

KIC 007281372

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})
007281372-01	OBS	No	0.566754	131.884393	1.2	2.200	8.7	0.2	0.93	6214	0.12	6443.28

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007281372-01	OBS	FP	0.00	1	0	0	1	LPP_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS—EPHEM_MATCH

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.

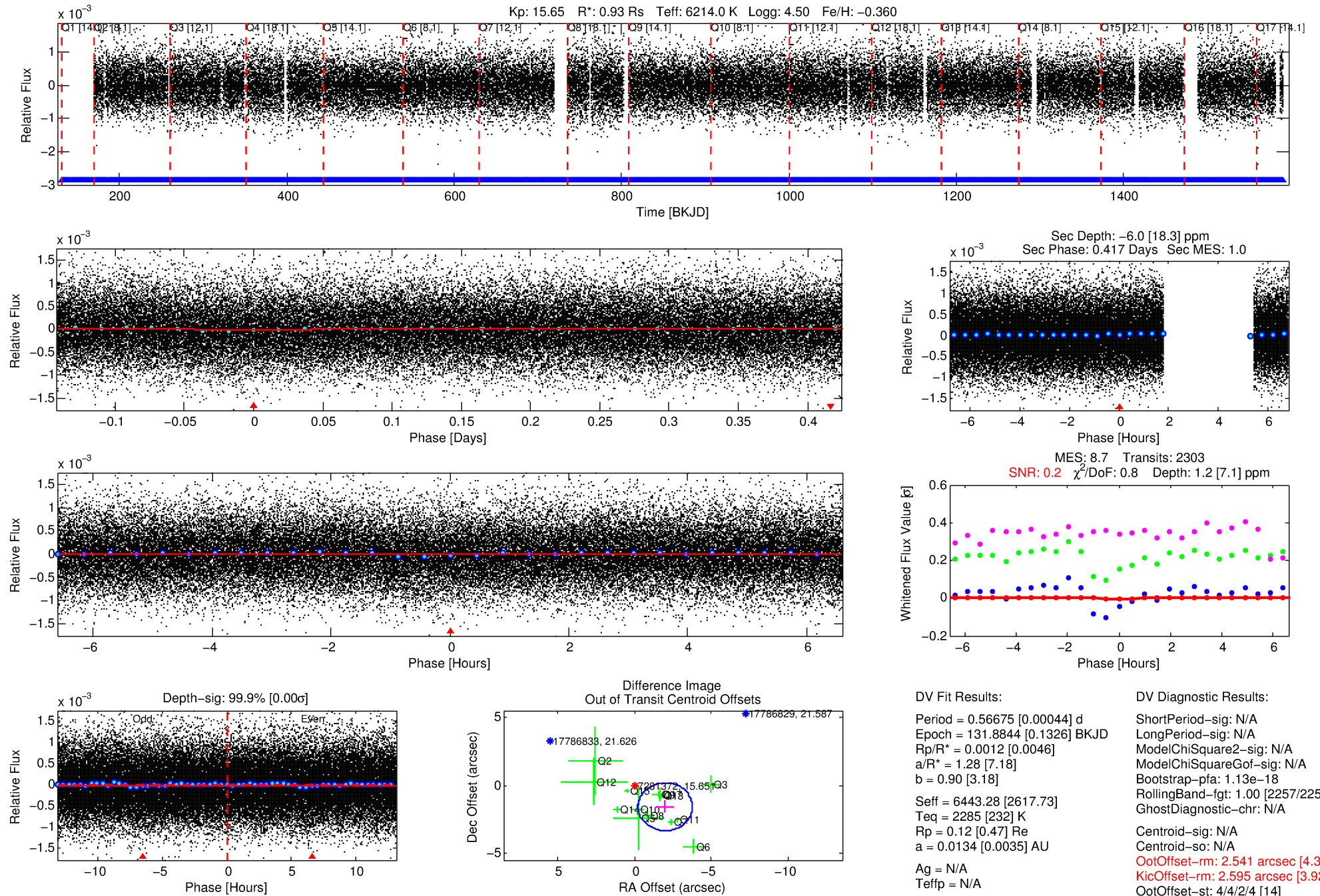
Ephemeris Match Information For 007281372-01

TCE (1)	KIC	Parent (2)	Parent KIC	$P_1:P_2$	Dist ($''$)	Δ Row	Δ Col	m_2	m_1	D_2/D_1	Mechanism	Flag	σ_P	σ_T
007281372-01	7281372	RR-Lyr-pri	7198959	1:1	565.8	50	133	7.86	15.65	623300.00	Direct-PRF	0	1.34	20.19

Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

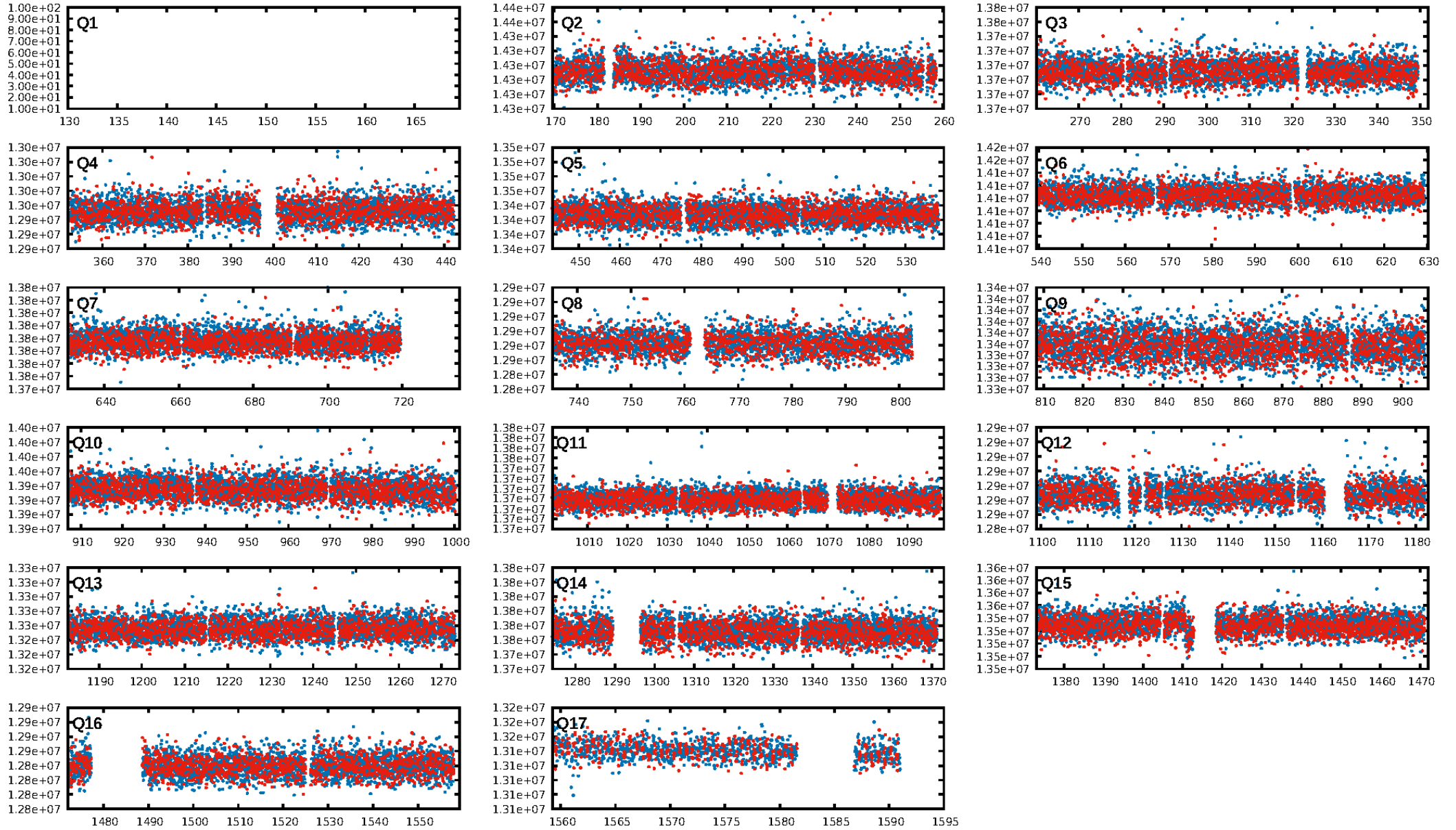
KIC: 7281372 Candidate: 1 of 1 Period: 0.567 d



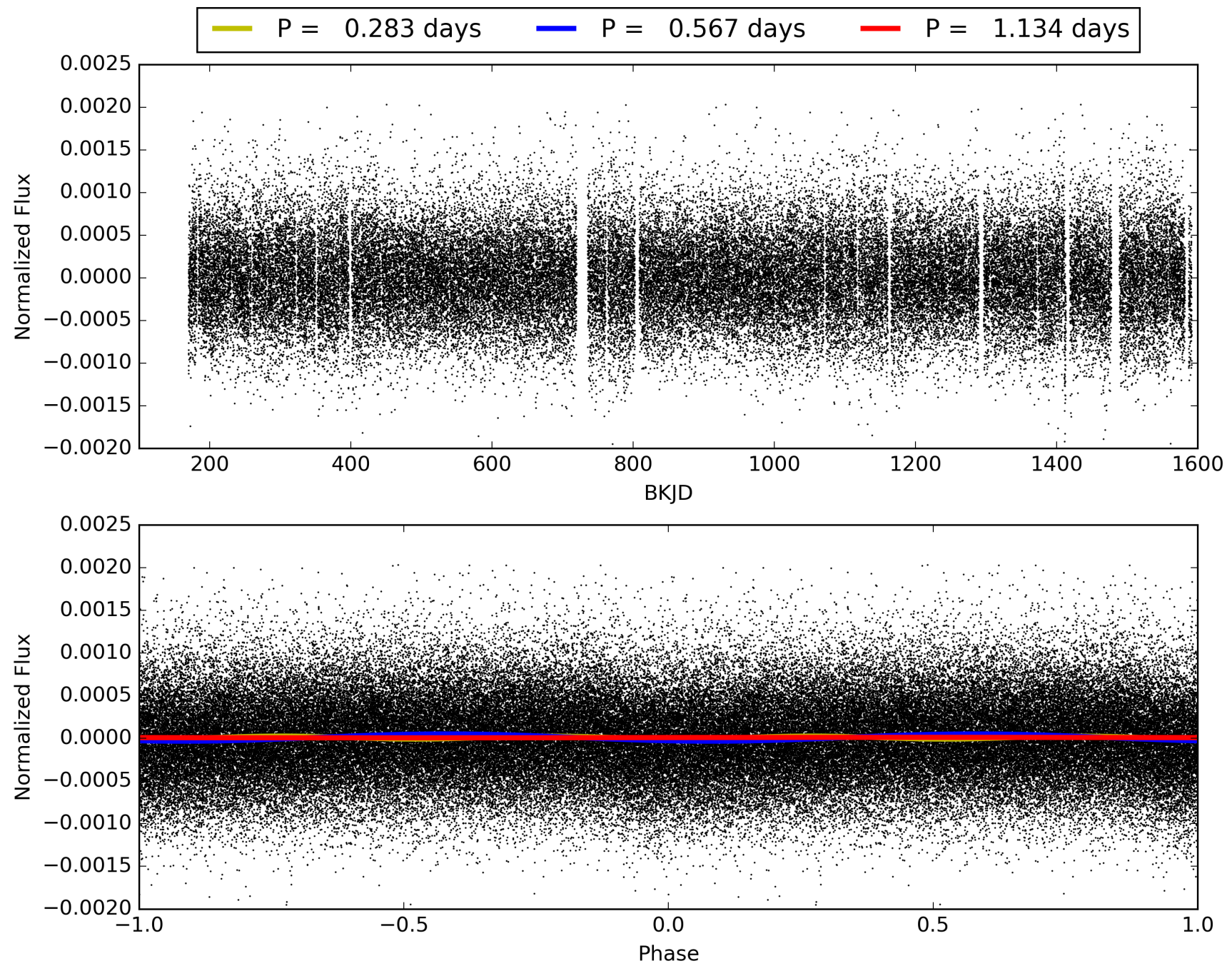
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 07:35:29 Z

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

TCE 007281372-01, PDC Light Curves

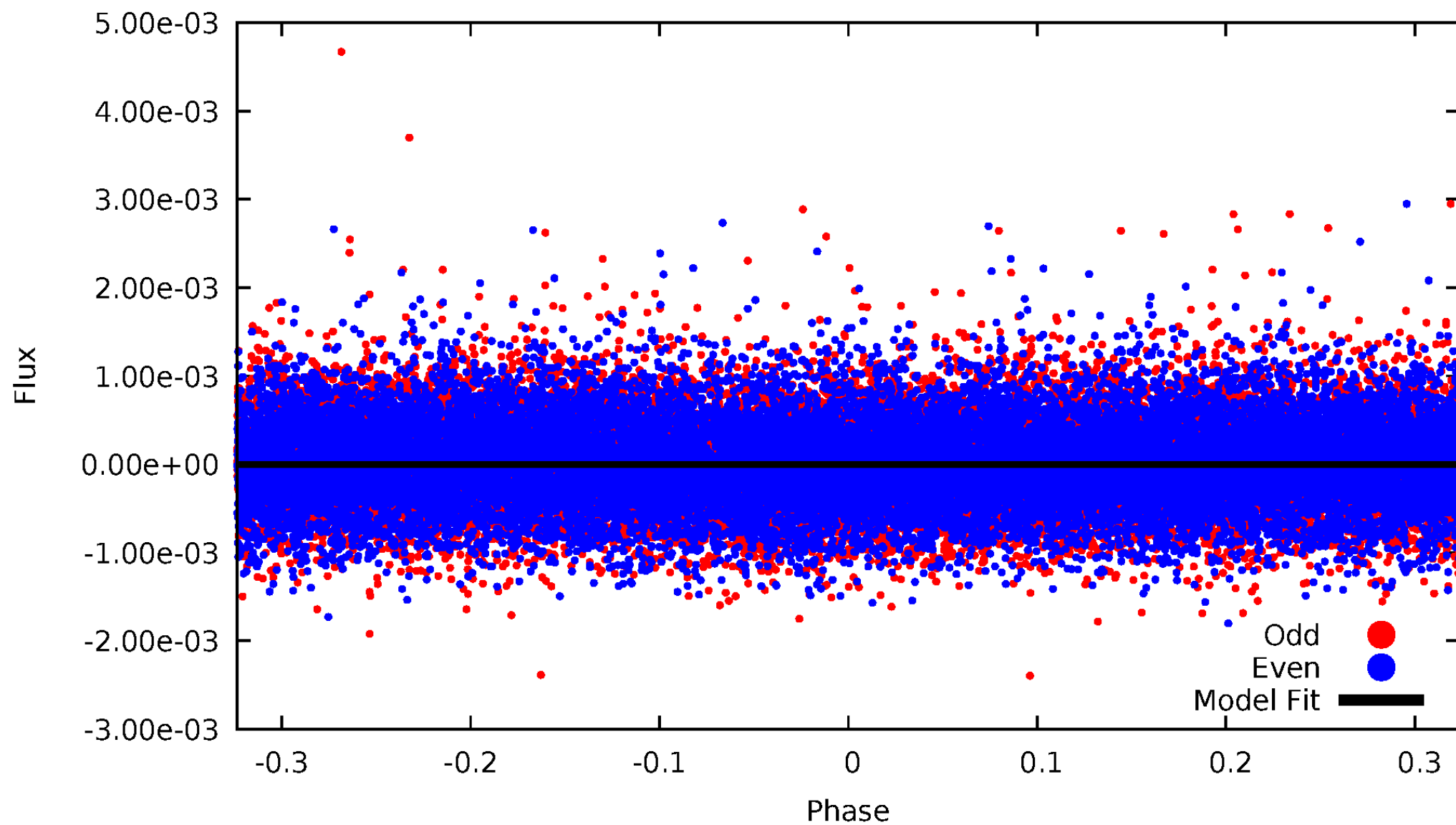


TCE 007281372-01



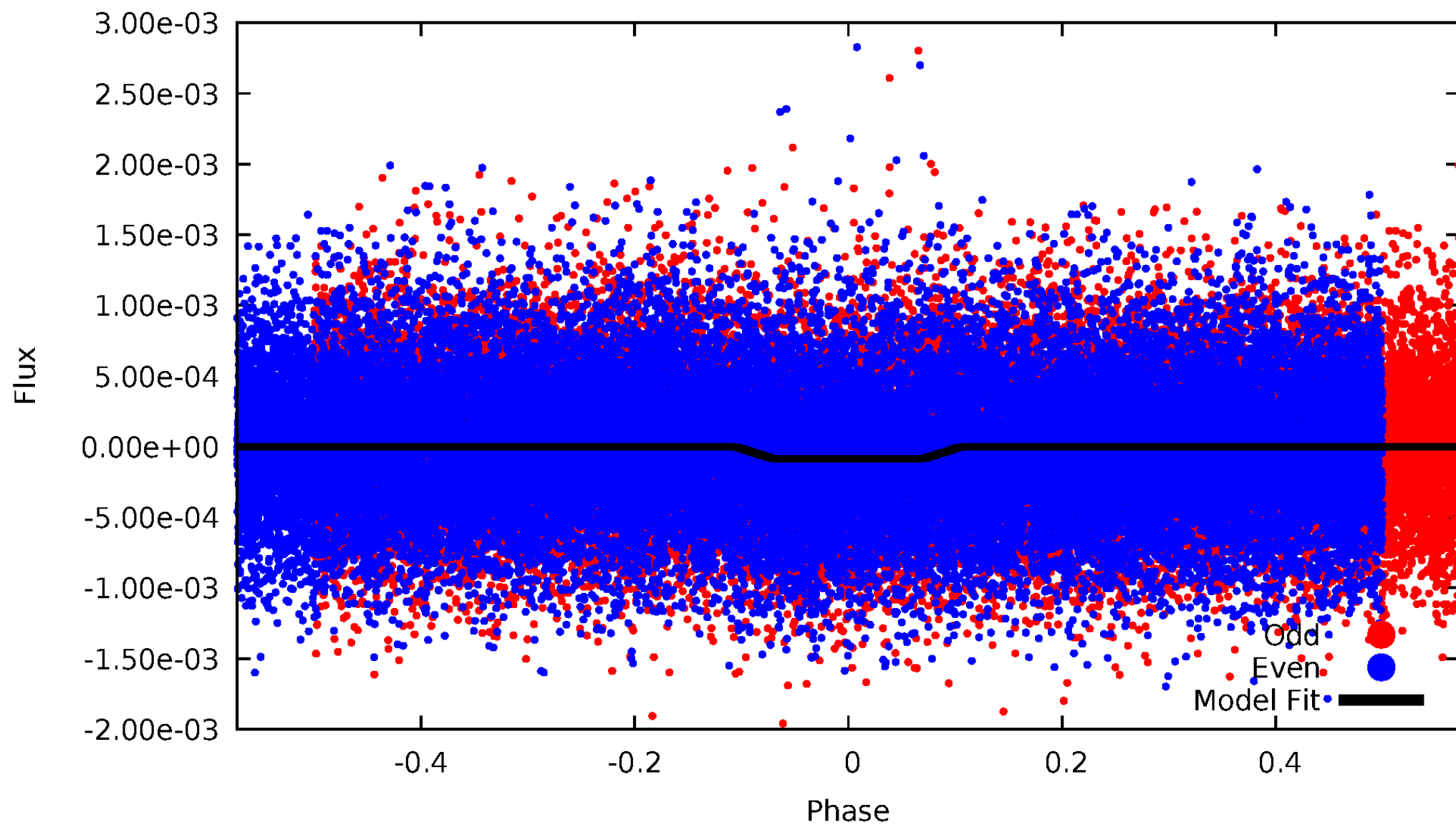
DV Odd/Even

TCE 007281372-01



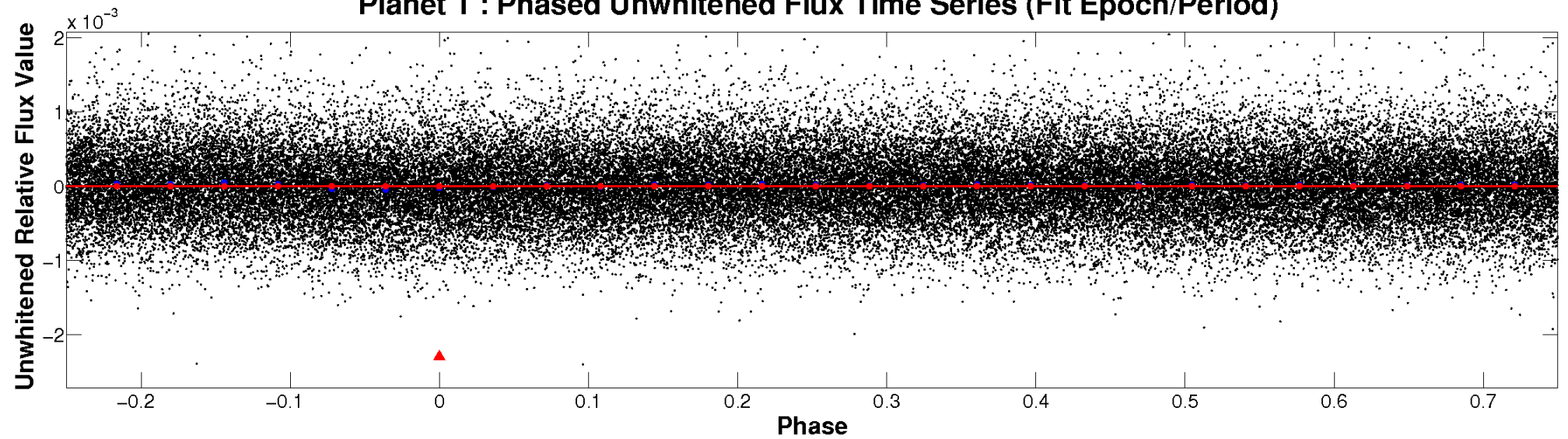
ALT Odd/Even

TCE 007281372-01

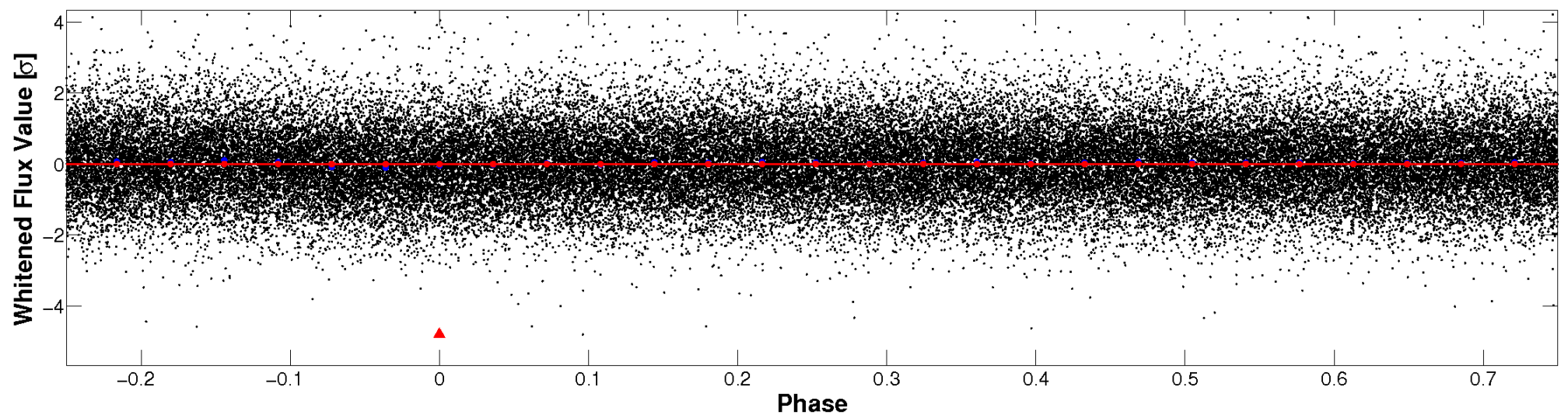


Non-Whitened Vs. Whitened Light Curve

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

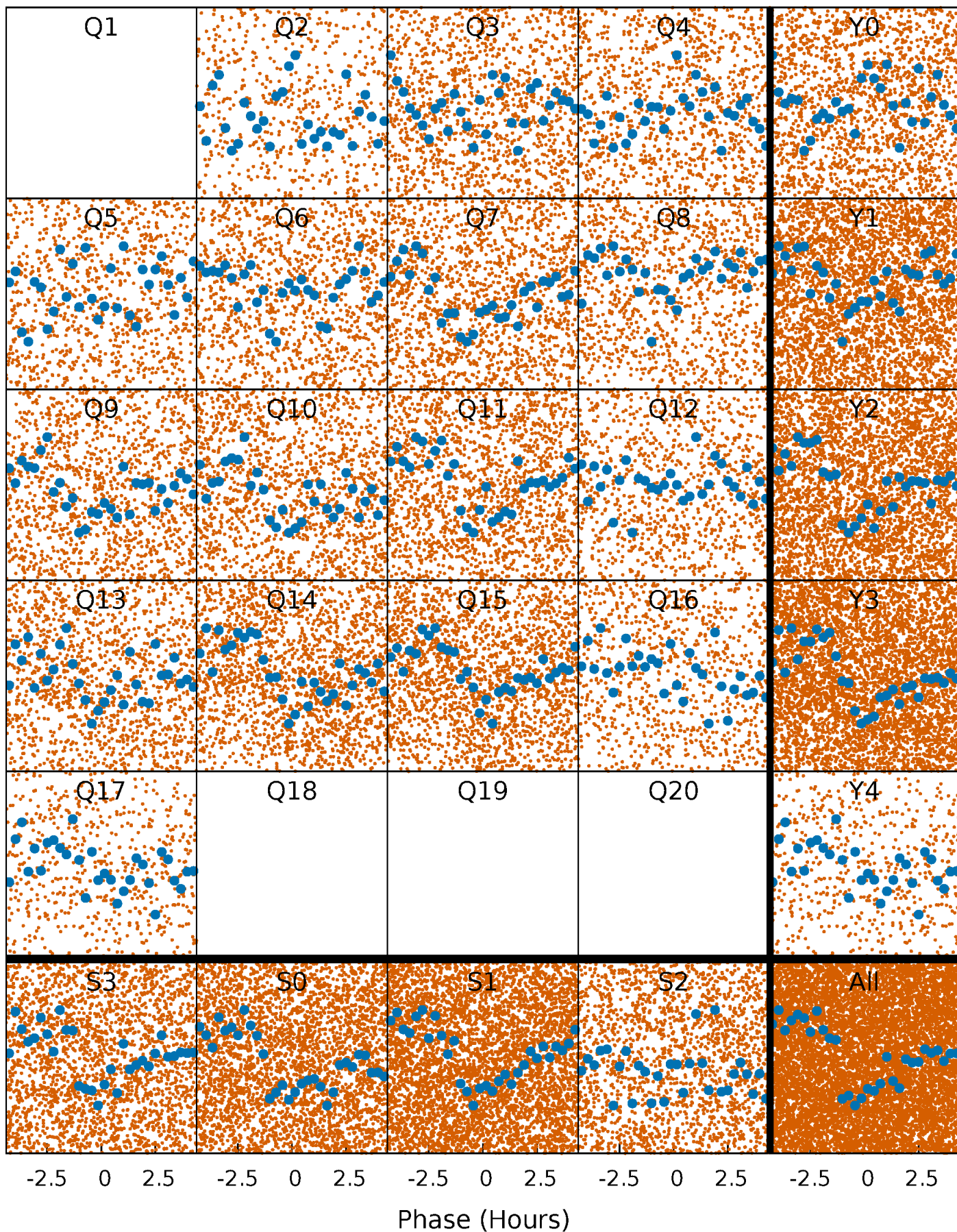


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



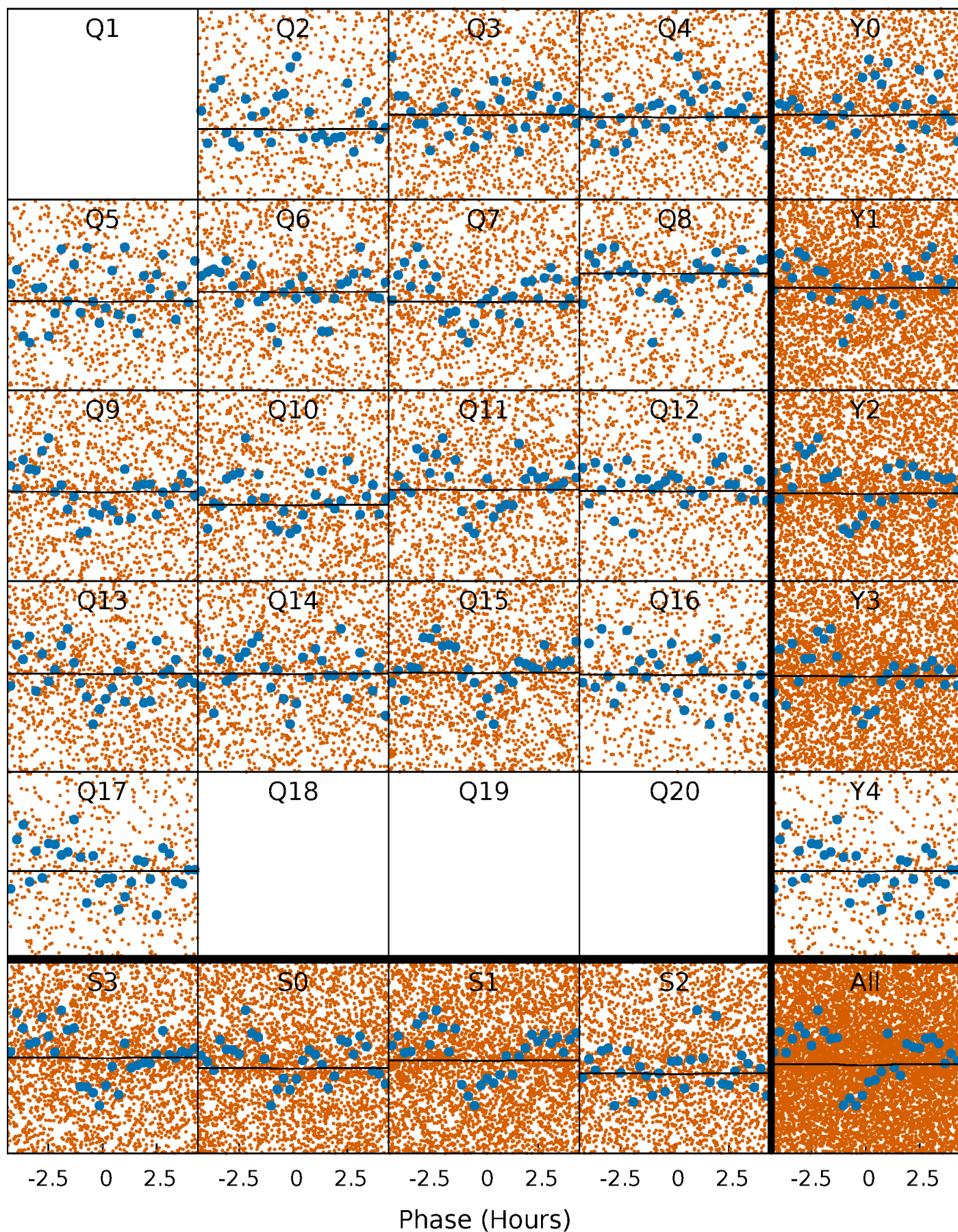
PDC Quarter-Phased Transit Curves

TCE 007281372-01 P= 0.566754 Days $T_0=131.884393$ (BKJD)



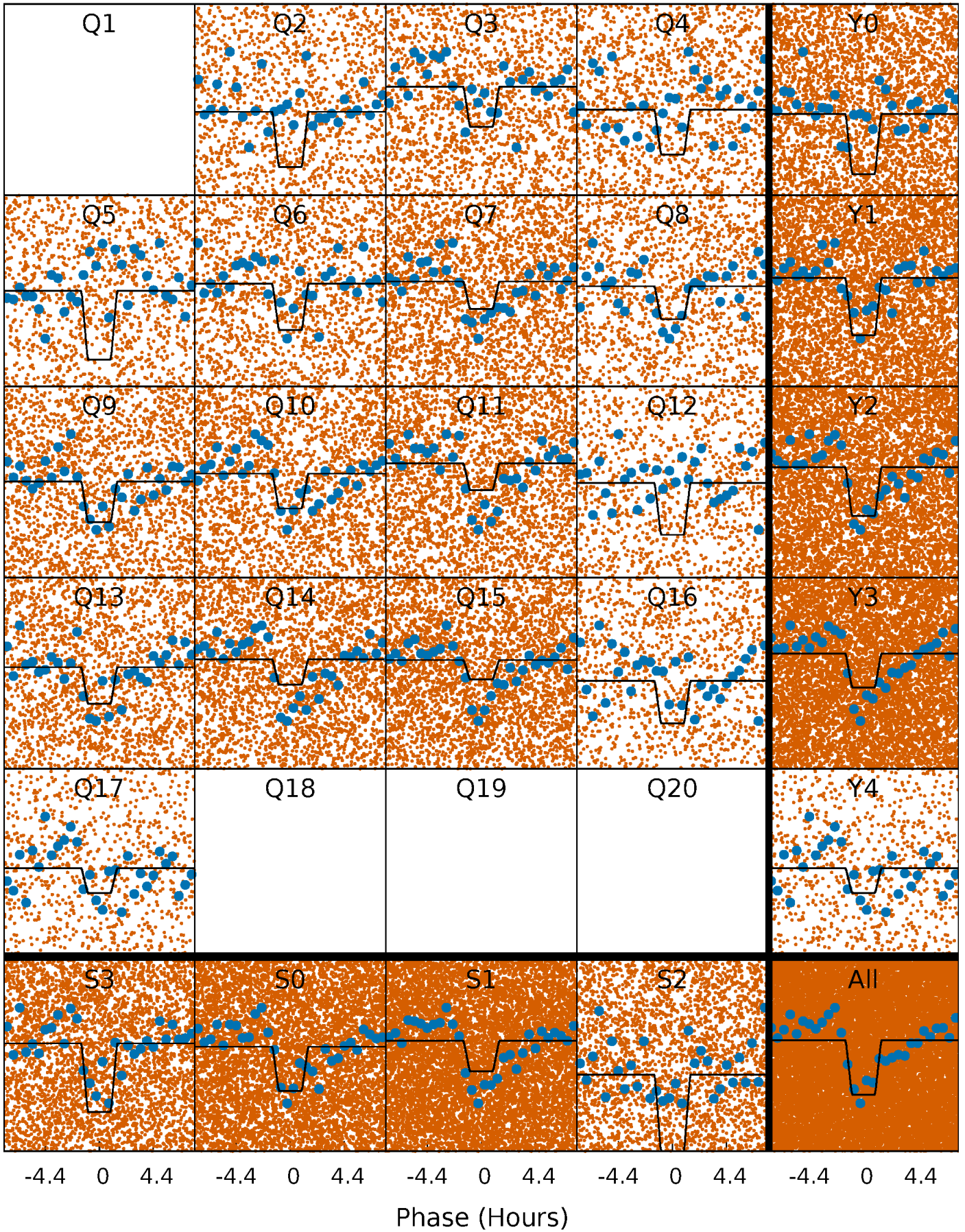
DV Quarter-Phased Transit Curves

TCE 007281372-01 P= 0.566754 Days $T_0=131.884393$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

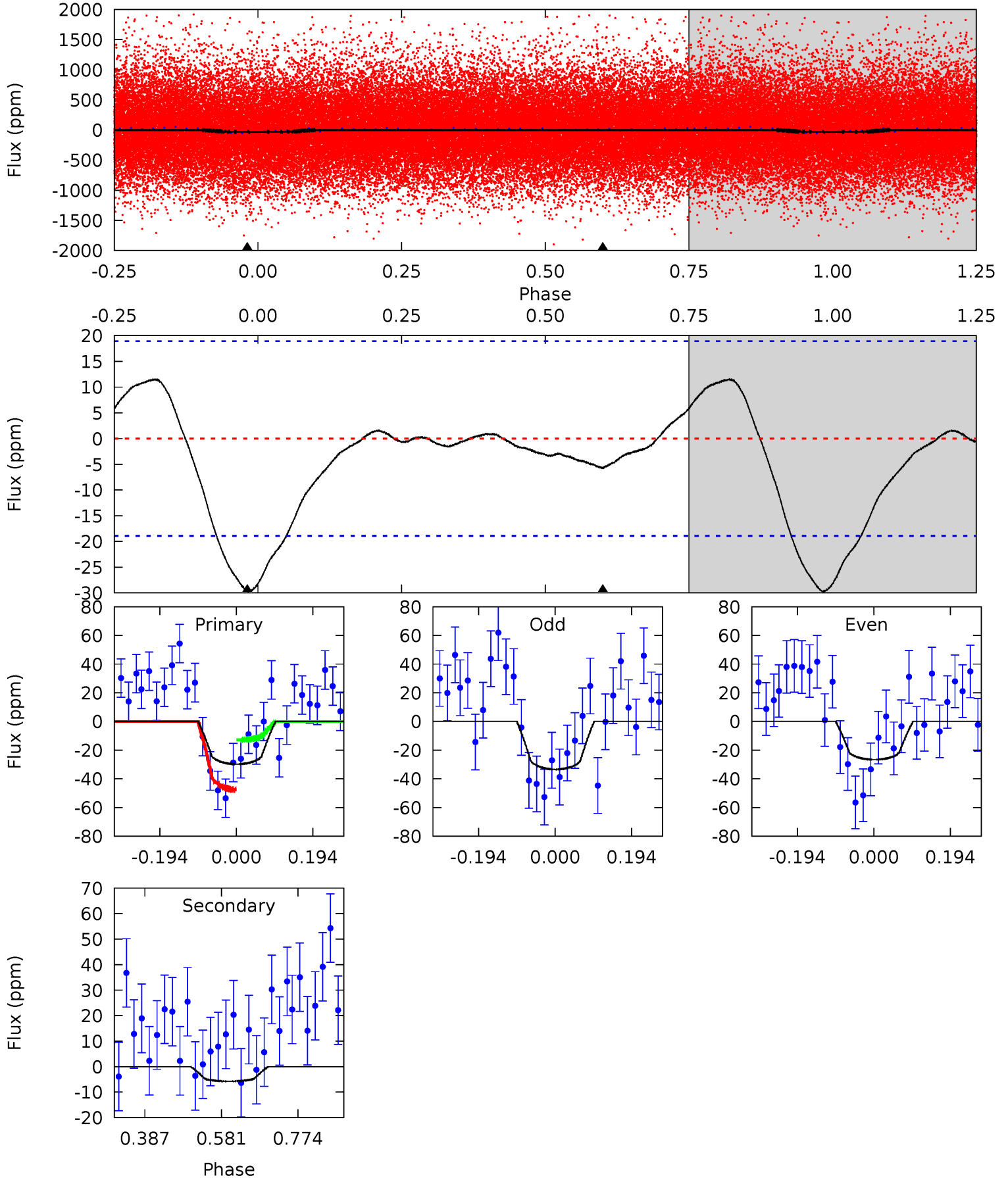
TCE 007281372-01 P= 0.566789 Days $T_0=131.827510$ (BKJD)



DV Model-Shift Uniqueness Test

007281372-01, P = 0.566754 Days, E = 131.884393 Days

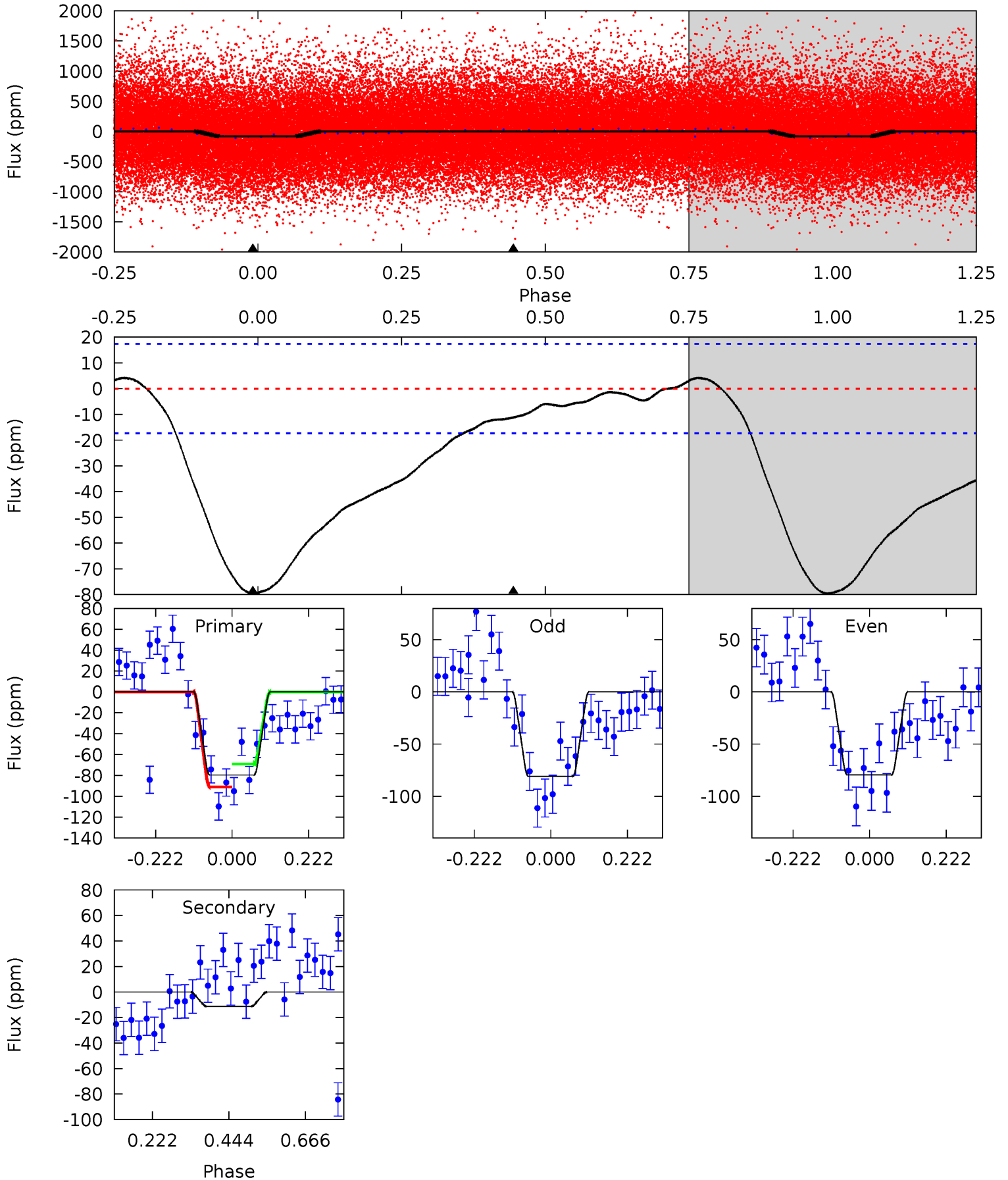
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.96	1.34	0	0	4.42	1.30	0.19	6.96	6.96	1.34	1.34	0.80	0.74	0.28	4.08



Alt Model-Shift Uniqueness Test

007281372-01, P = 0.566789 Days, E = 131.827510 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.1	2.84	0	0	4.39	1.22	2.78	20.1	20.1	2.84	2.84	0.19	0.96	0.05	2.74



Stellar Parameters For KIC 007281372

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6214^{+175}_{-219}	$4.501^{+0.052}_{-0.208}$	$-0.360^{+0.300}_{-0.300}$	$0.933^{+0.291}_{-0.097}$	$1.005^{+0.123}_{-0.136}$	$1.745^{+0.384}_{-0.919}$
	+3%/-4%	+1%/-5%	+83%/-83%	+31%/-10%	+12%/-14%	+22%/-53%
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 007281372-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-6 ± 4	$0.38^{+0.39}_{-0.28}$	3252^{+254}_{-158}	4688^{+5090}_{-1679}	$2.680^{+39.590}_{-2.206}$
Alt.	-11 ± 4	$1.02^{+0.52}_{-0.47}$	3253^{+250}_{-154}	3726^{+1189}_{-811}	$1.019^{+2.346}_{-0.590}$

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

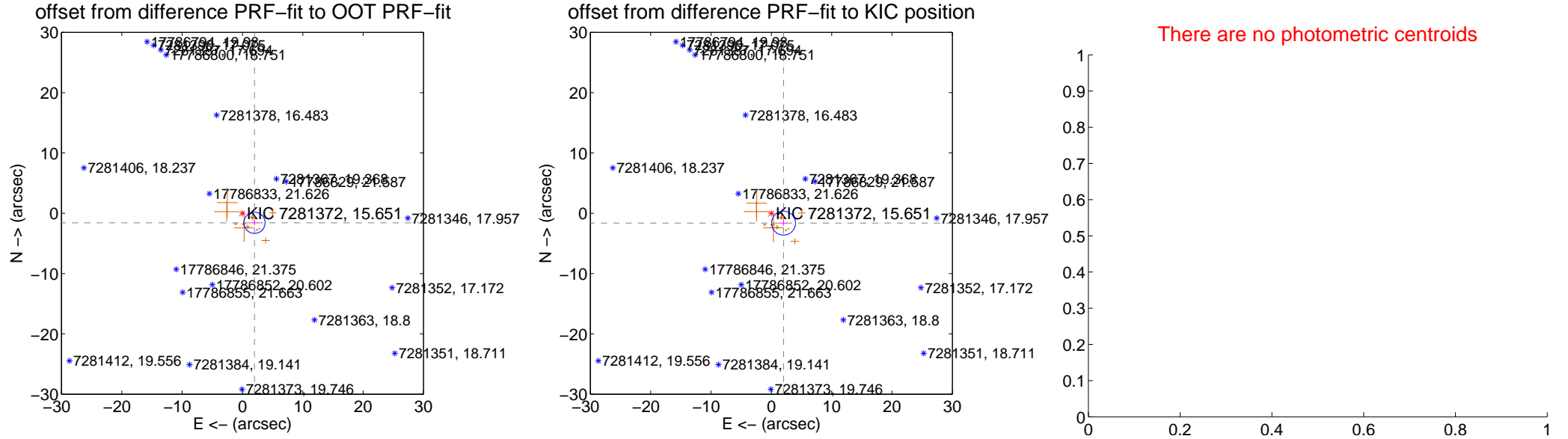
DV Centroid Data

Supplemental centroid analysis for 007281372-01. Kepler magnitude: 15.65. Transit SNR 0.23

There are 1 quarters with good PRF difference image offsets

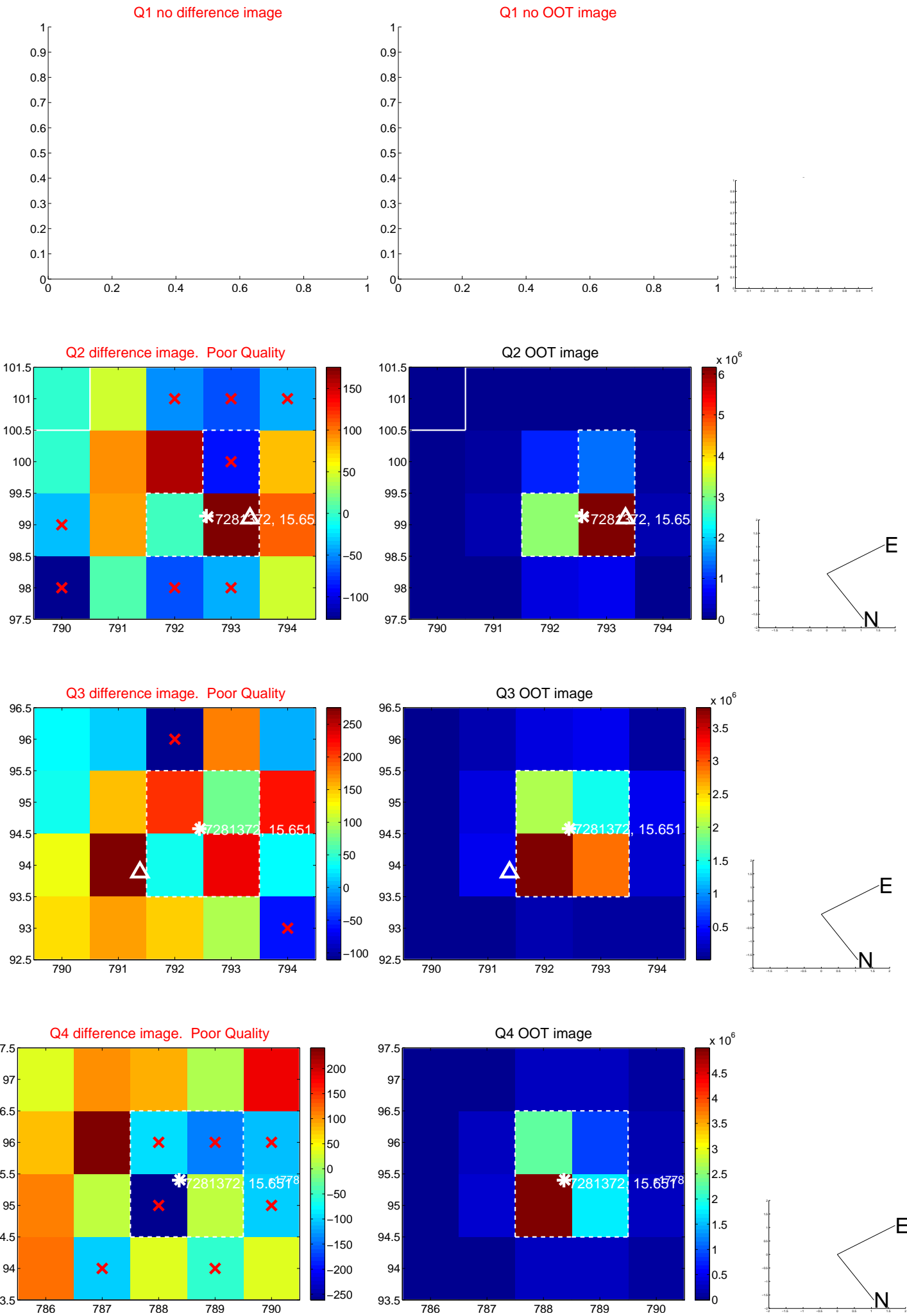
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.541 ± 0.586	4.33	-1.989 ± 0.555	-1.582 ± 0.407
PRF-fit source offset from KIC position	2.595 ± 0.661	3.92	-2.018 ± 0.608	-1.631 ± 0.442
photometric centroid source offset	—	—	—	—

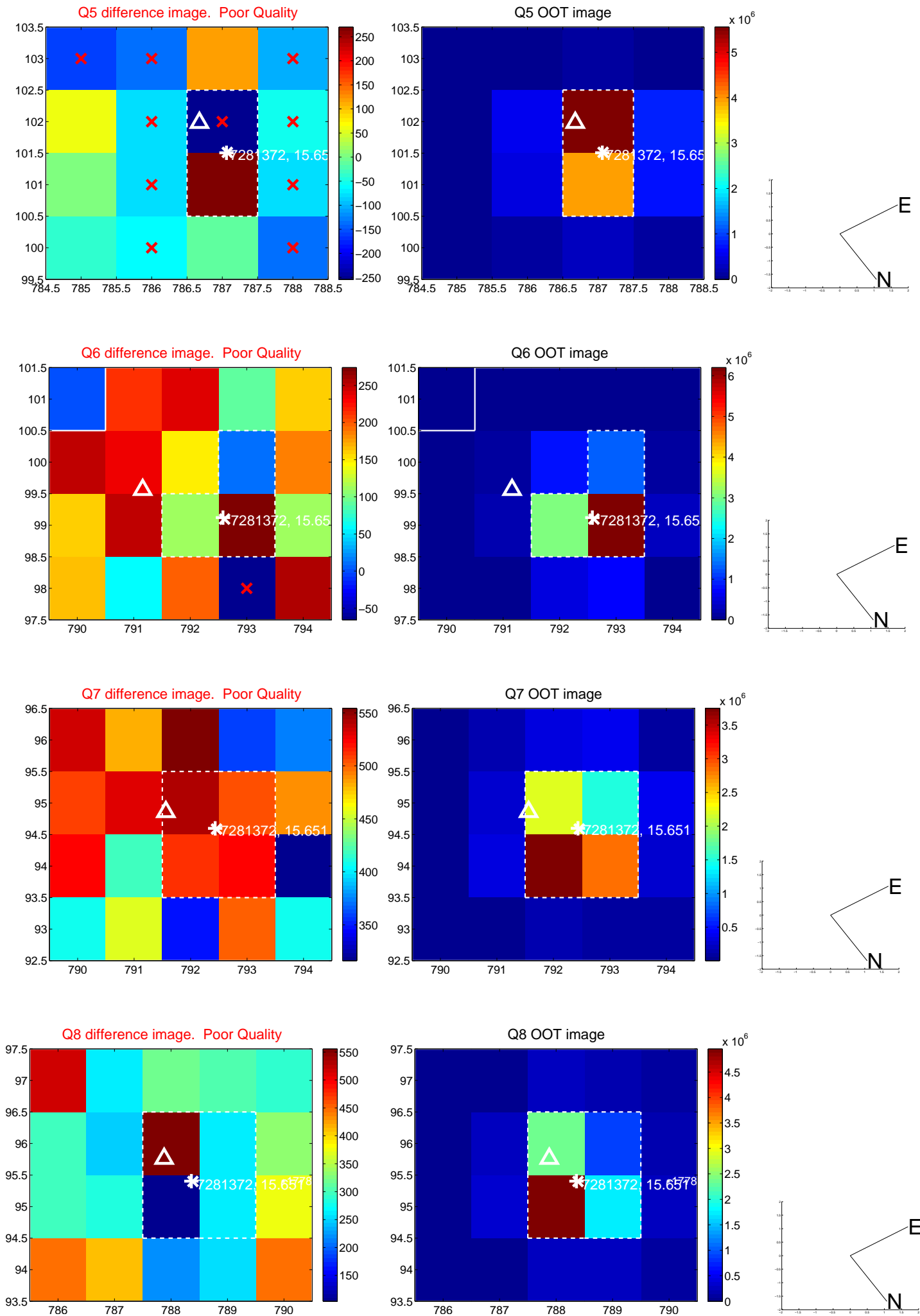


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

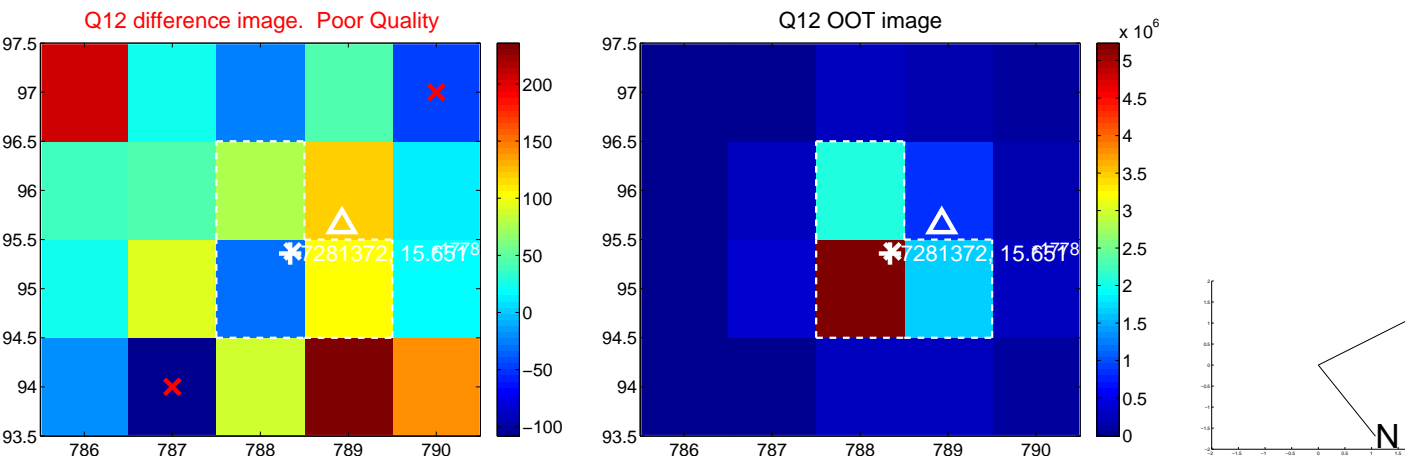
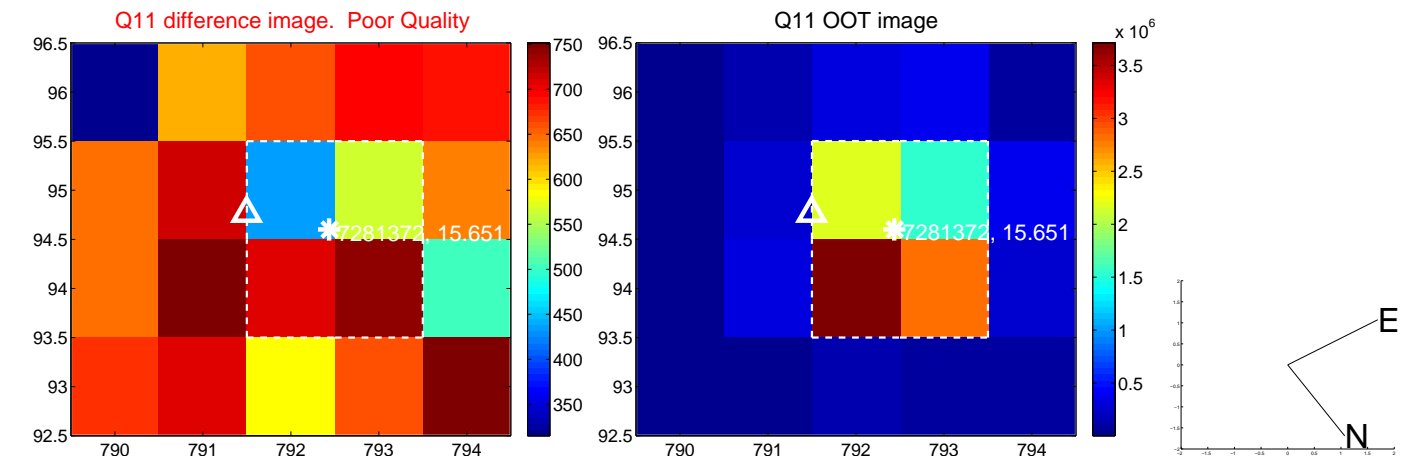
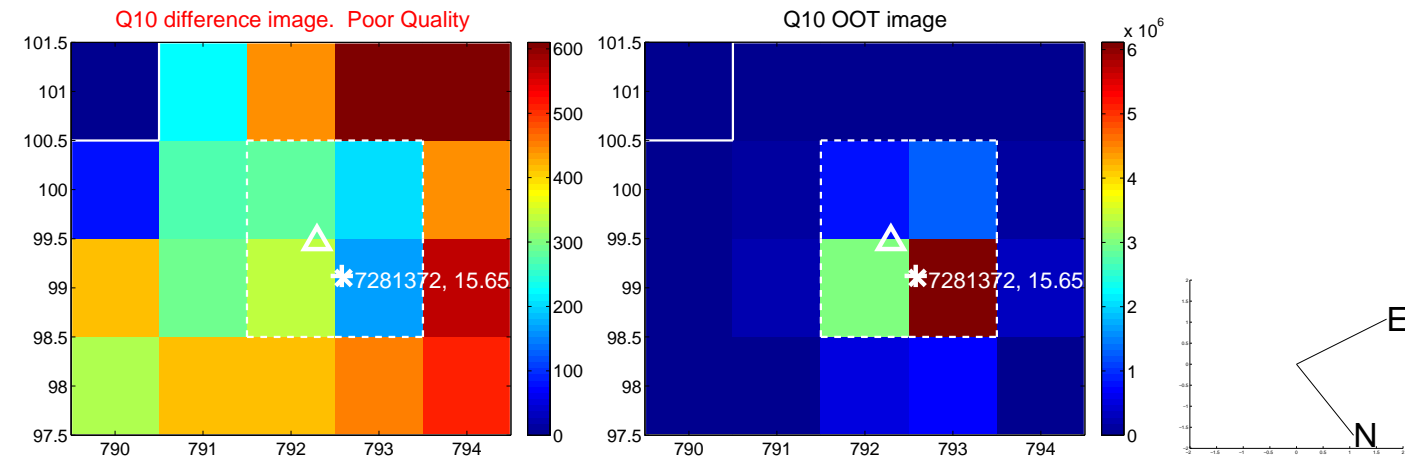
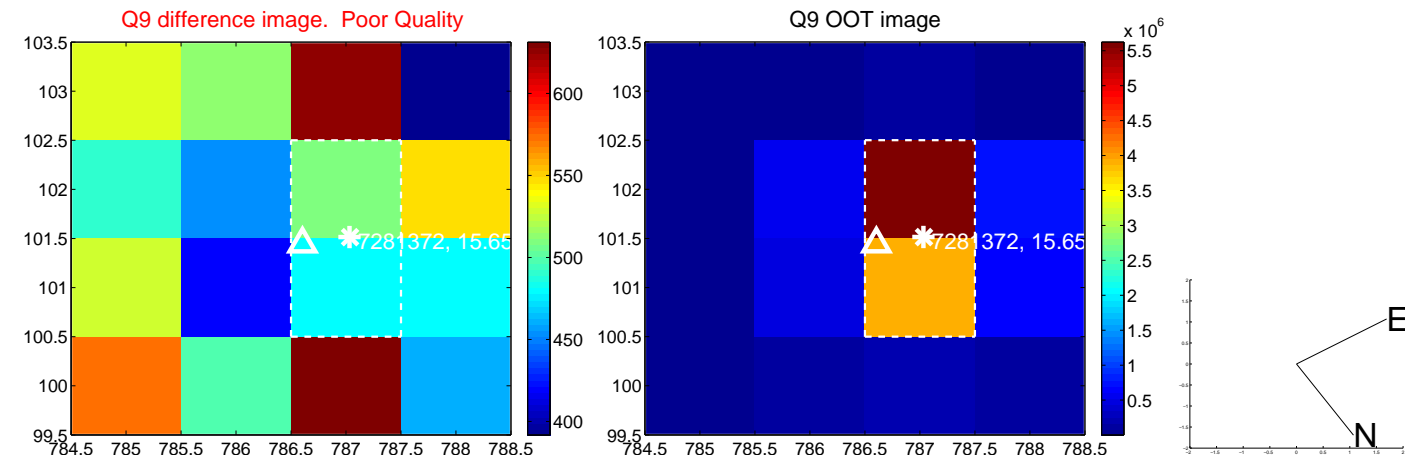
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



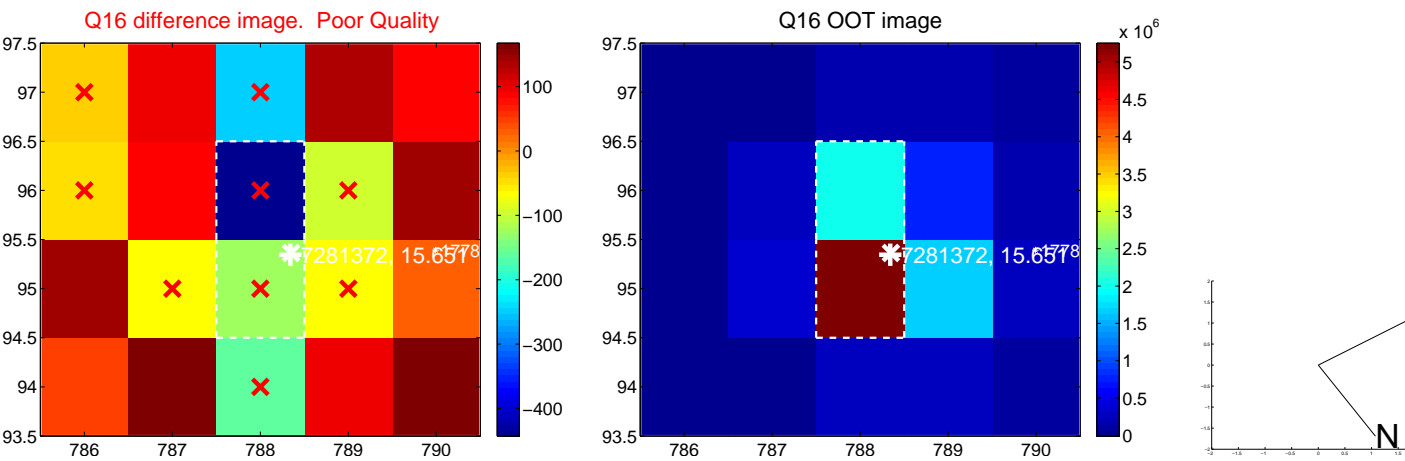
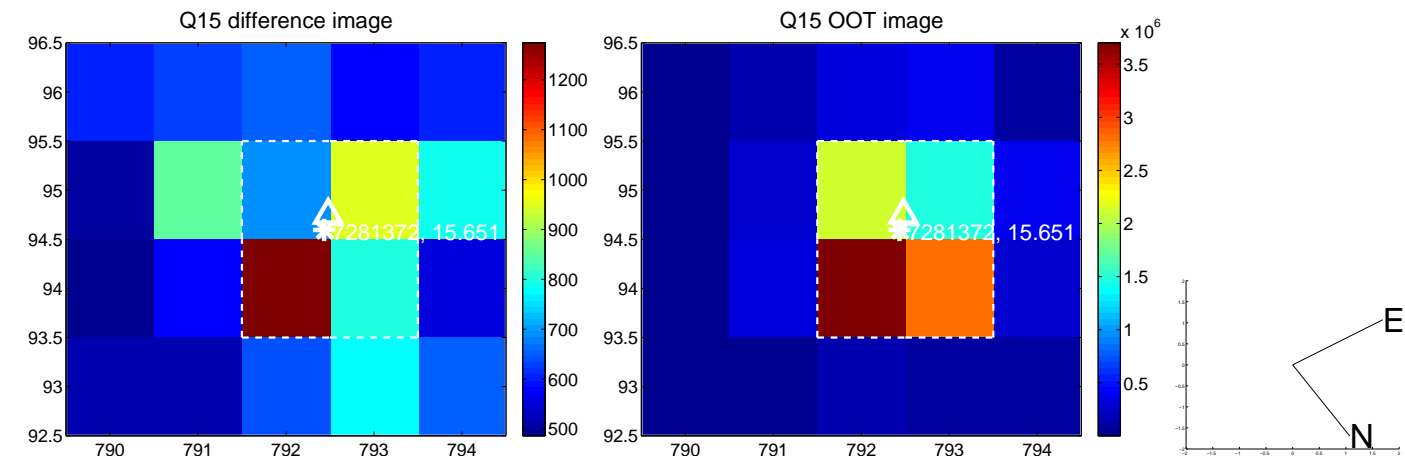
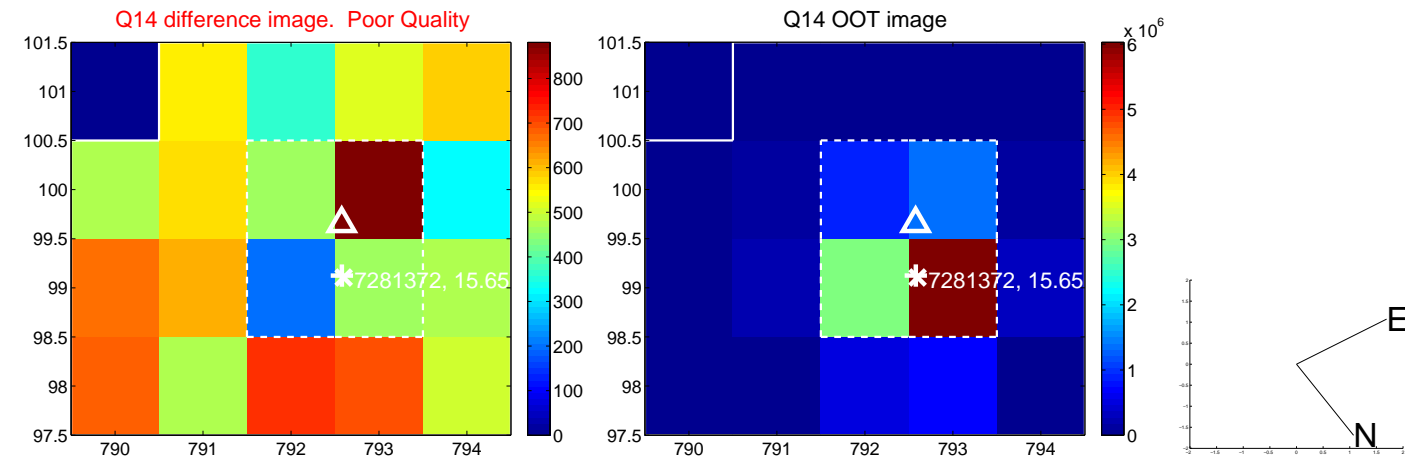
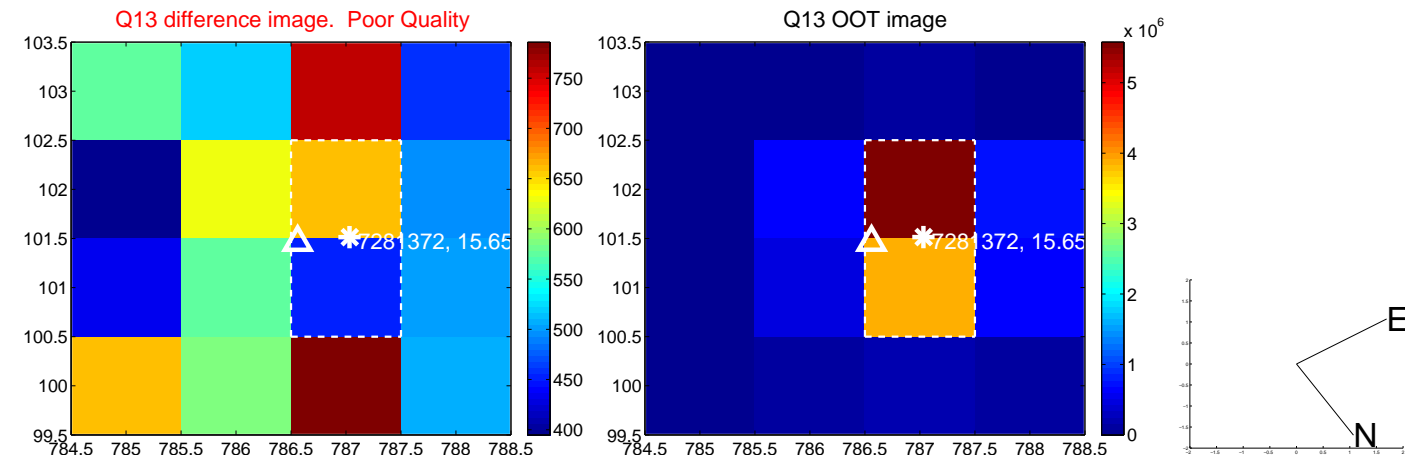
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



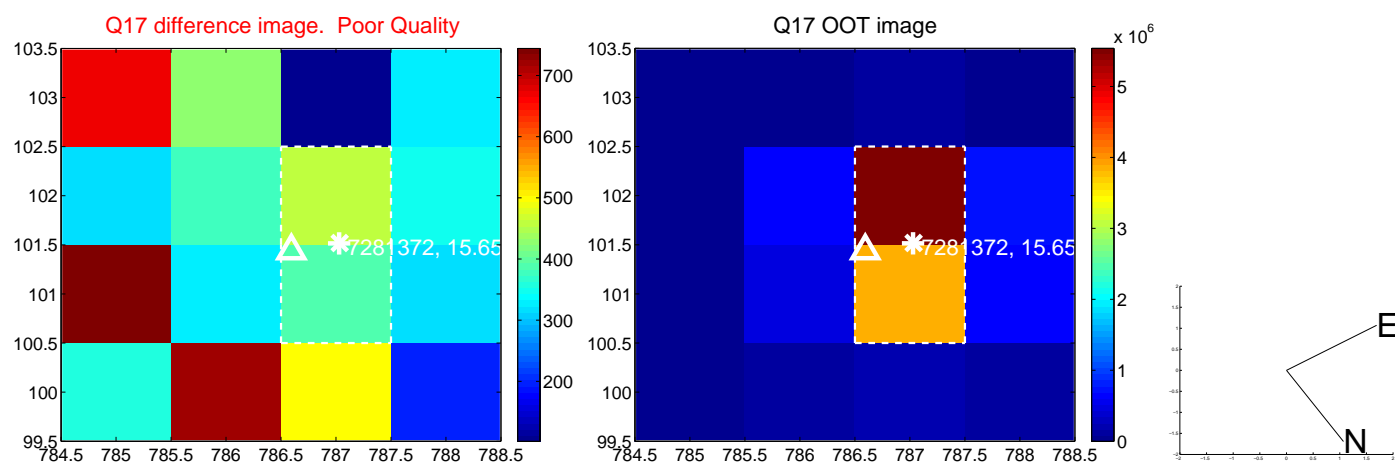
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folded centroid time series figure for this object.



UKIRT Image

Declination

