

KIC 007033389

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})
007033389-01	OBS	No	0.566789	131.815575	16.0	1.243	8.3	2.4	1.15	6466	0.51	10383.55

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007033389-01	OBS	FP	0.00	1	0	0	1	LPP_DV—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.

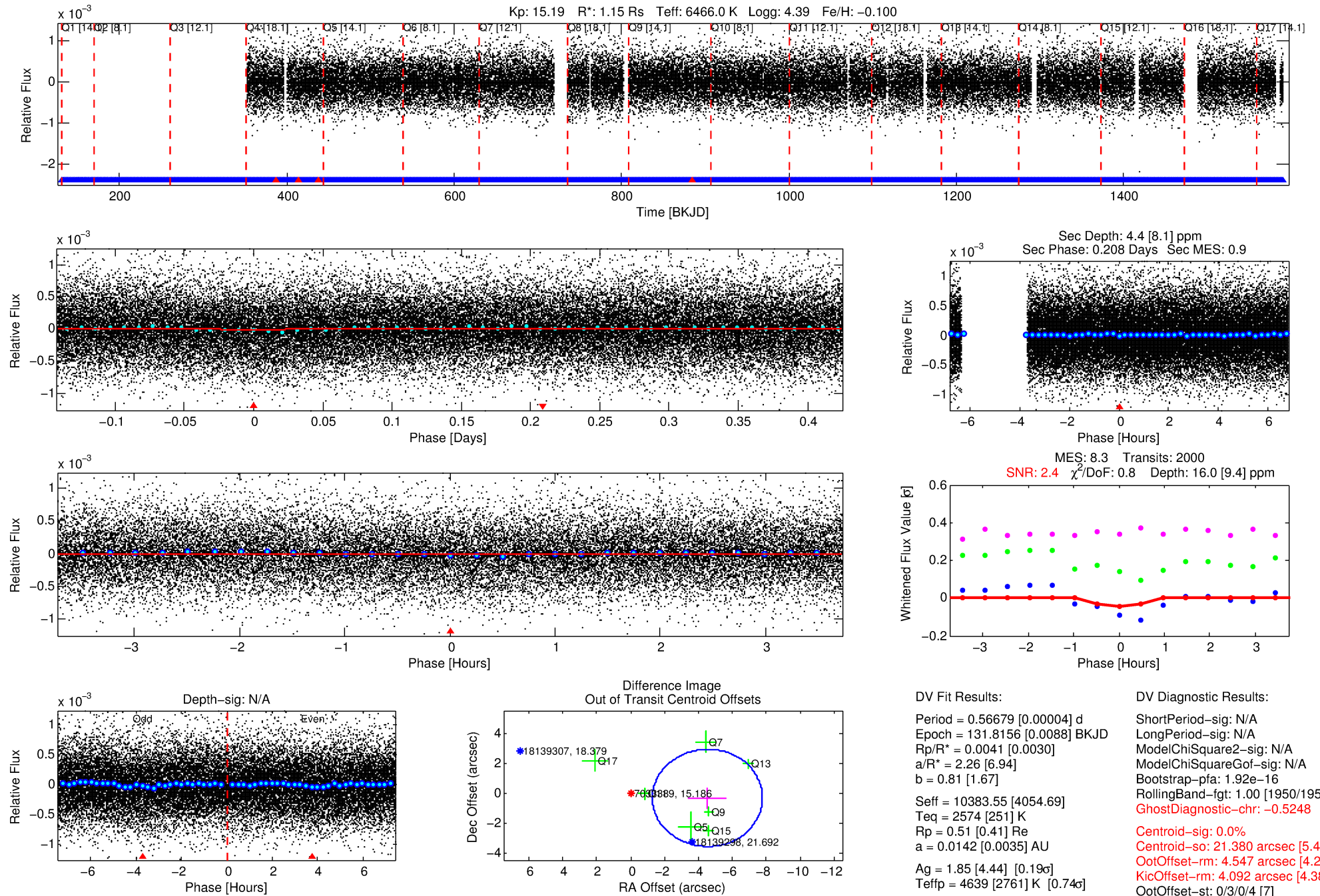
Ephemeris Match Information For 007033389-01

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
007033389-01	7033389	RR-Lyr-pri	7198959	1:1	1210.9	286	103	7.86	15.18	38956.00	Direct-PRF	0	1.76	19.88

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

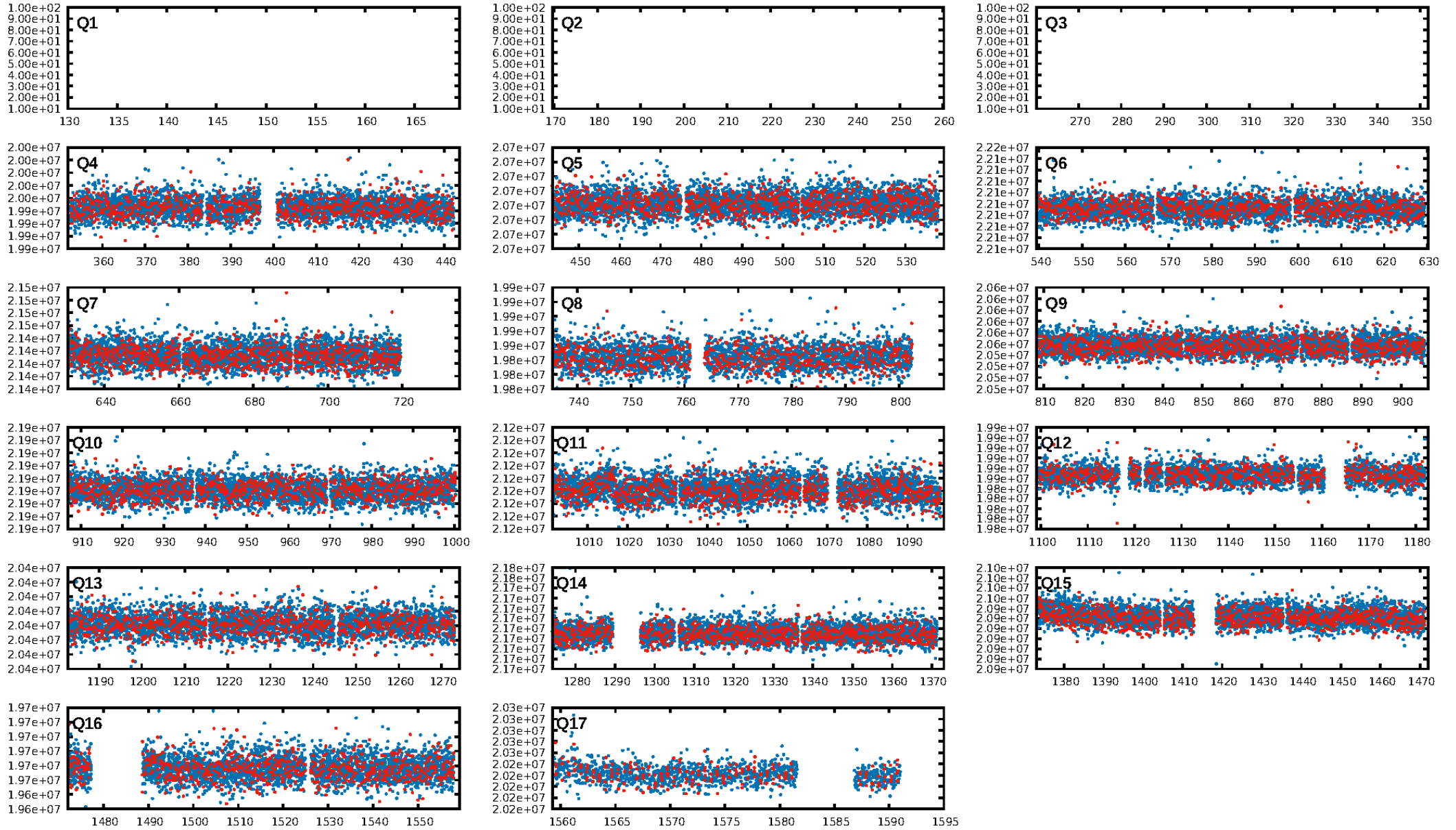
KIC: 7033389 Candidate: 1 of 1 Period: 0.567 d



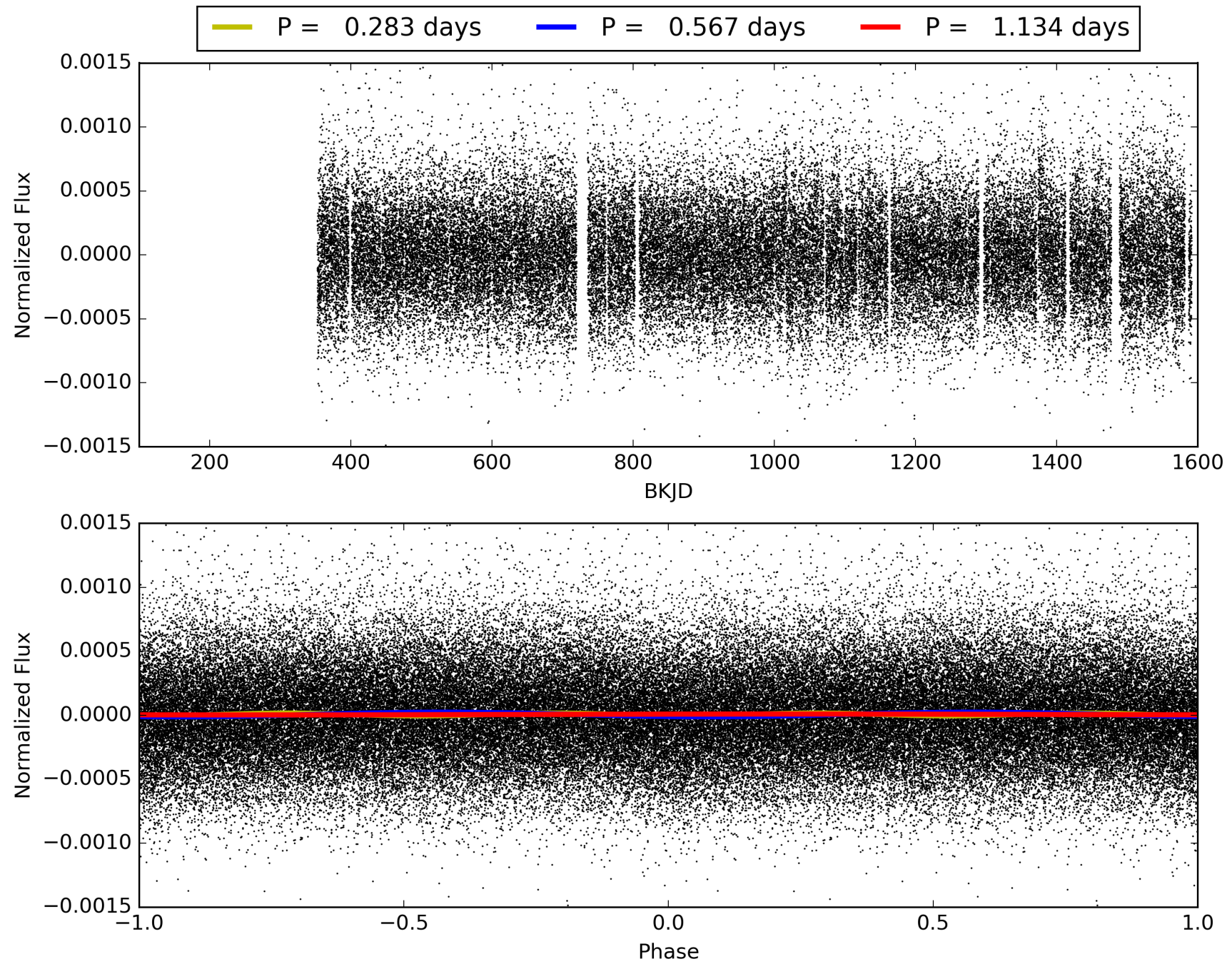
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 10:40:04 Z

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

TCE 007033389-01, PDC Light Curves

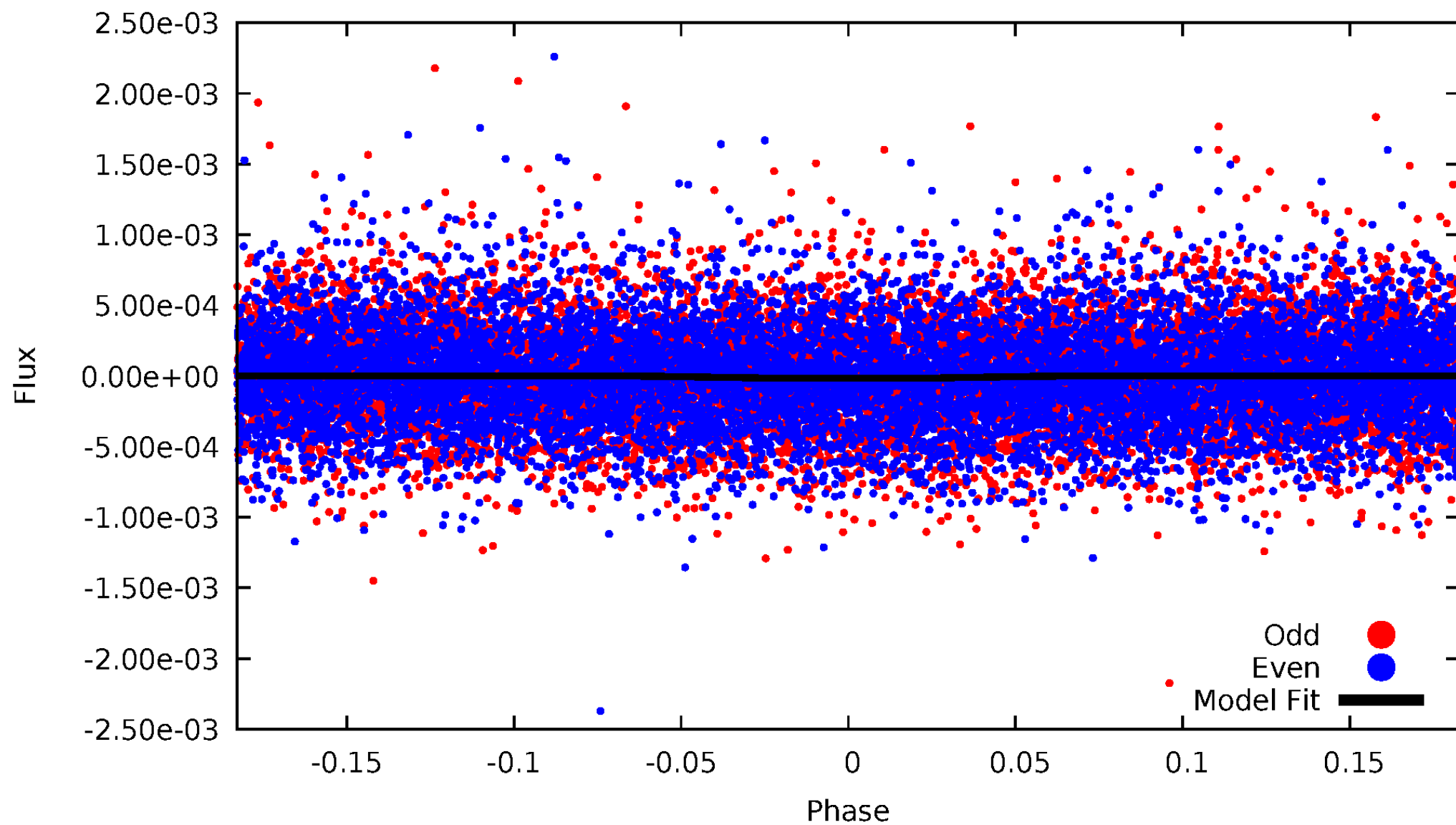


TCE 007033389-01



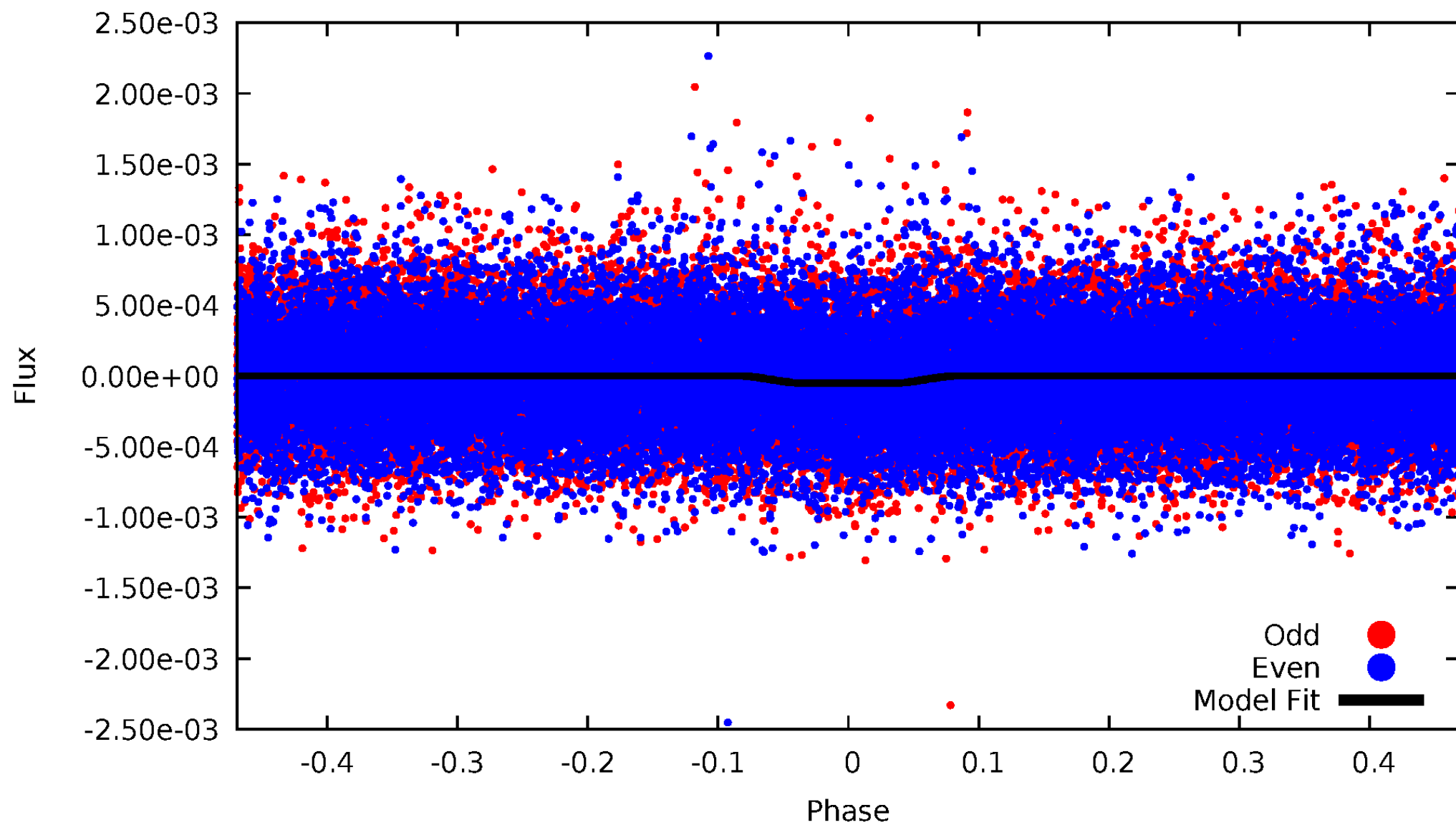
DV Odd/Even

TCE 007033389-01



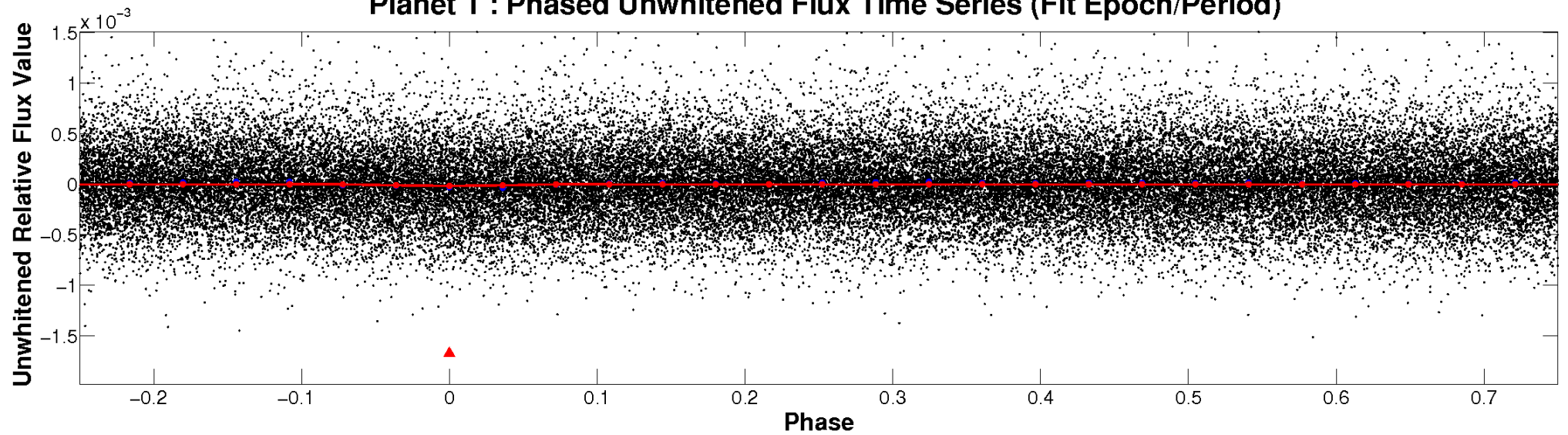
ALT Odd/Even

TCE 007033389-01

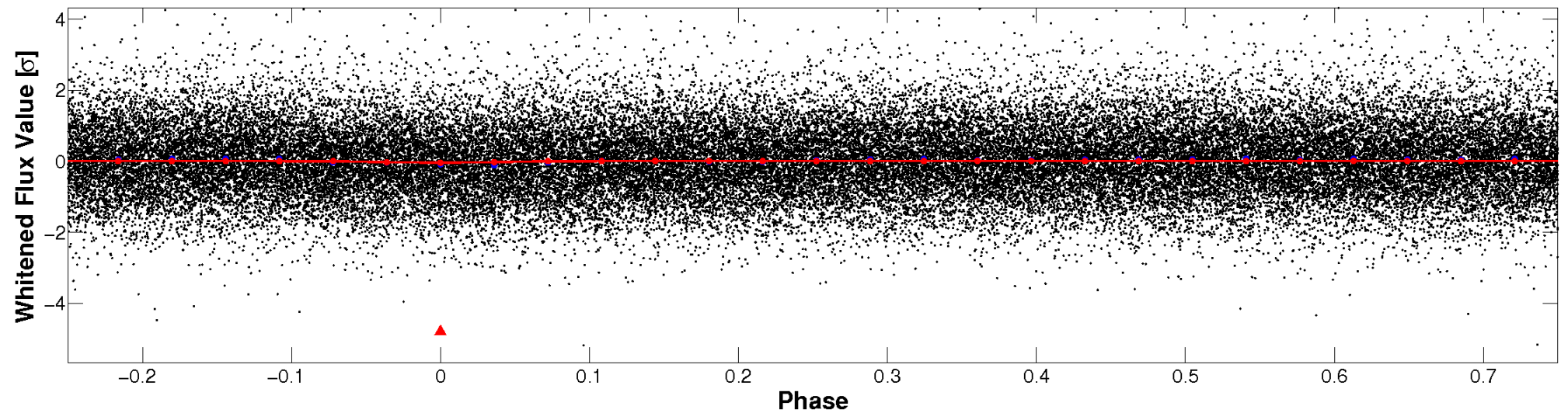


Non-Whitened Vs. Whitened Light Curve

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

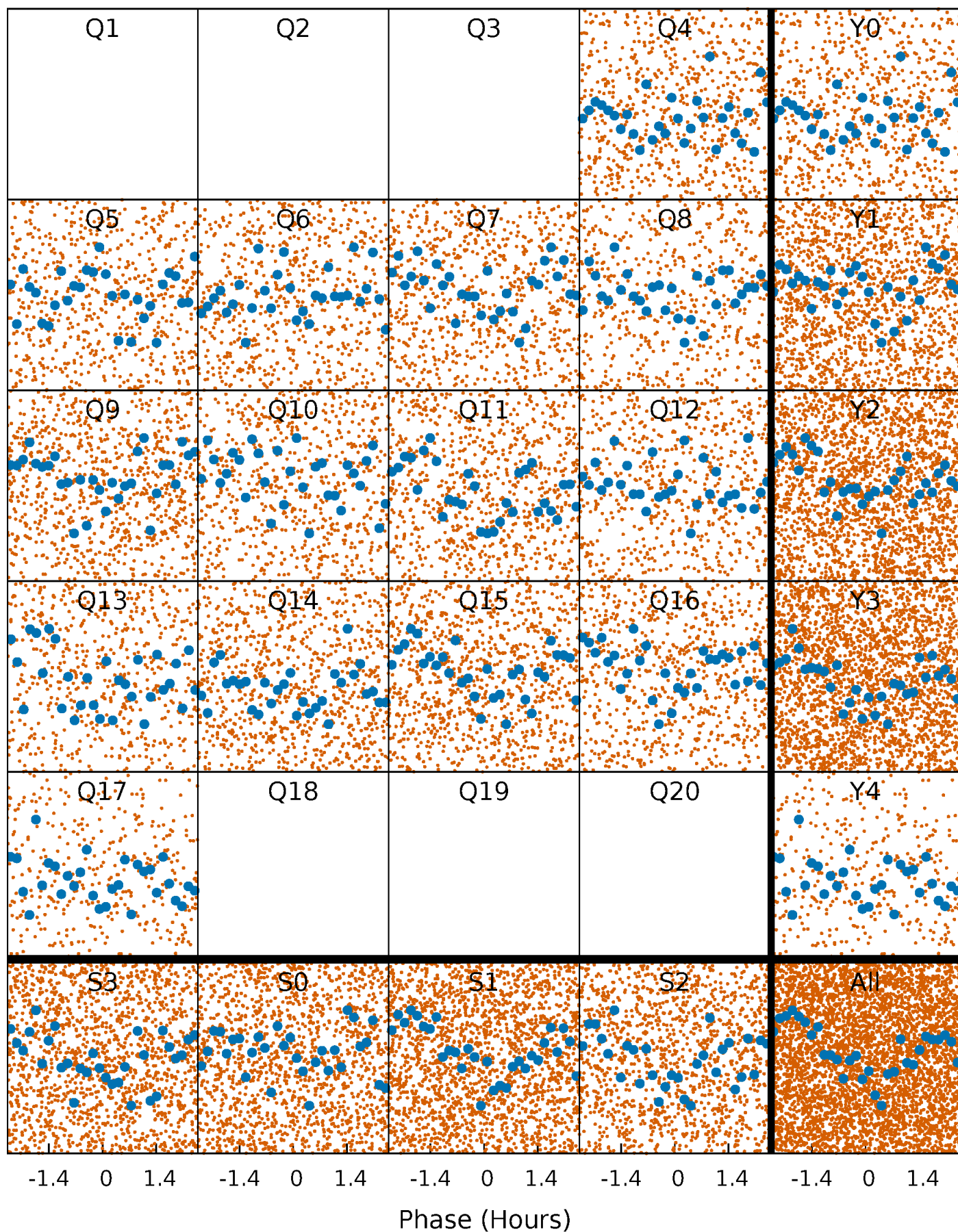


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



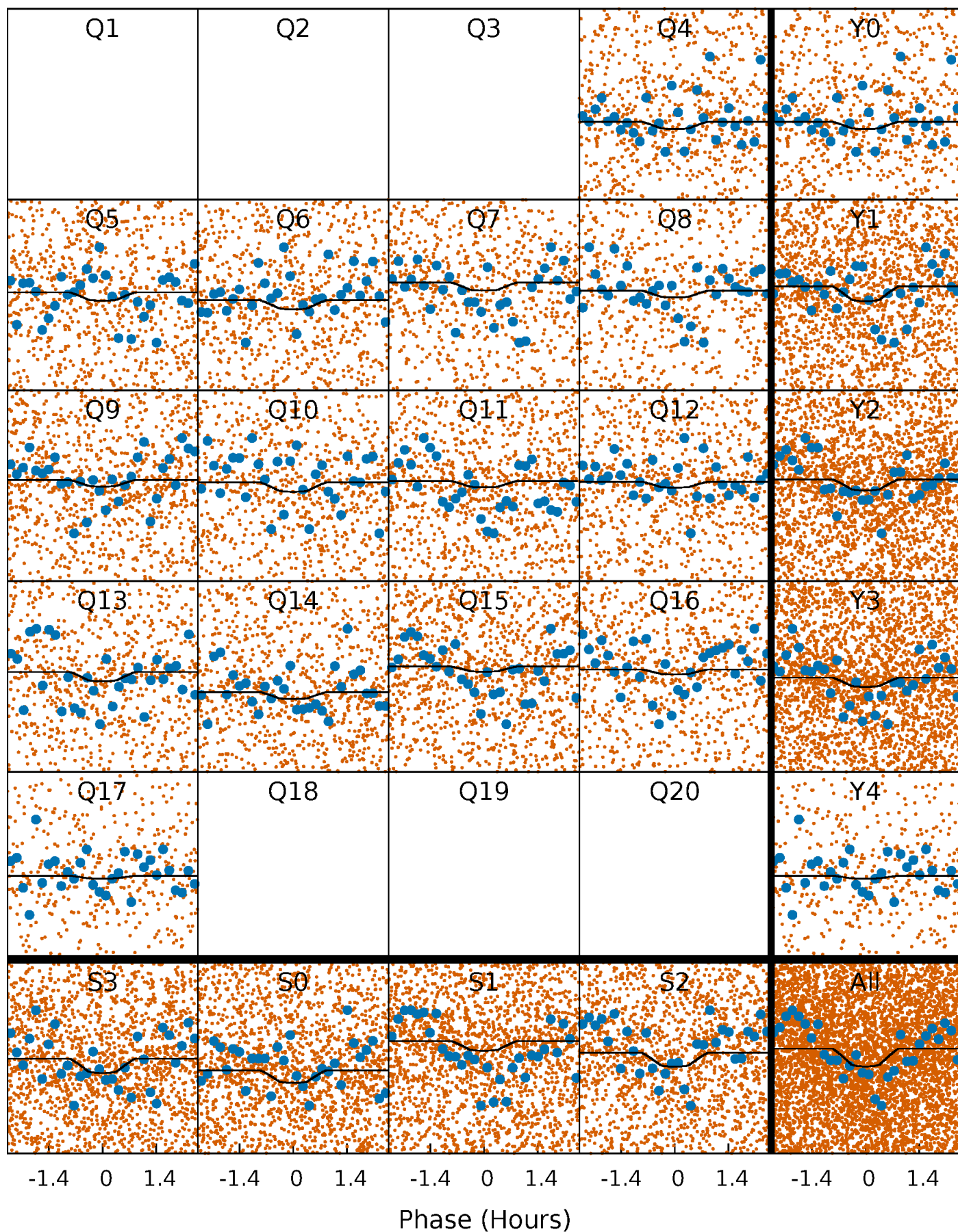
PDC Quarter-Phased Transit Curves

TCE 007033389-01 P= 0.566789 Days $T_0=131.815575$ (BKJD)



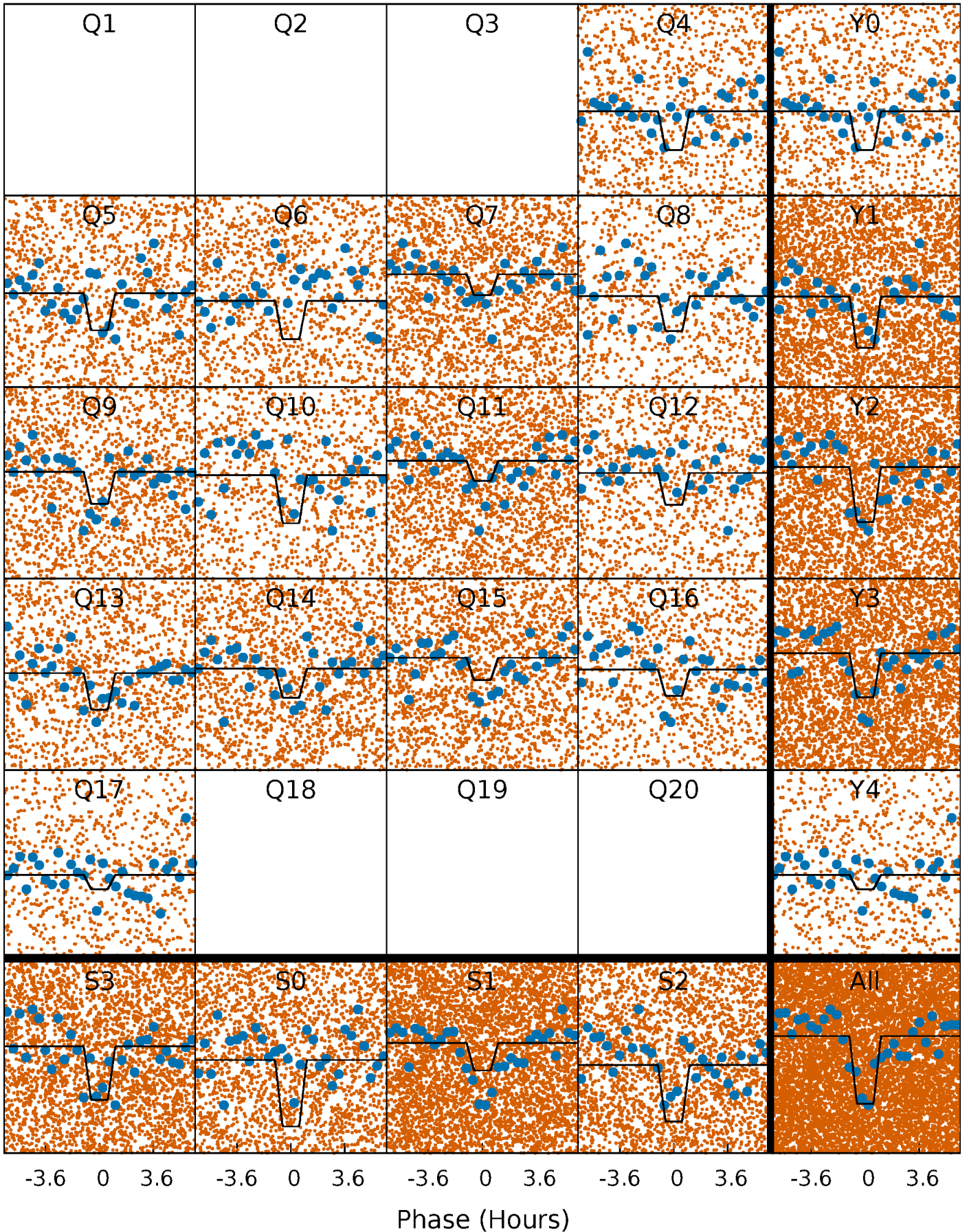
DV Quarter-Phased Transit Curves

TCE 007033389-01 P= 0.566789 Days $T_0=131.815575$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

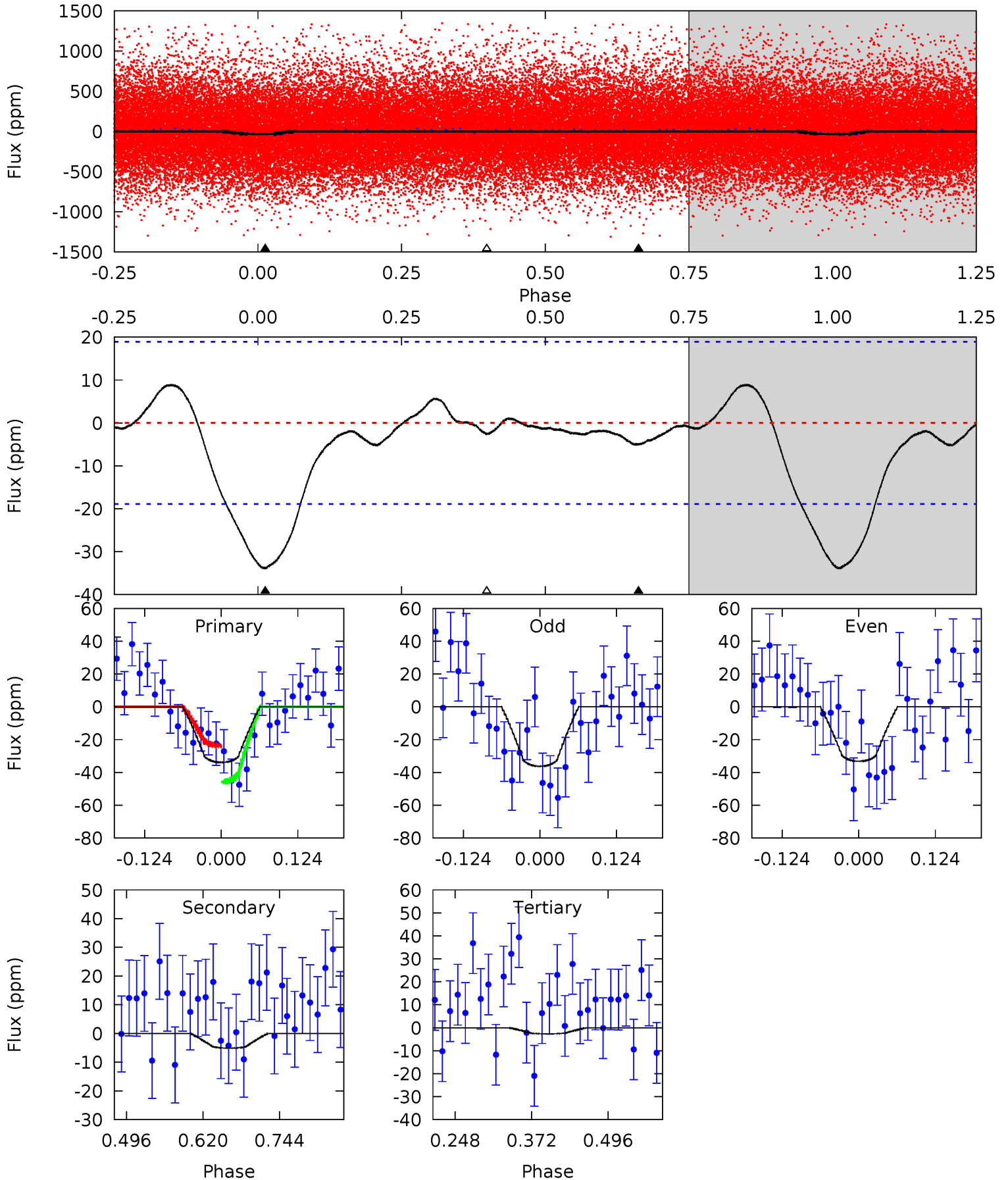
TCE 007033389-01 P= 0.566788 Days $T_0=131.827434$ (BKJD)



DV Model-Shift Uniqueness Test

007033389-01, P = 0.566789 Days, E = 131.815575 Days

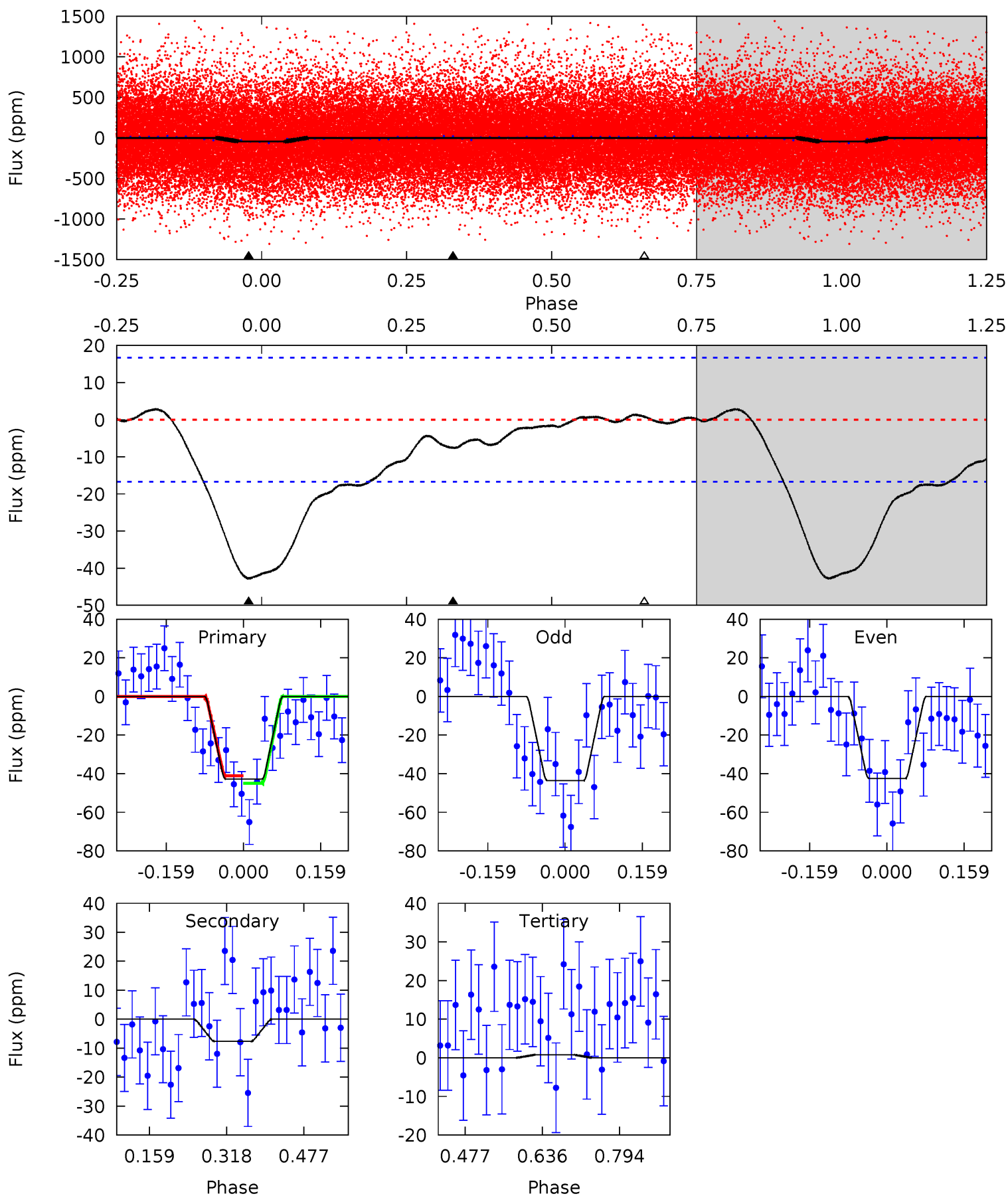
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.11	1.22	0.63	0	4.52	1.54	0.86	7.48	8.11	0.58	1.22	0.37	0.84	0.21	2.66



Alt Model-Shift Uniqueness Test

007033389-01, P = 0.566788 Days, E = 131.827434 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.4	2.04	-0.21	0	4.47	1.41	1.41	11.7	11.4	2.25	2.04	0.15	1.00	0.06	0.52



Stellar Parameters For KIC 007033389

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6466^{+179}_{-246}	$4.386^{+0.065}_{-0.195}$	$-0.100^{+0.250}_{-0.300}$	$1.154^{+0.345}_{-0.148}$	$1.180^{+0.169}_{-0.169}$	$1.083^{+0.367}_{-0.530}$
	+3%/-4%	+1%/-4%	+250%/-300%	+30%/-13%	+14%/-14%	+34%/-49%
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 007033389-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-5 ± 4	$0.58^{+0.41}_{-0.33}$	3658^{+243}_{-195}	4261^{+2421}_{-7405}	$1.233^{+6.386}_{-1.062}$
Alt.	-8 ± 4	$0.94^{+0.39}_{-0.40}$	3678^{+251}_{-201}	3933^{+1358}_{-1214}	$0.904^{+2.185}_{-0.553}$

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 $A_{obs} \gg 1.0$

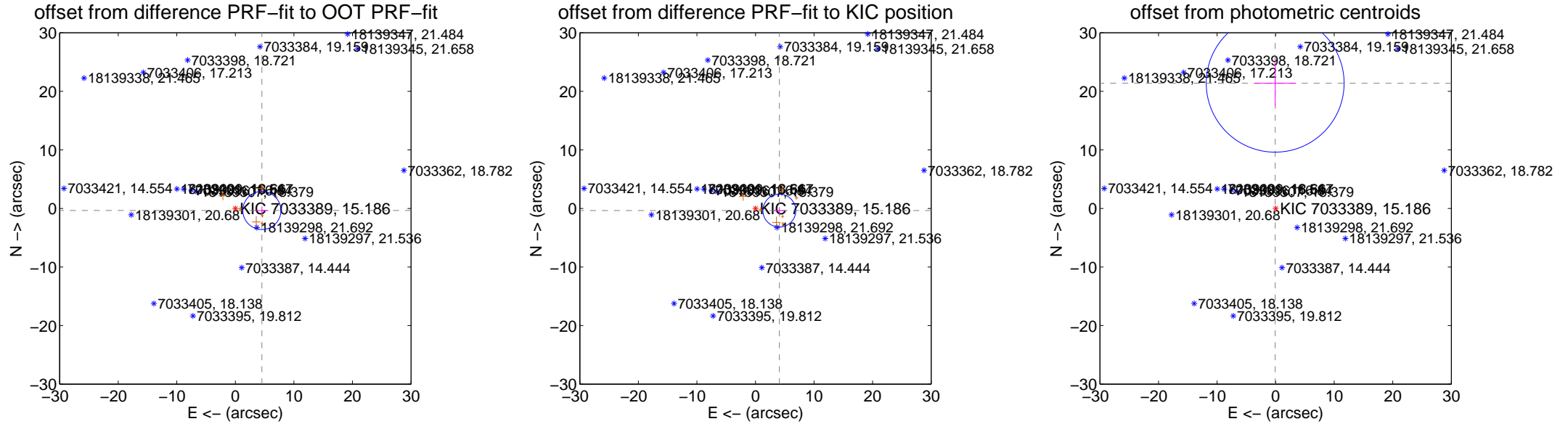
DV Centroid Data

Supplemental centroid analysis for 007033389-01. Kepler magnitude: 15.19. Transit SNR 2.38

There are 0 quarters with good PRF difference image offsets

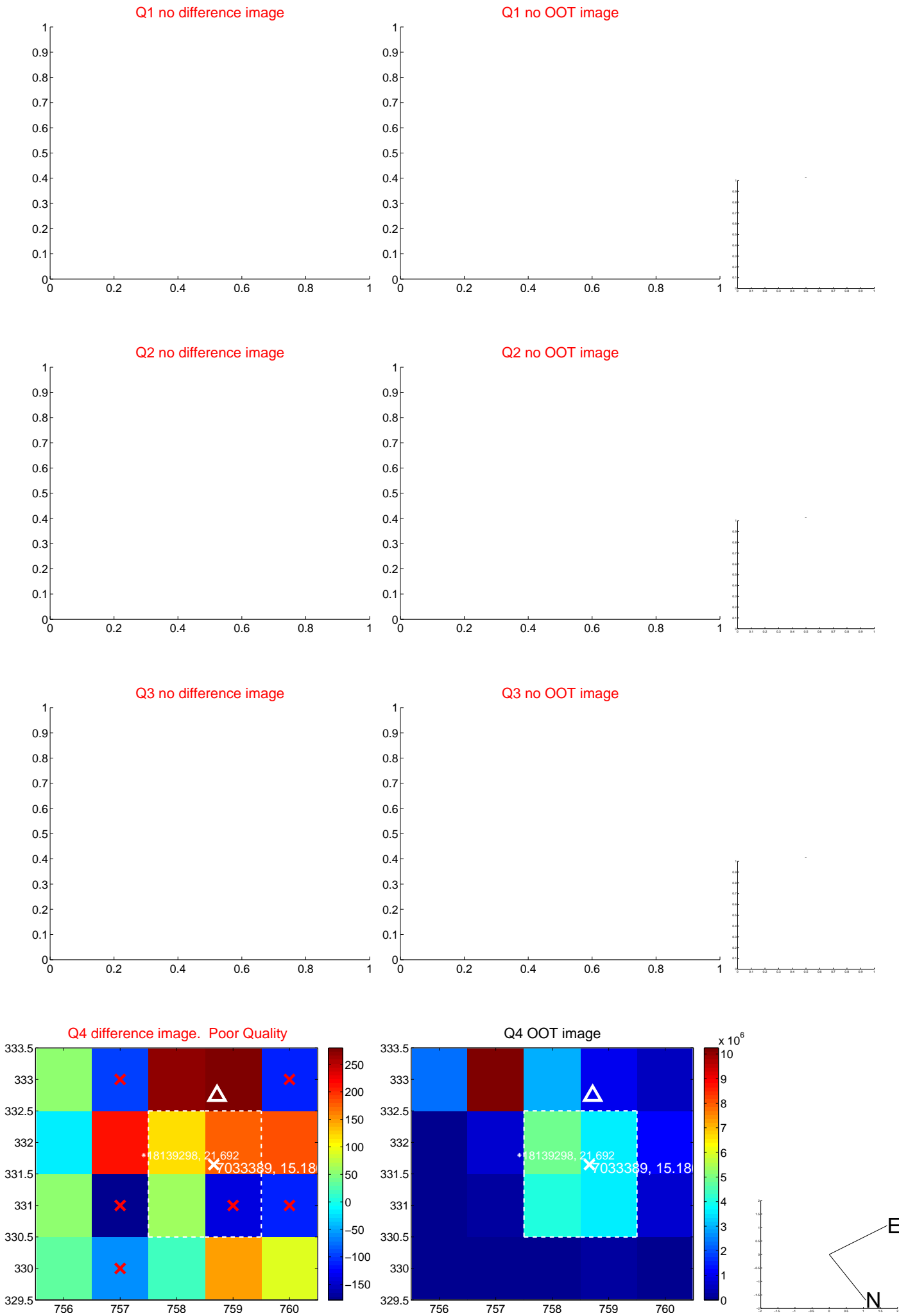
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.547 ± 1.084	4.20	-4.534 ± 1.089	-0.347 ± 0.674
PRF-fit source offset from KIC position	4.092 ± 0.935	4.38	-4.076 ± 0.935	-0.369 ± 0.590
photometric centroid source offset	21.38 ± 3.92	5.45	0.08 ± 3.55	21.38 ± 3.92

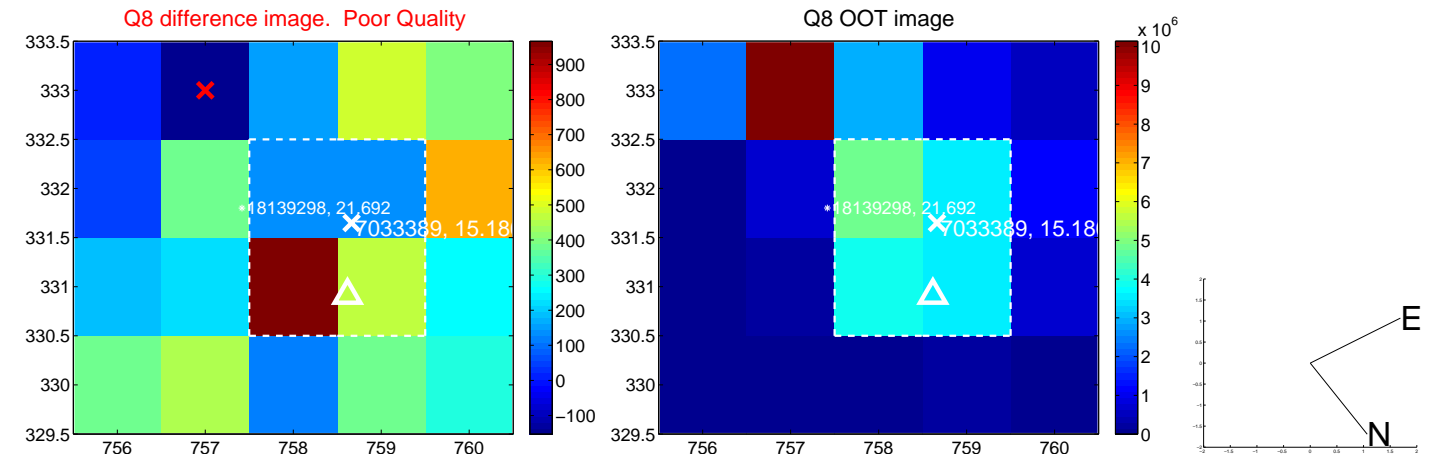
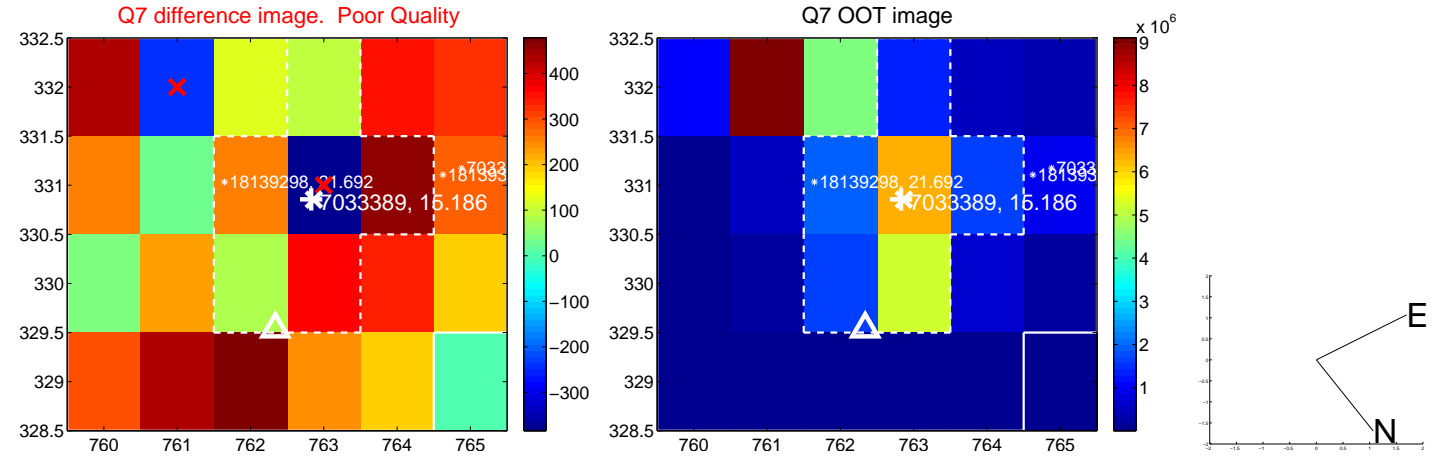
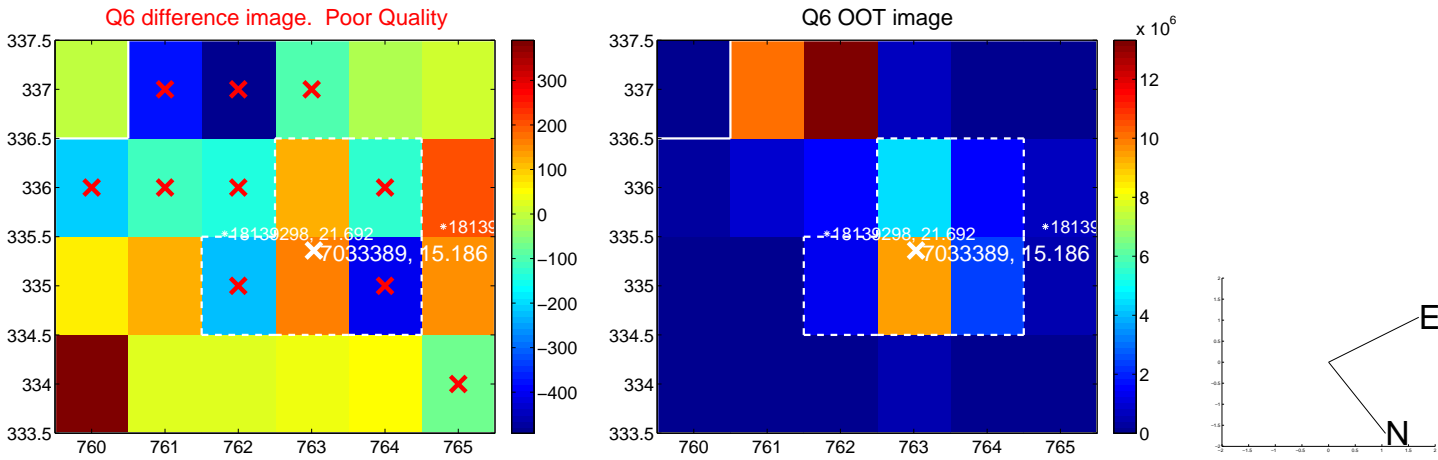
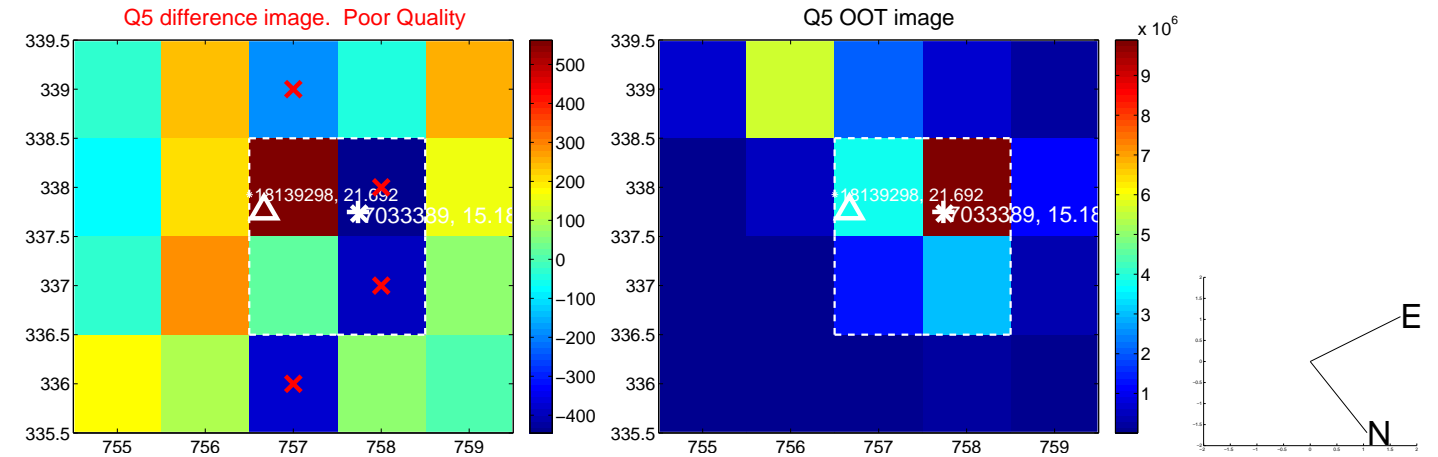


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

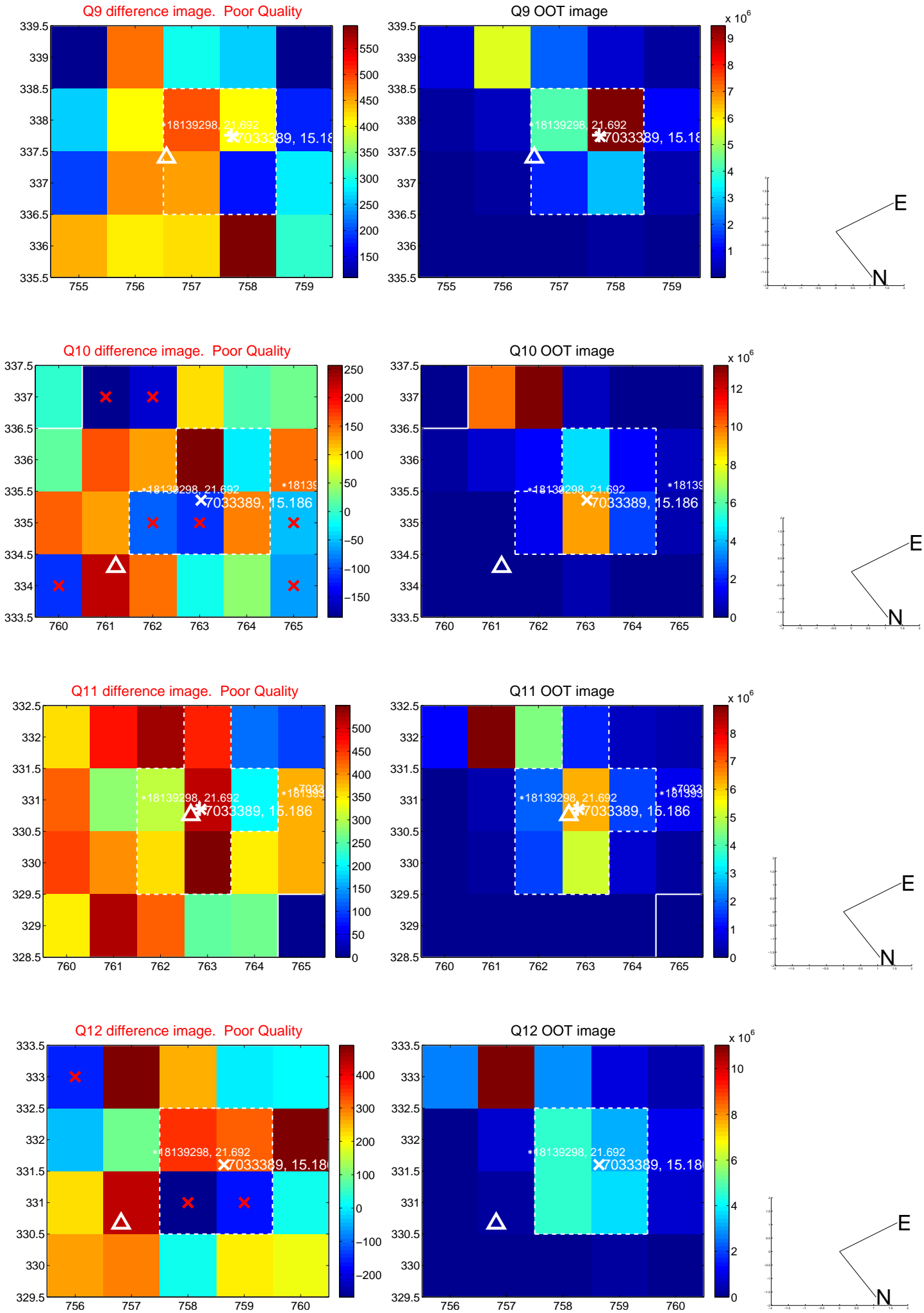
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



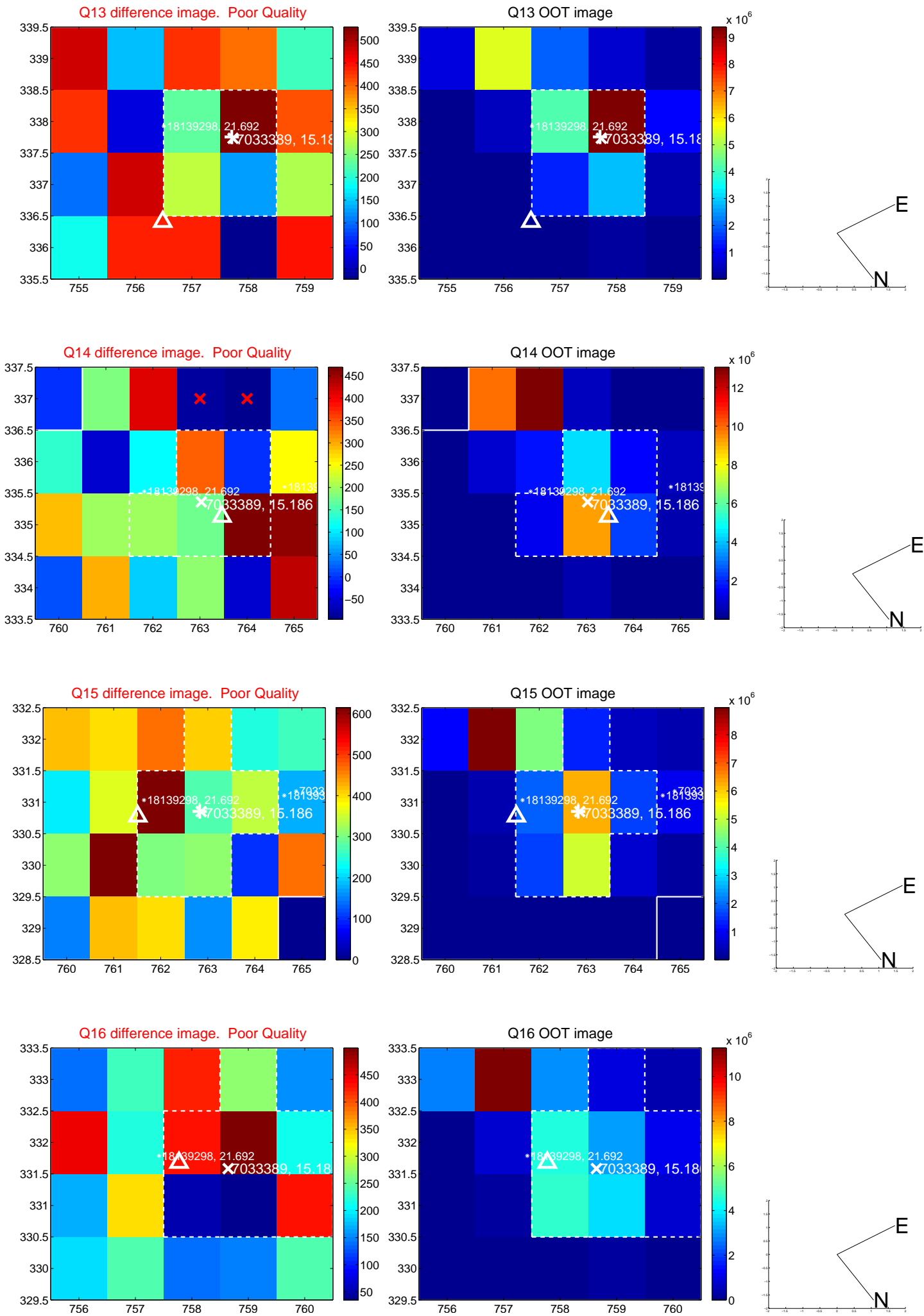
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



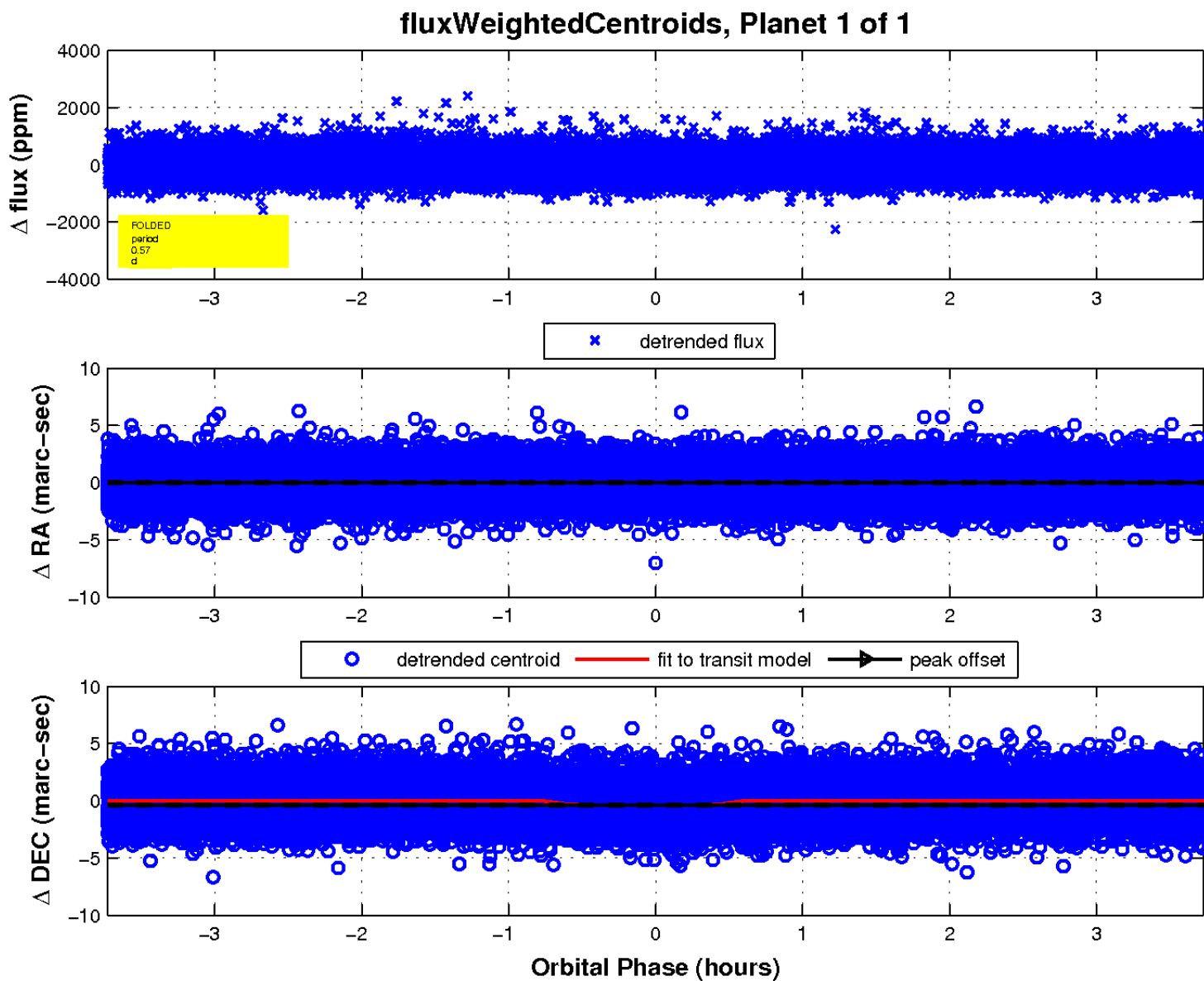
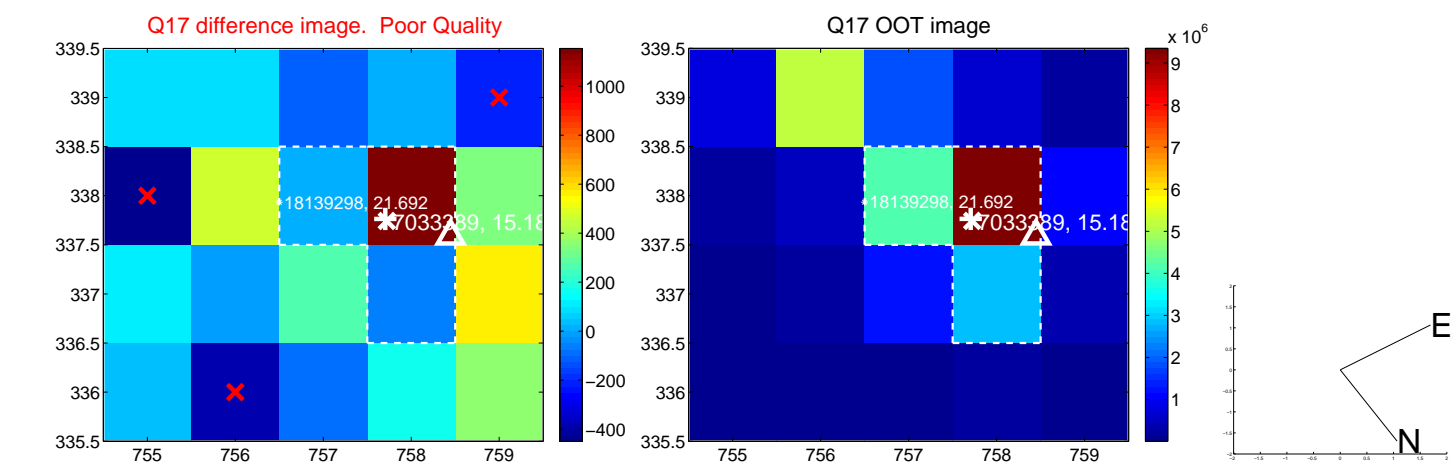
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

