0.0029] AU
Ag = N/A
Teffp = N/A

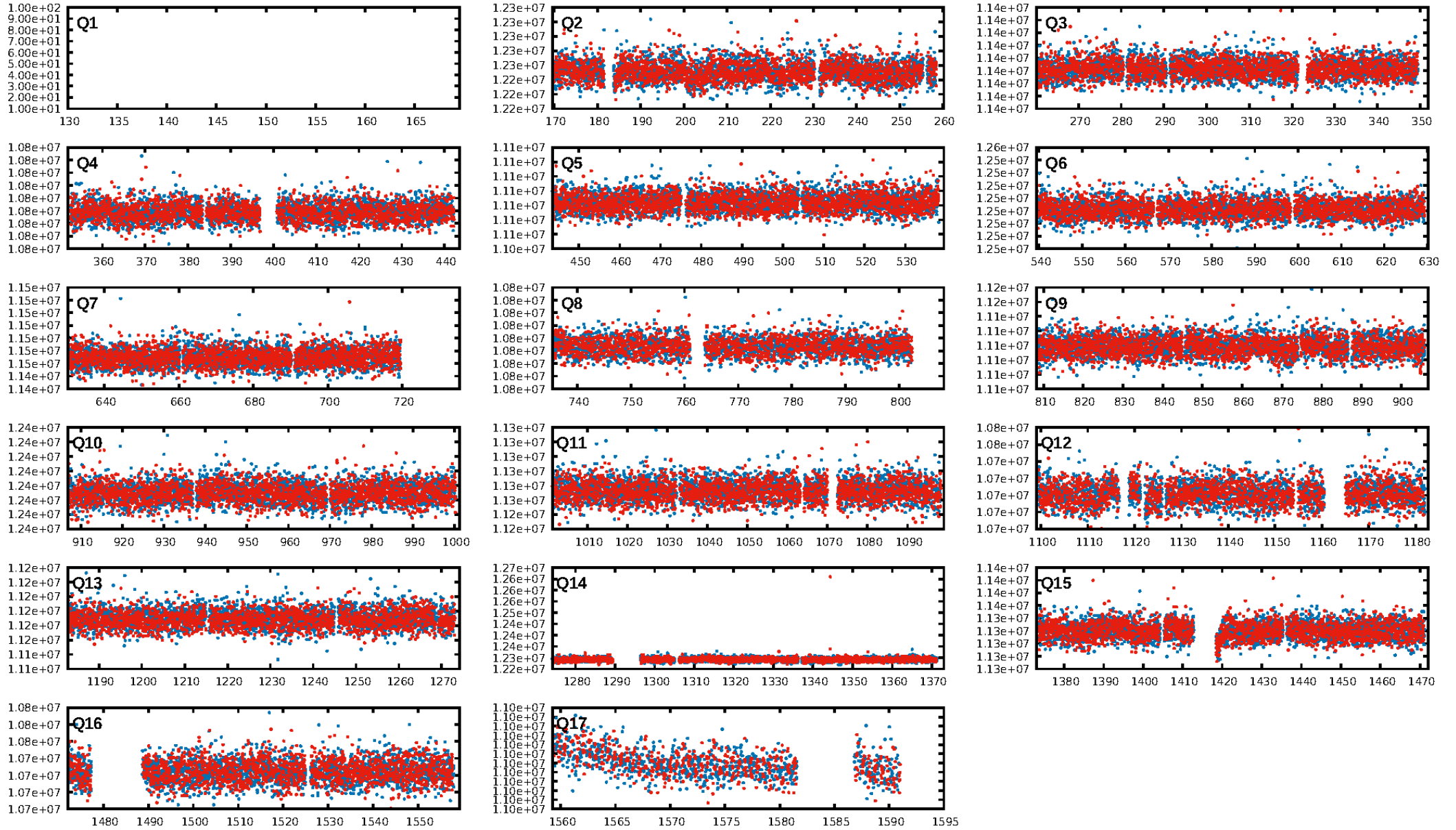
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.44e-29
RollingBand-fgt: 1.00 [2256/2256]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.854 arcsec [2.46 σ]
KicOffset-rm: 2.084 arcsec [3.02 σ]
OotOffset-st: 1/4/3/4 [12]
KicOffset-st: 1/4/3/4 [12]
DiffImageQuality-fgm: 0.00 [0/12]
DiffImageOverlap-fno: 1.00 [16/16]

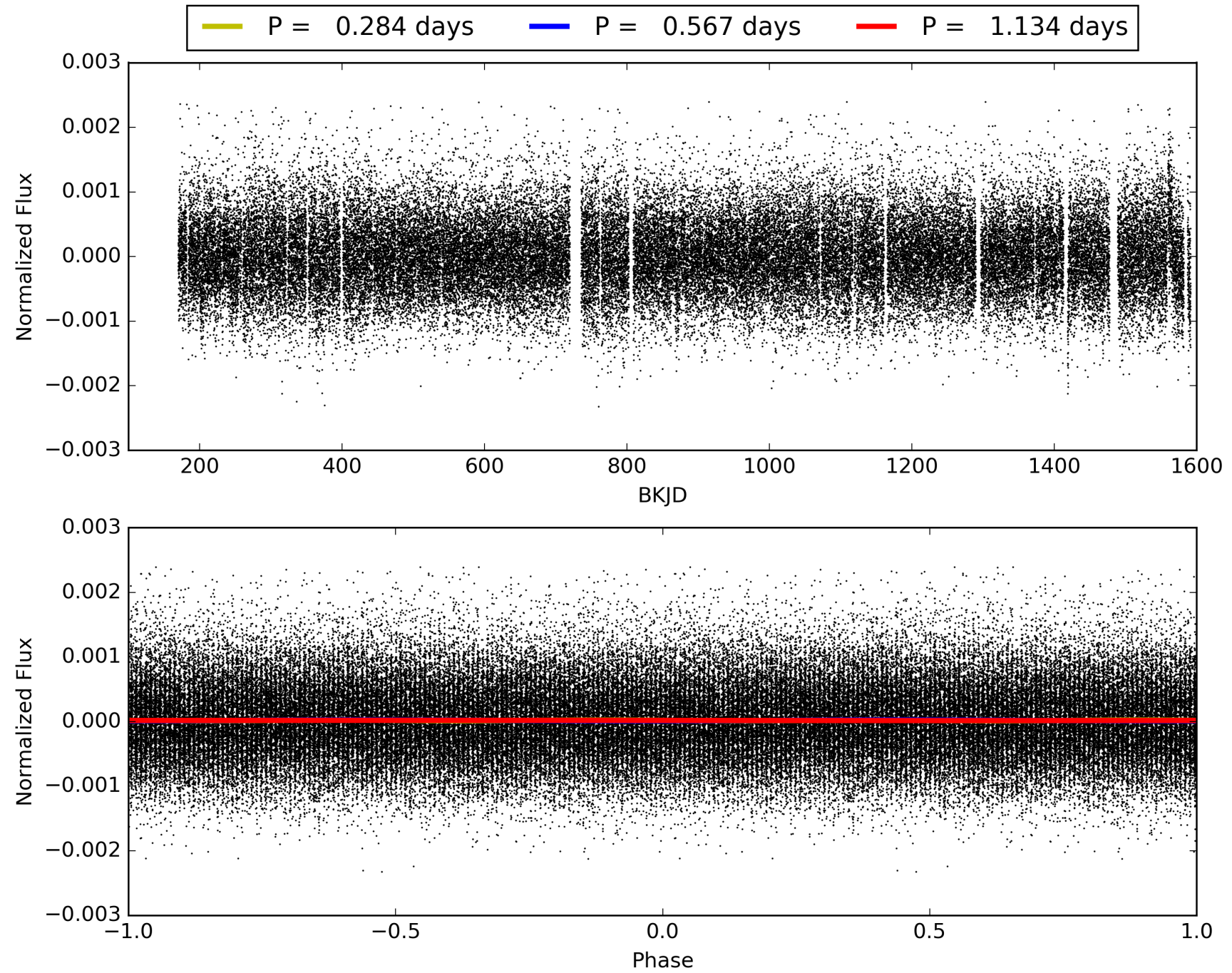
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 09:03:46 Z

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

TCE 007117610-01, PDC Light Curves

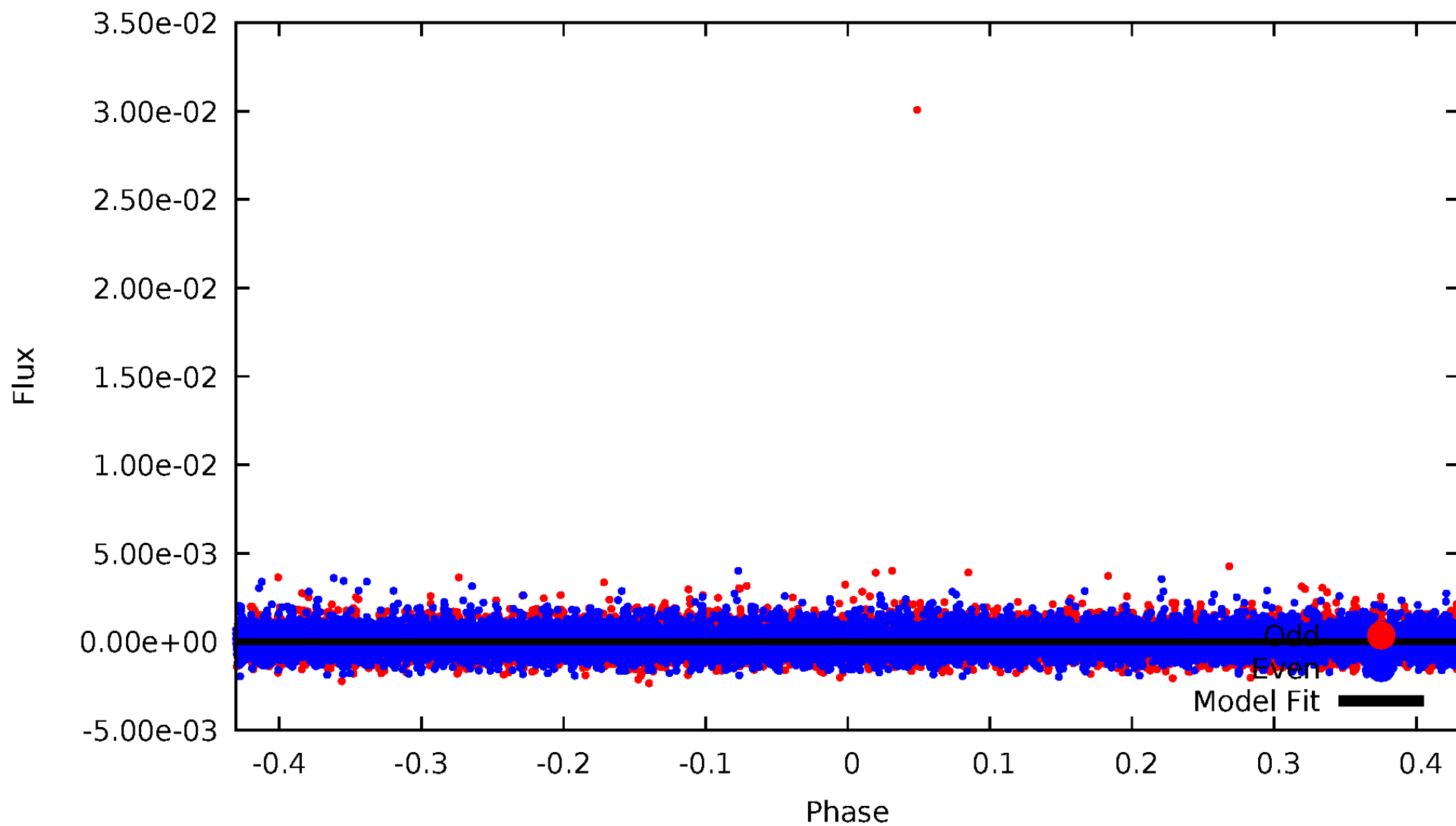


TCE 007117610-01



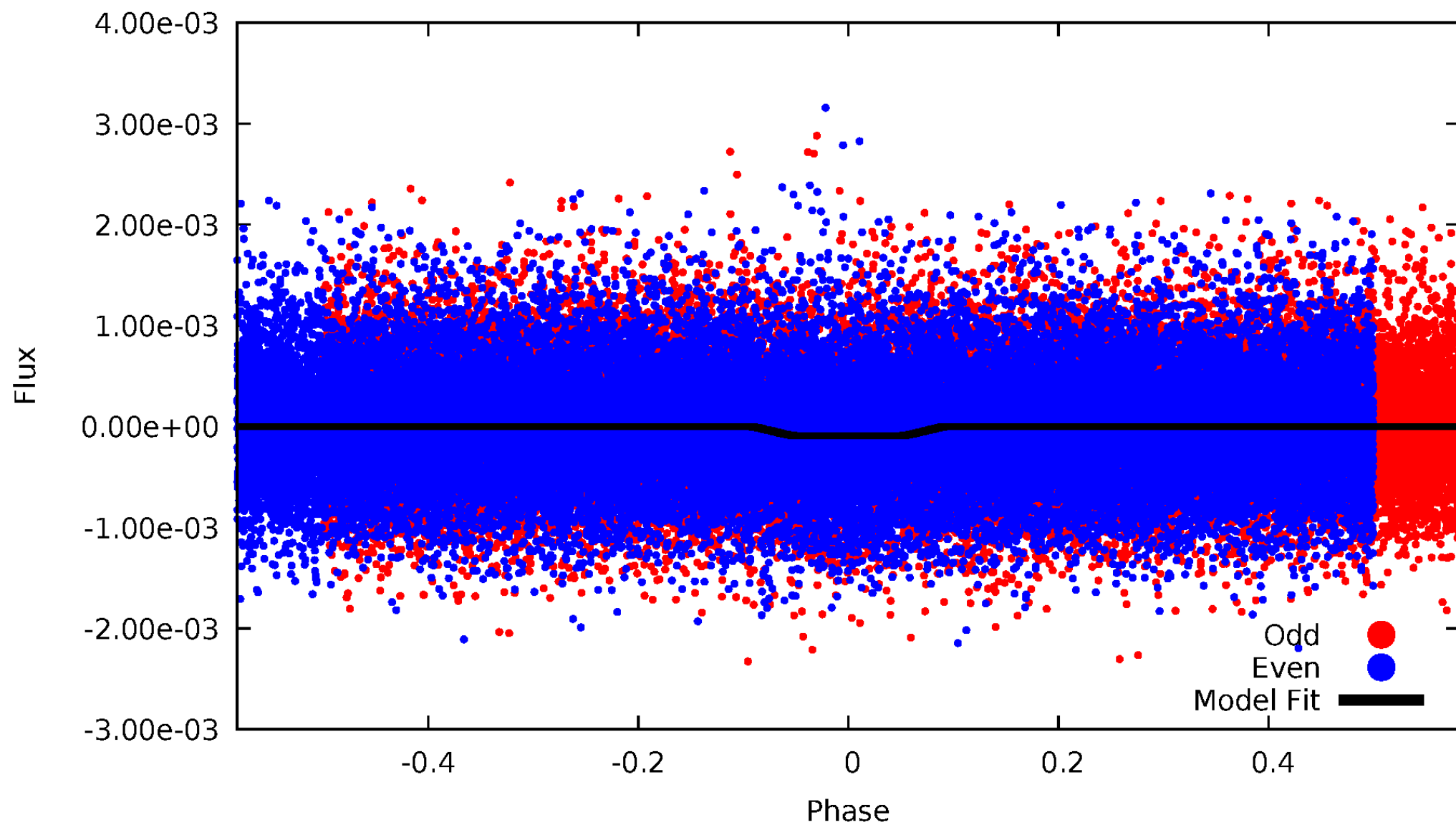
DV Odd/Even

TCE 007117610-01



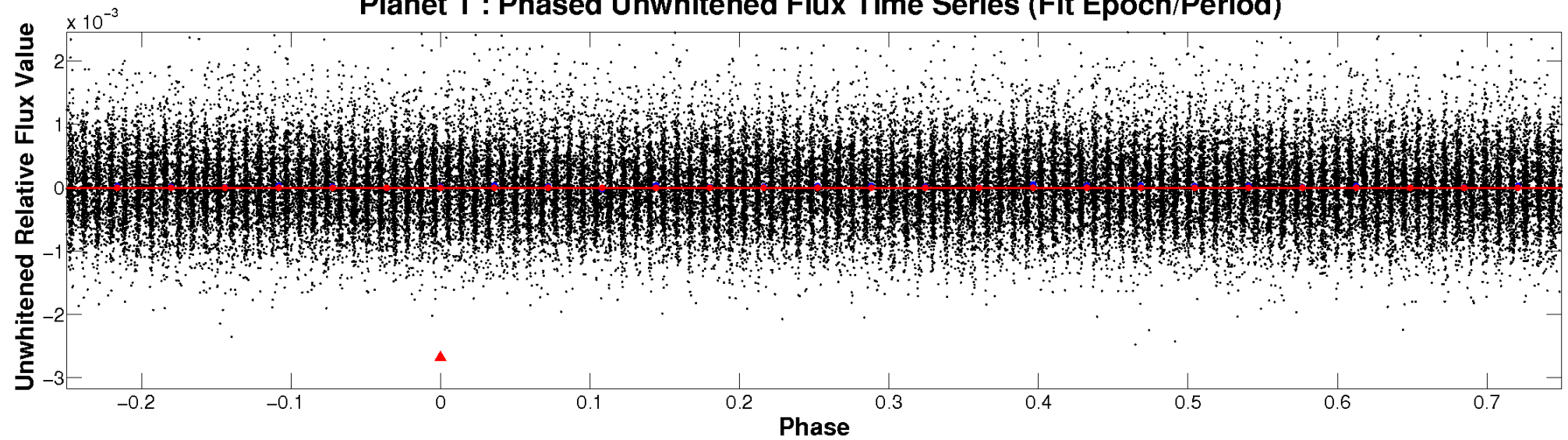
ALT Odd/Even

TCE 007117610-01

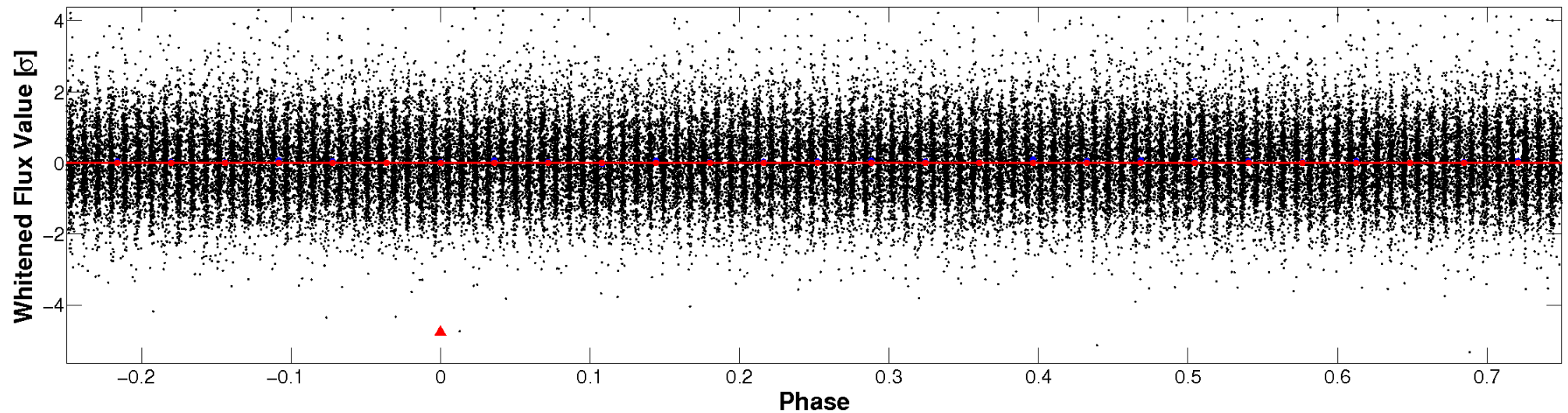


Non-Whitened Vs. Whitened Light Curve

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

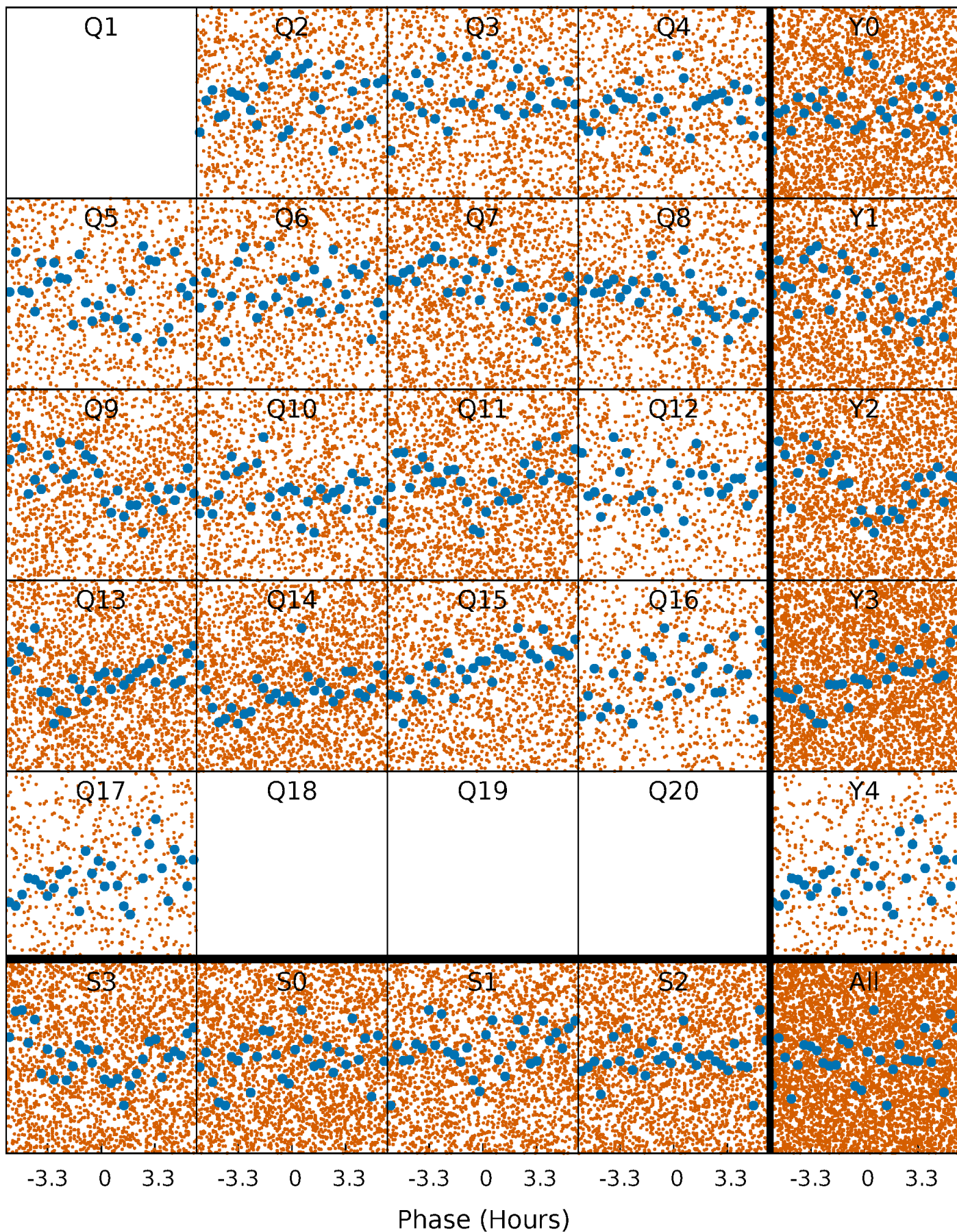


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



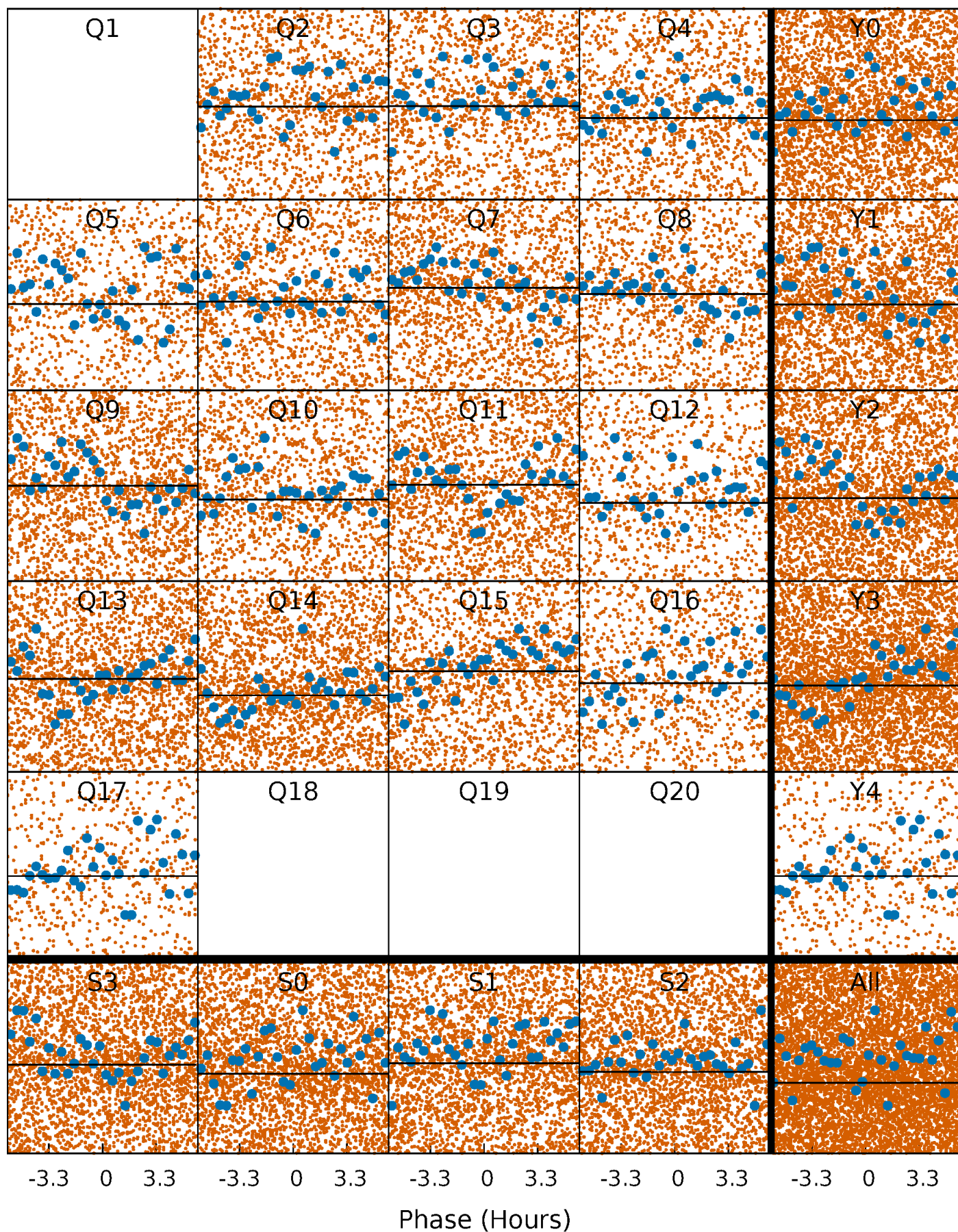
PDC Quarter-Phased Transit Curves

TCE 007117610-01 P= 0.567048 Days $T_0=131.994159$ (BKJD)



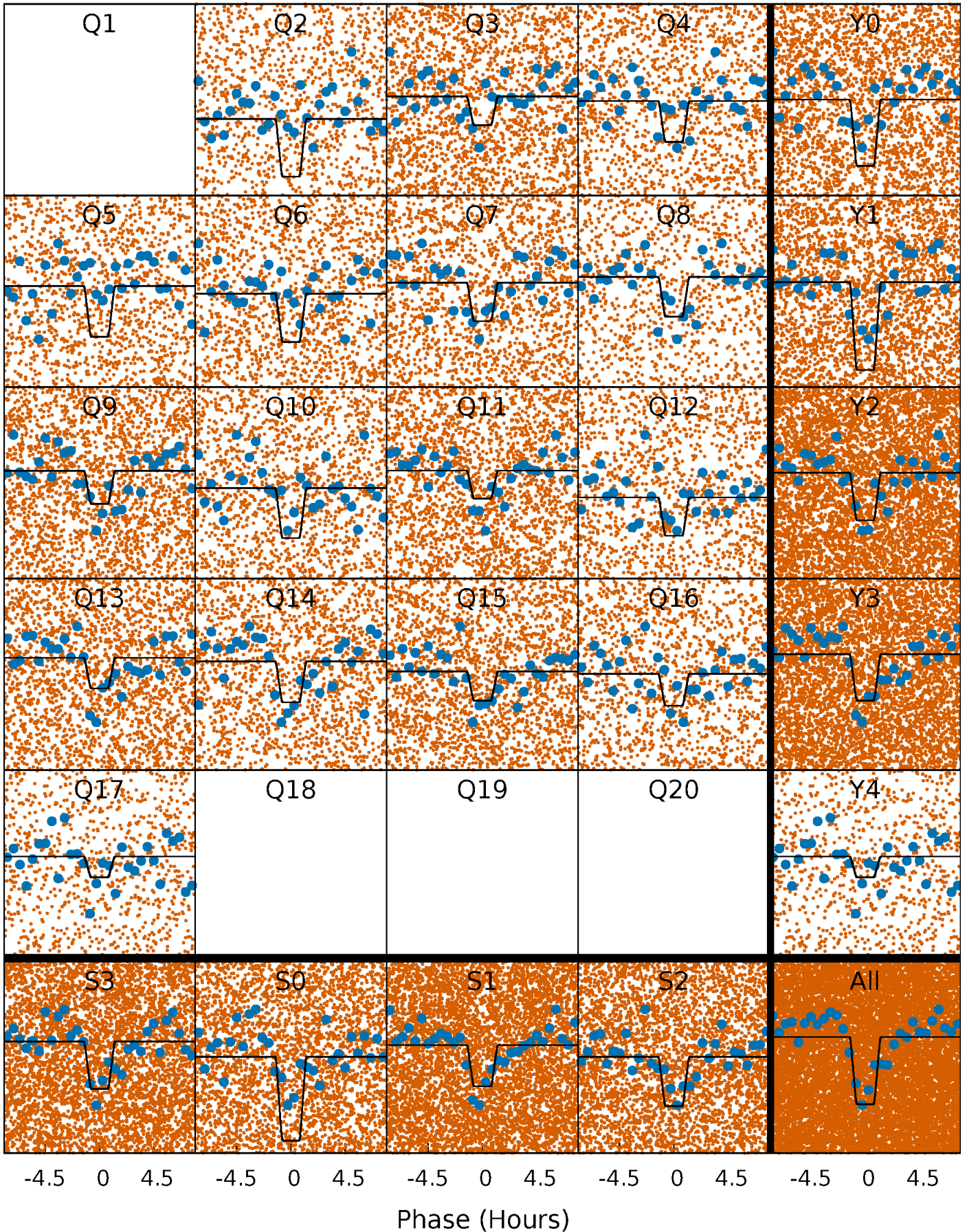
DV Quarter-Phased Transit Curves

TCE 007117610-01 P= 0.567048 Days $T_0=131.994159$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

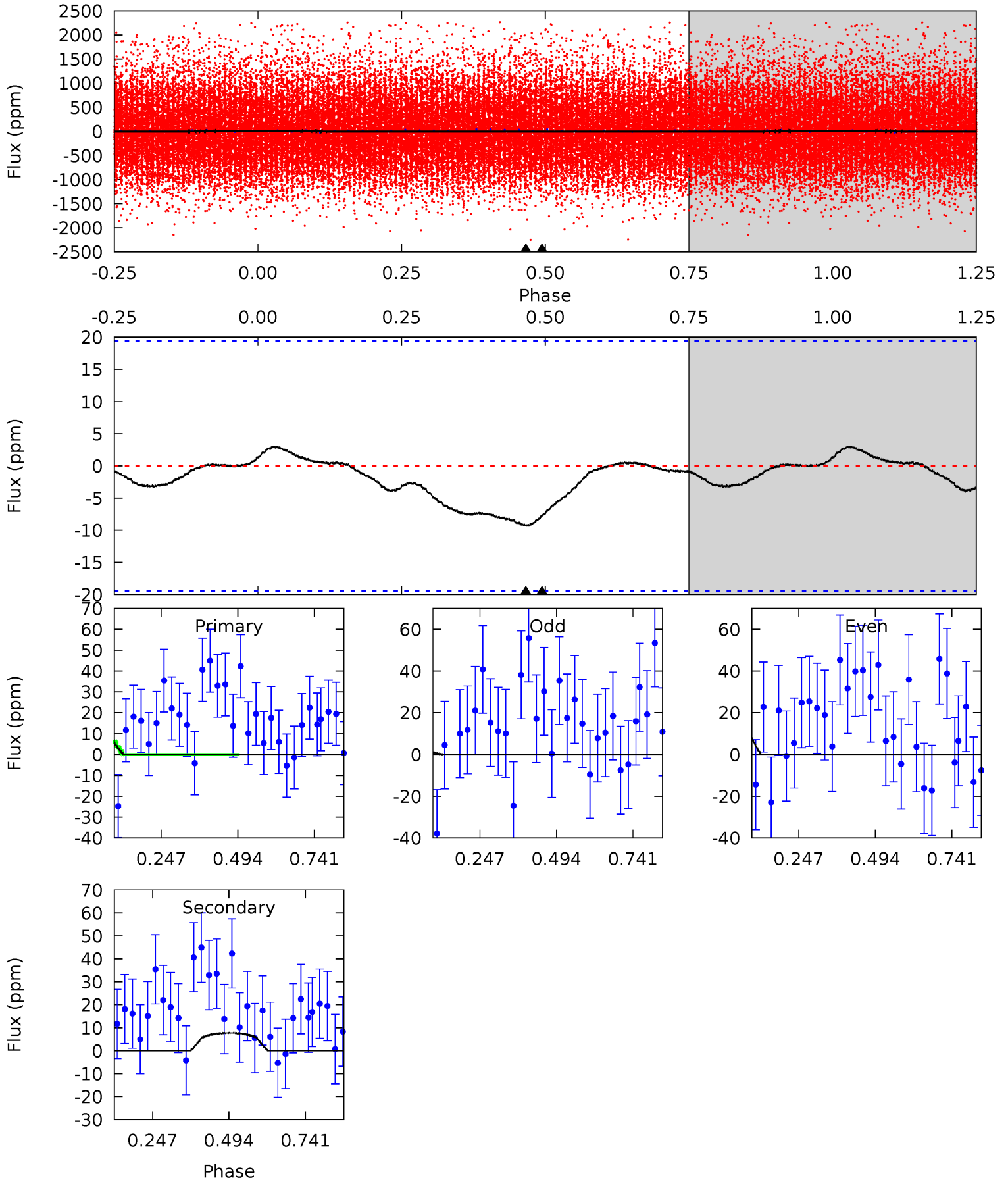
TCE 007117610-01 P= 0.566782 Days $T_0=131.844834$ (BKJD)



DV Model-Shift Uniqueness Test

007117610-01, P = 0.567048 Days, E = 131.994159 Days

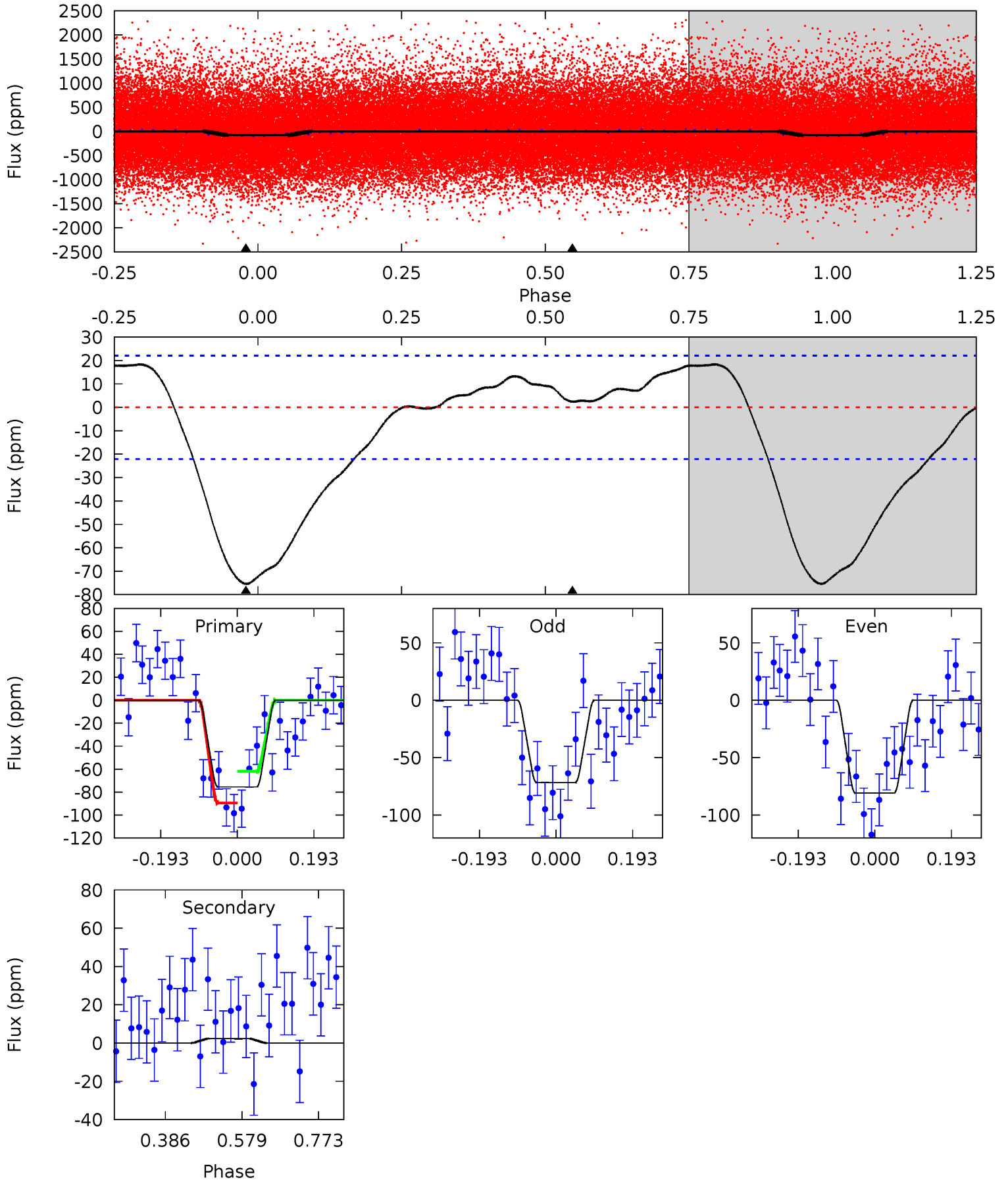
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.10	1.74	0	0	4.37	1.16	0.38	2.10	2.10	1.74	1.74	1.32	3.17	0.24	0.84



Alt Model-Shift Uniqueness Test

007117610-01, P = 0.566782 Days, E = 131.844834 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.1	-0.46	0	0	4.42	1.30	2.12	15.1	15.1	-0.46	-0.46	0.93	0.97	0.20	2.72



Stellar Parameters For KIC 007117610

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5468^{+163}_{-163}	$4.570^{+0.036}_{-0.153}$	$0.070^{+0.250}_{-0.300}$	$0.834^{+0.187}_{-0.062}$	$0.943^{+0.074}_{-0.111}$	$2.289^{+0.354}_{-0.956}$
	+3%/-3%	+1%/-3%	+357%/-429%	+22%/-7%	+8%/-12%	+15%/-42%
Source	PHO1	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 007117610-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-8 ± 4	$2.92^{+3.12}_{-2.07}$	2740^{+216}_{-167}	-2781^{+6057}_{-205}	$0.070^{+0.864}_{-0.058}$
Alt.	2 ± 5	$3.20^{+3.17}_{-2.29}$	2742^{+244}_{-171}	-2976^{+176}_{-277}	$-0.012^{+0.037}_{-0.194}$

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

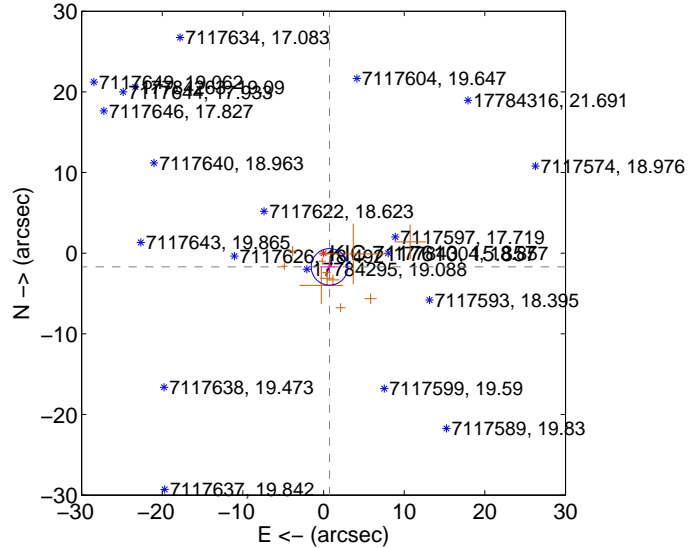
Supplemental centroid analysis for 007117610-01. Kepler magnitude: 15.86. Transit SNR 0.00

There are 0 quarters with good PRF difference image offsets

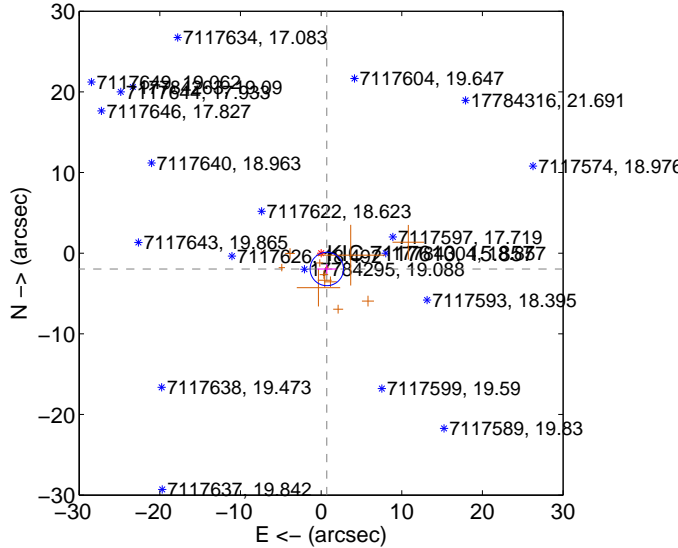
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.854 ± 0.755	2.46	-0.740 ± 1.147	-1.699 ± 0.634
PRF-fit source offset from KIC position	2.084 ± 0.690	3.02	-0.707 ± 1.208	-1.960 ± 0.594
photometric centroid source offset	—	—	—	—

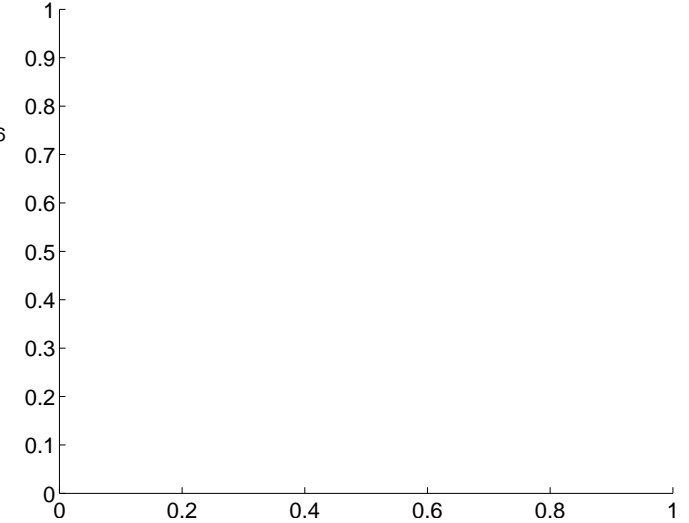
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

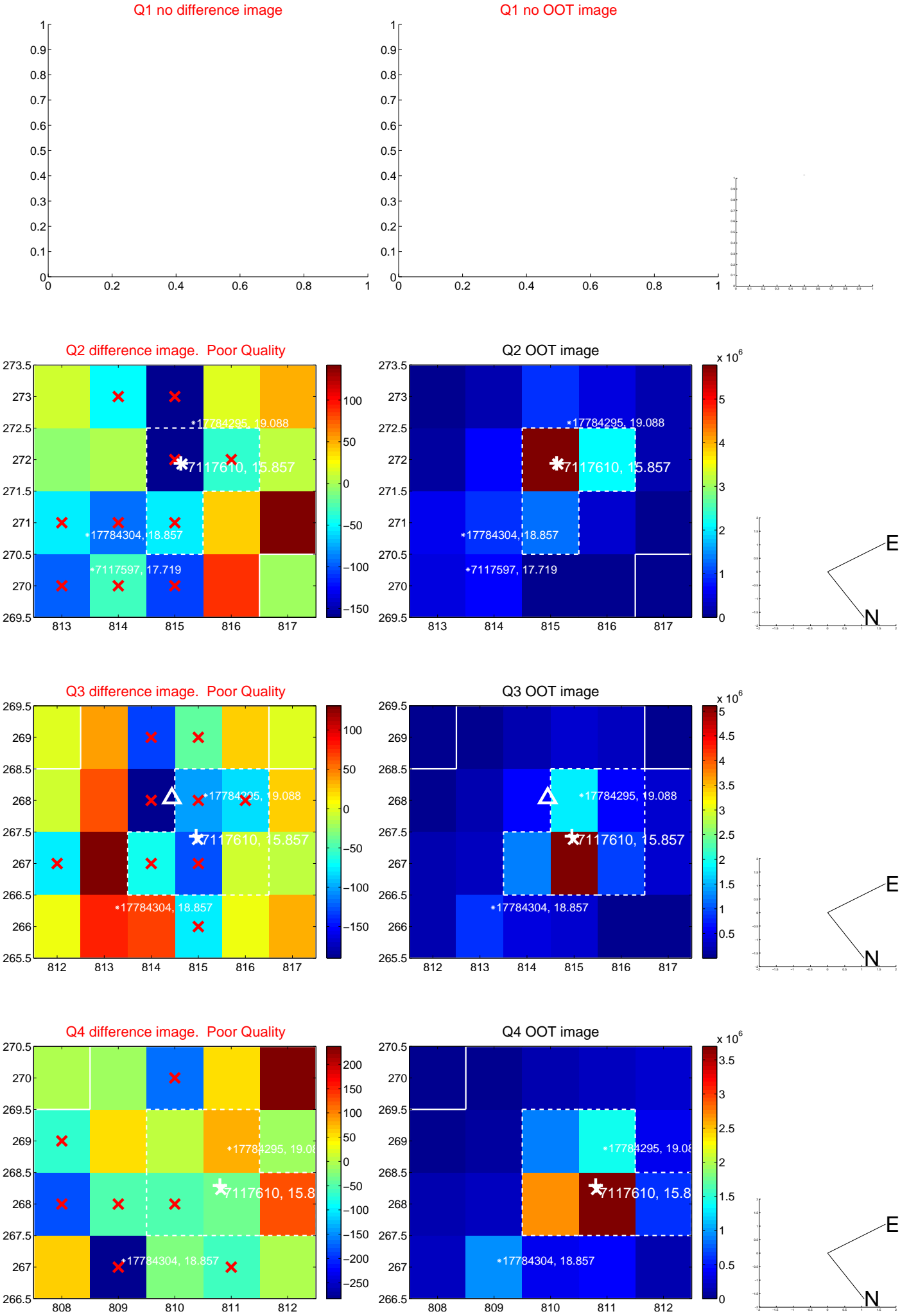


There are no photometric centroids

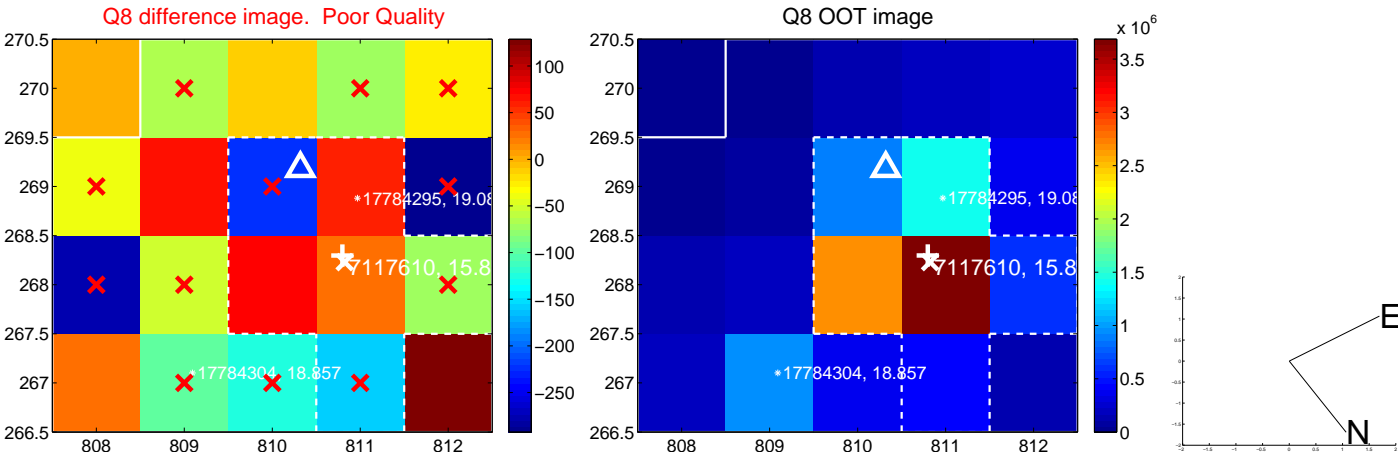
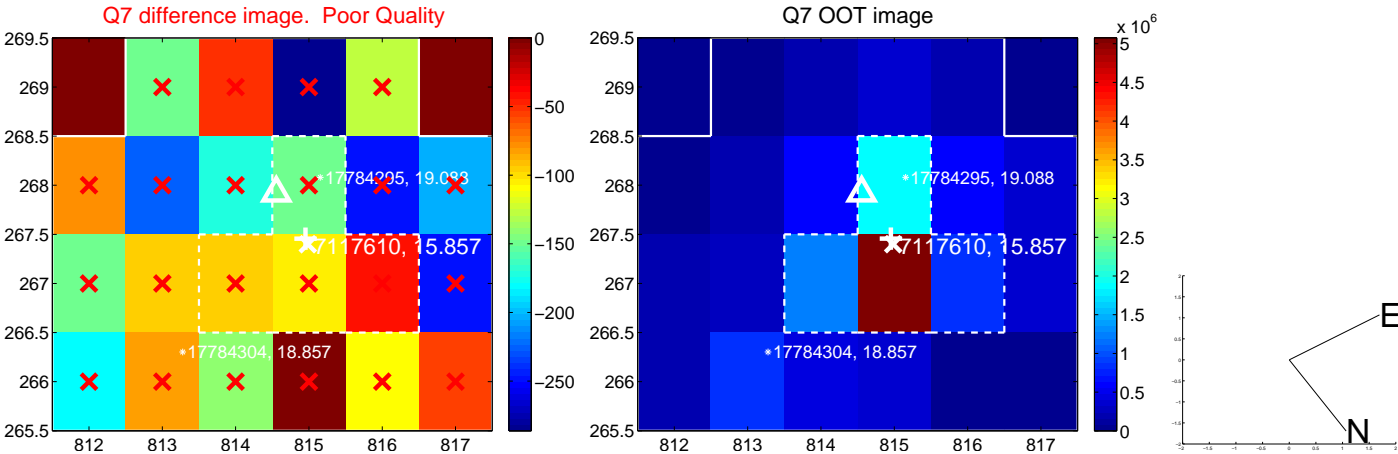
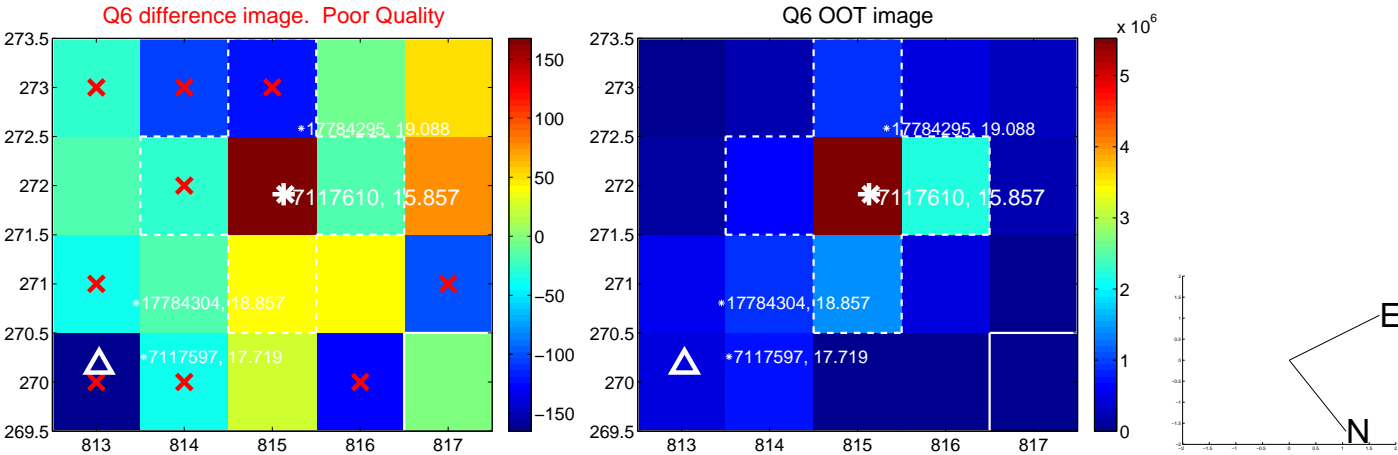
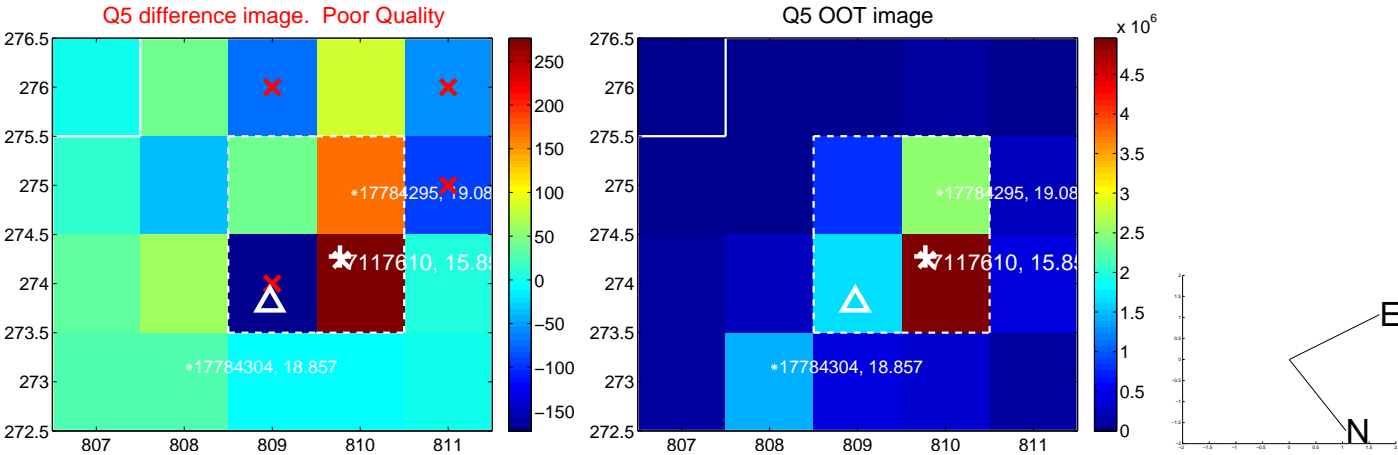


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

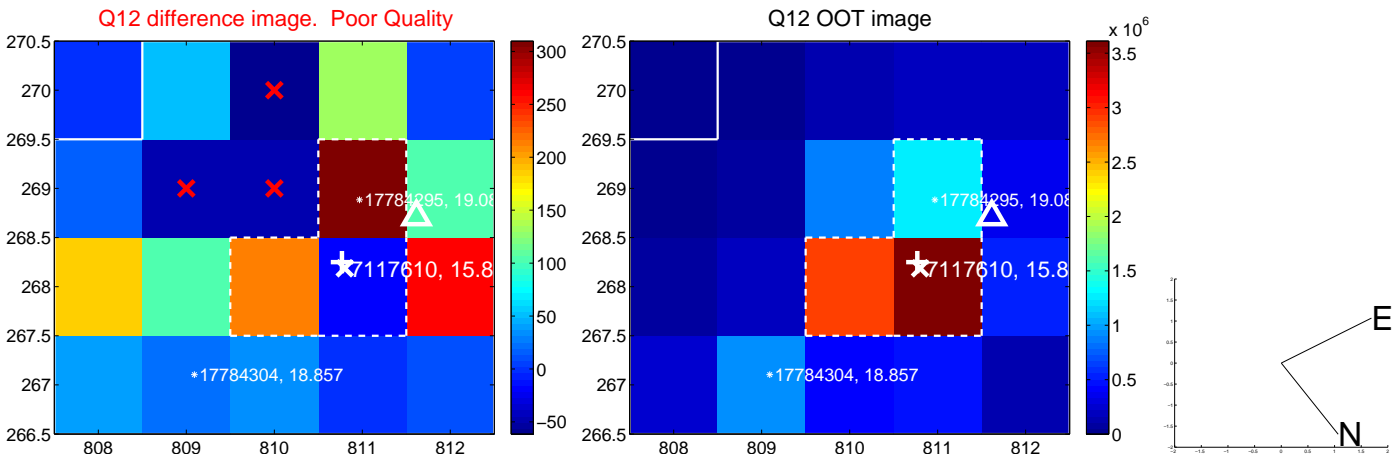
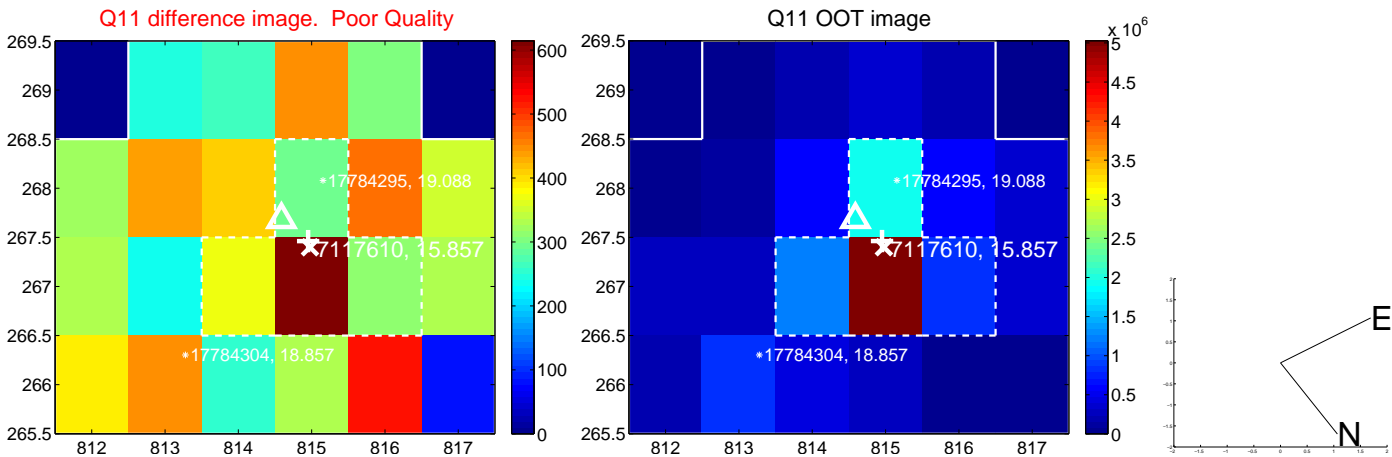
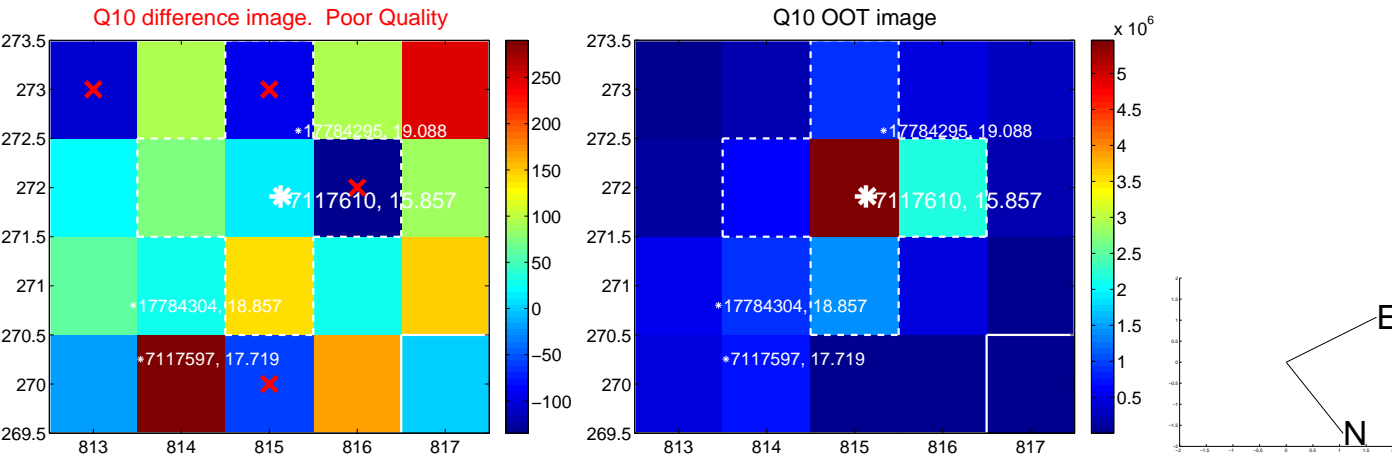
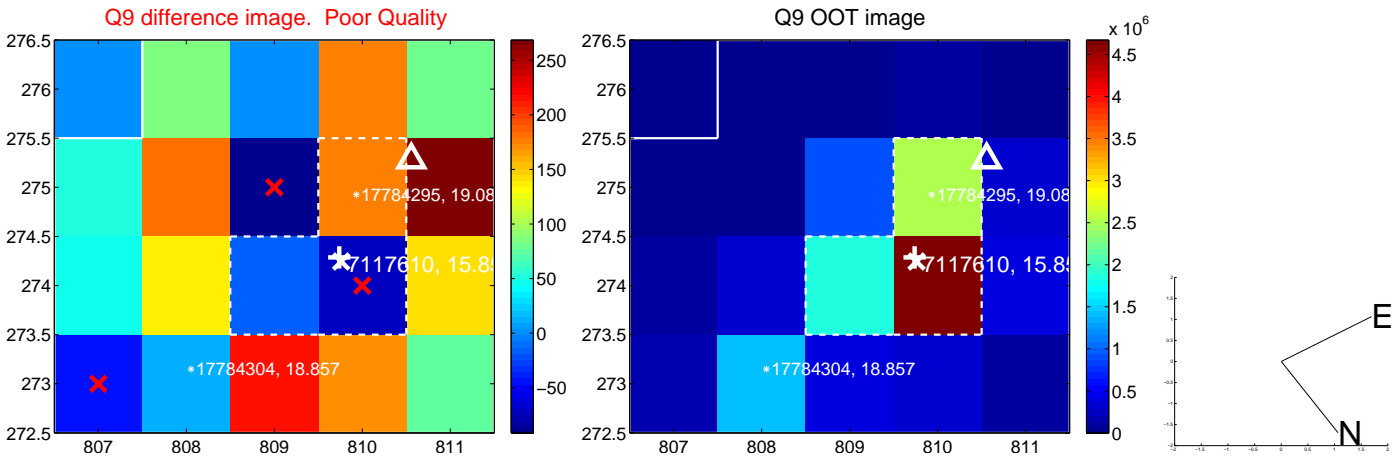
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



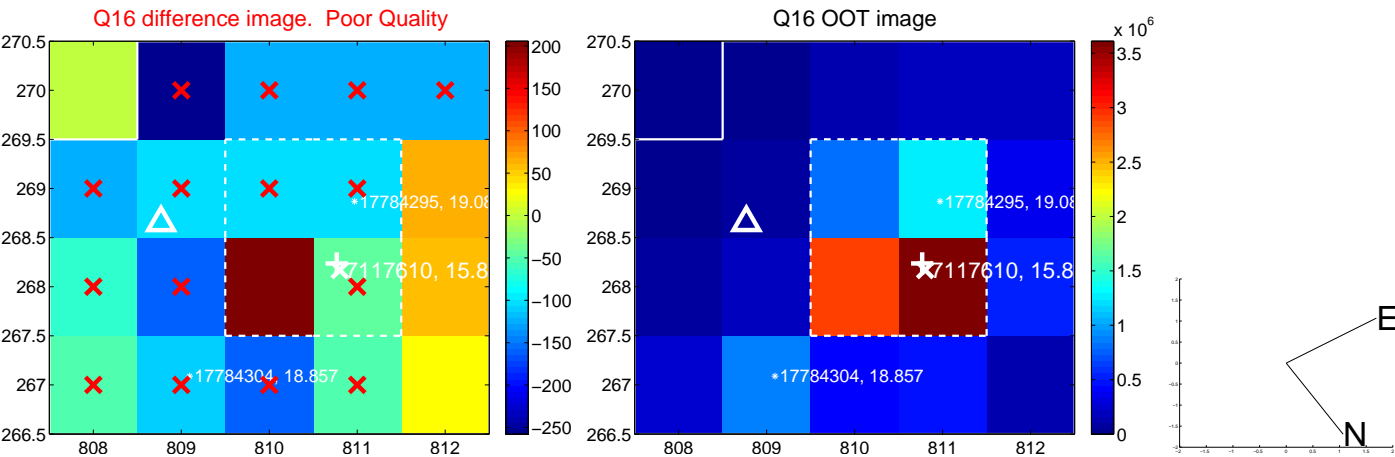
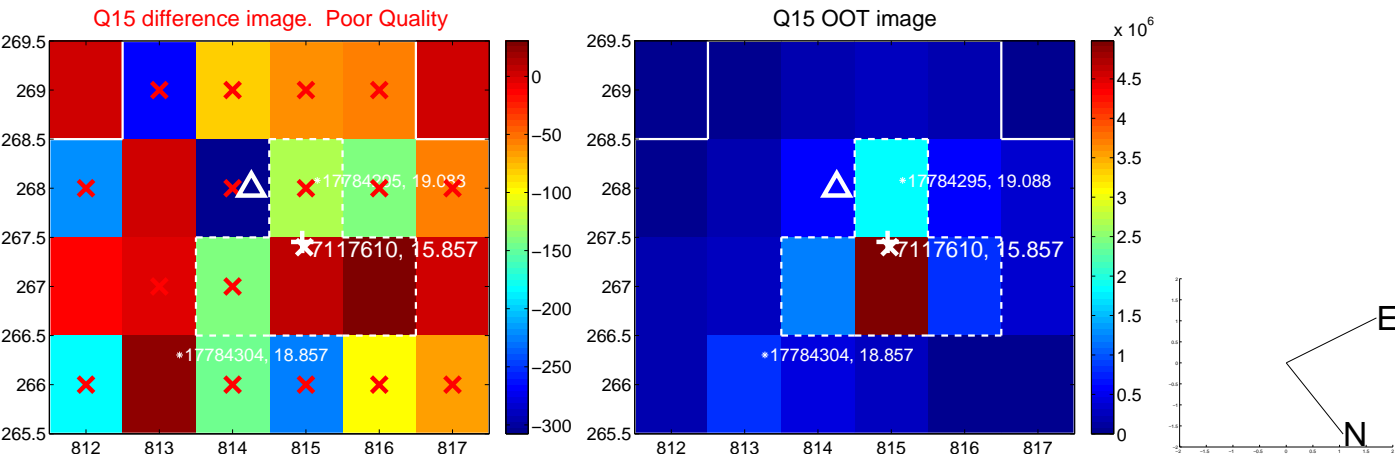
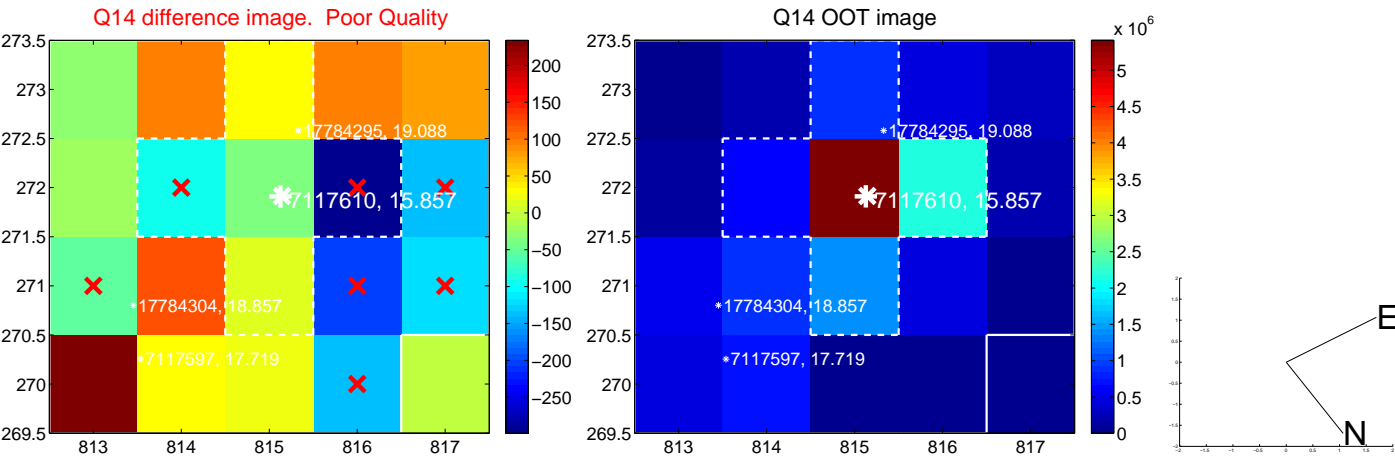
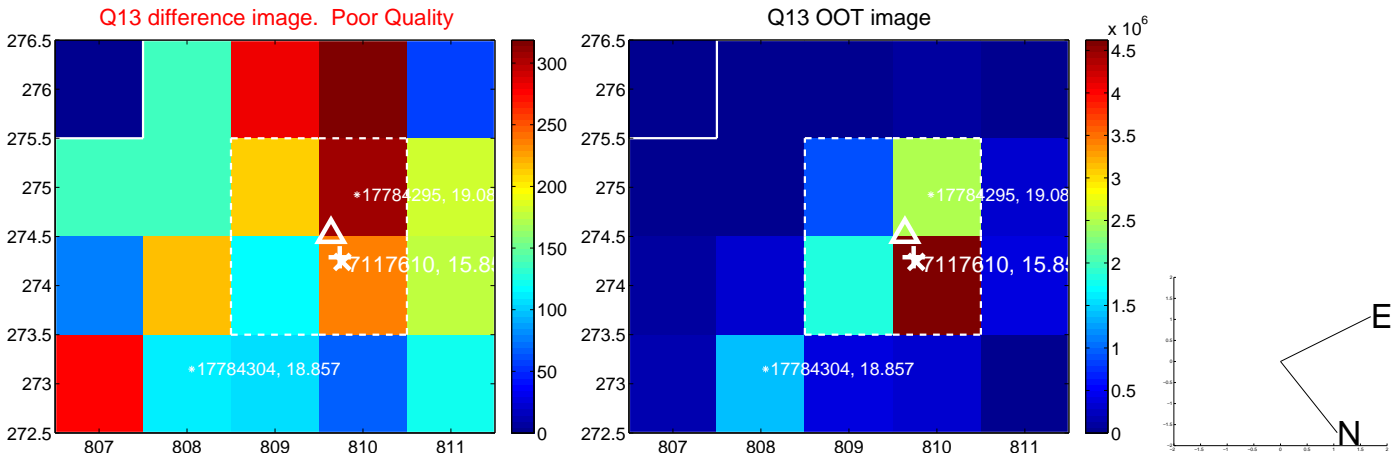
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



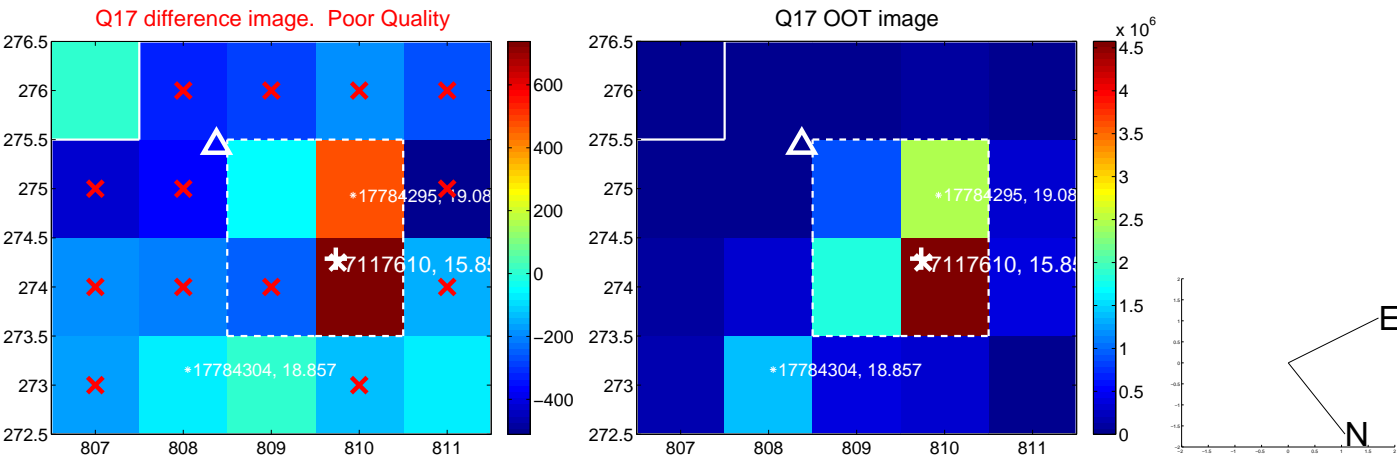
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folded centroid time series figure for this object.

UKIRT Image

Declination

