

KIC 007117561

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})
007117561-01	OBS	No	0.566782	131.818754	44.7	1.635	8.4	6.0	1.26	6623	0.99	12716.53

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007117561-01	OBS	FP	0.00	1	0	1	1	LPP_DV—HALO_GHOST—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.

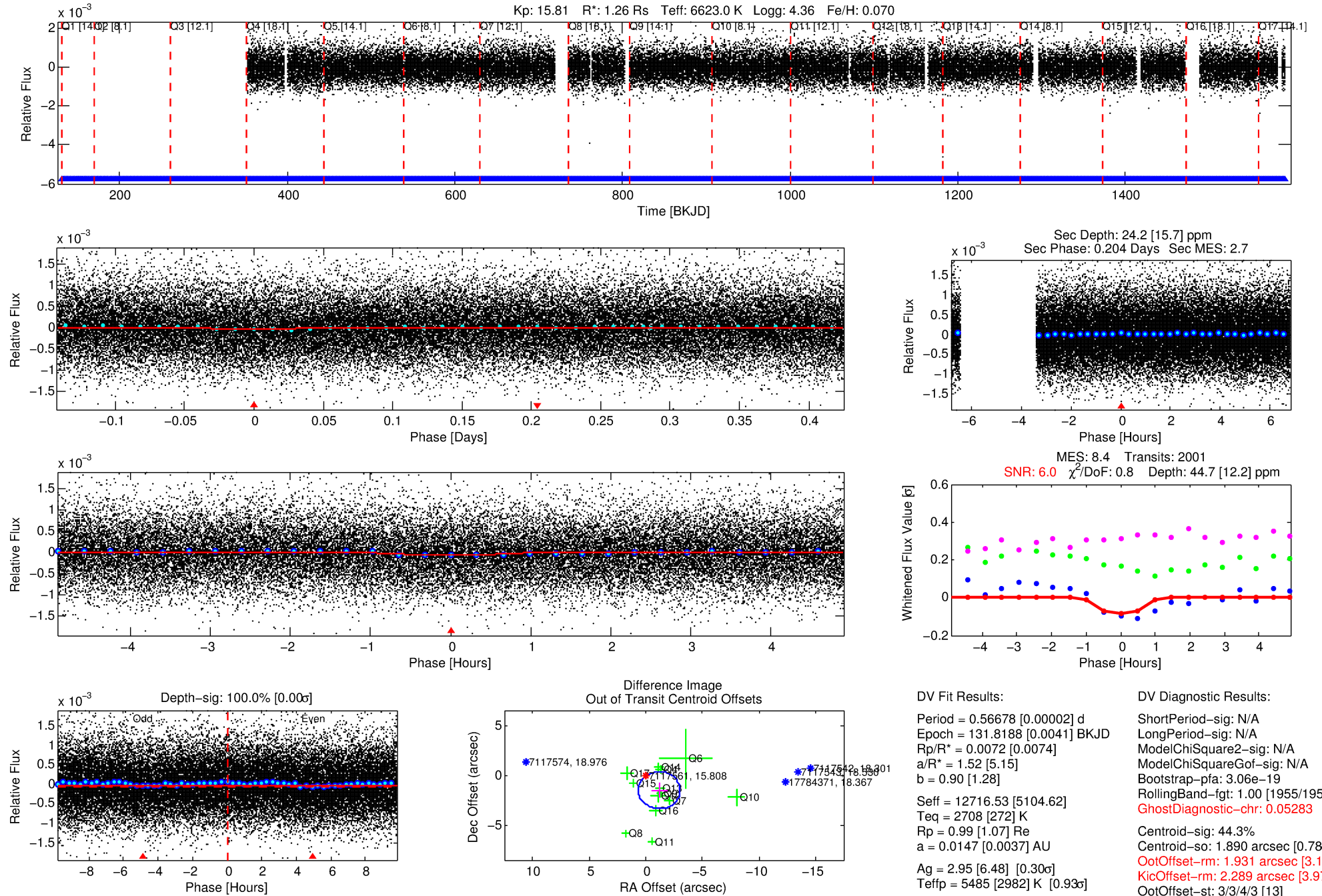
Ephemeris Match Information For 007117561-01

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
007117561-01	7117561	RR-Lyr-pri	7198959	1:1	1043.5	216	149	7.86	15.81	13851.00	Direct-PRF	0	3.16	19.53

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

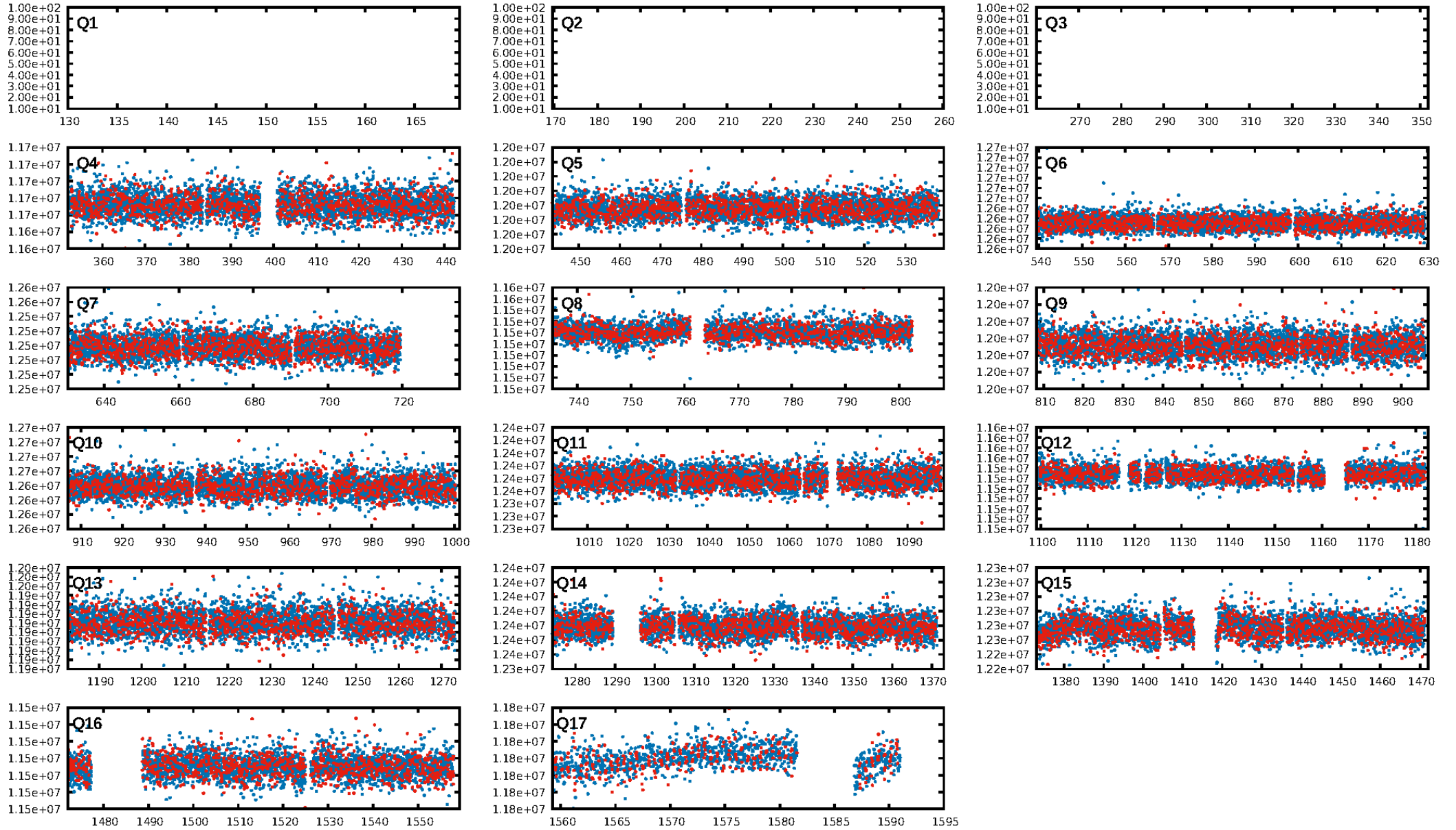
KIC: 7117561 Candidate: 1 of 1 Period: 0.567 d



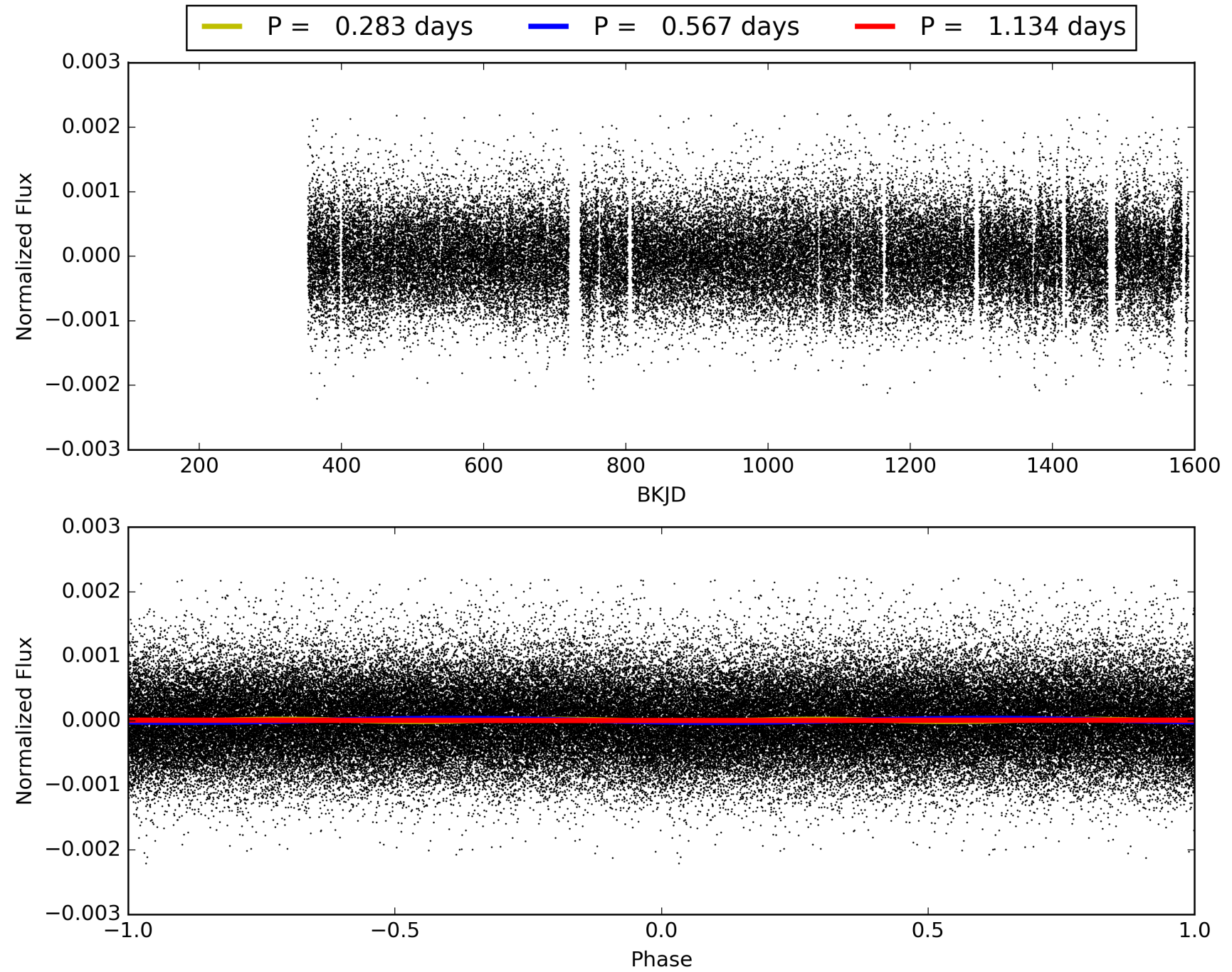
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 08:36:04 Z

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

TCE 007117561-01, PDC Light Curves

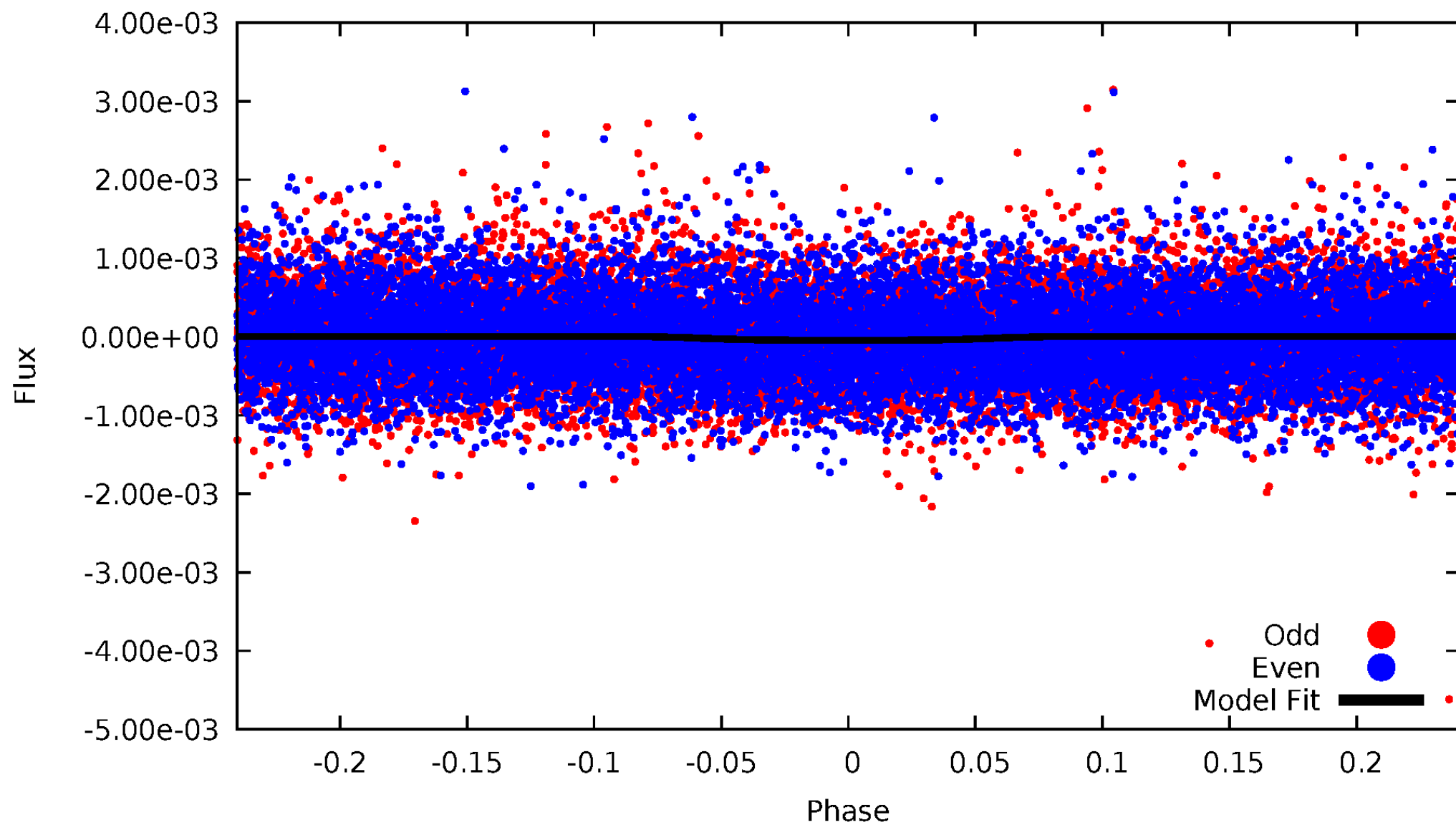


TCE 007117561-01



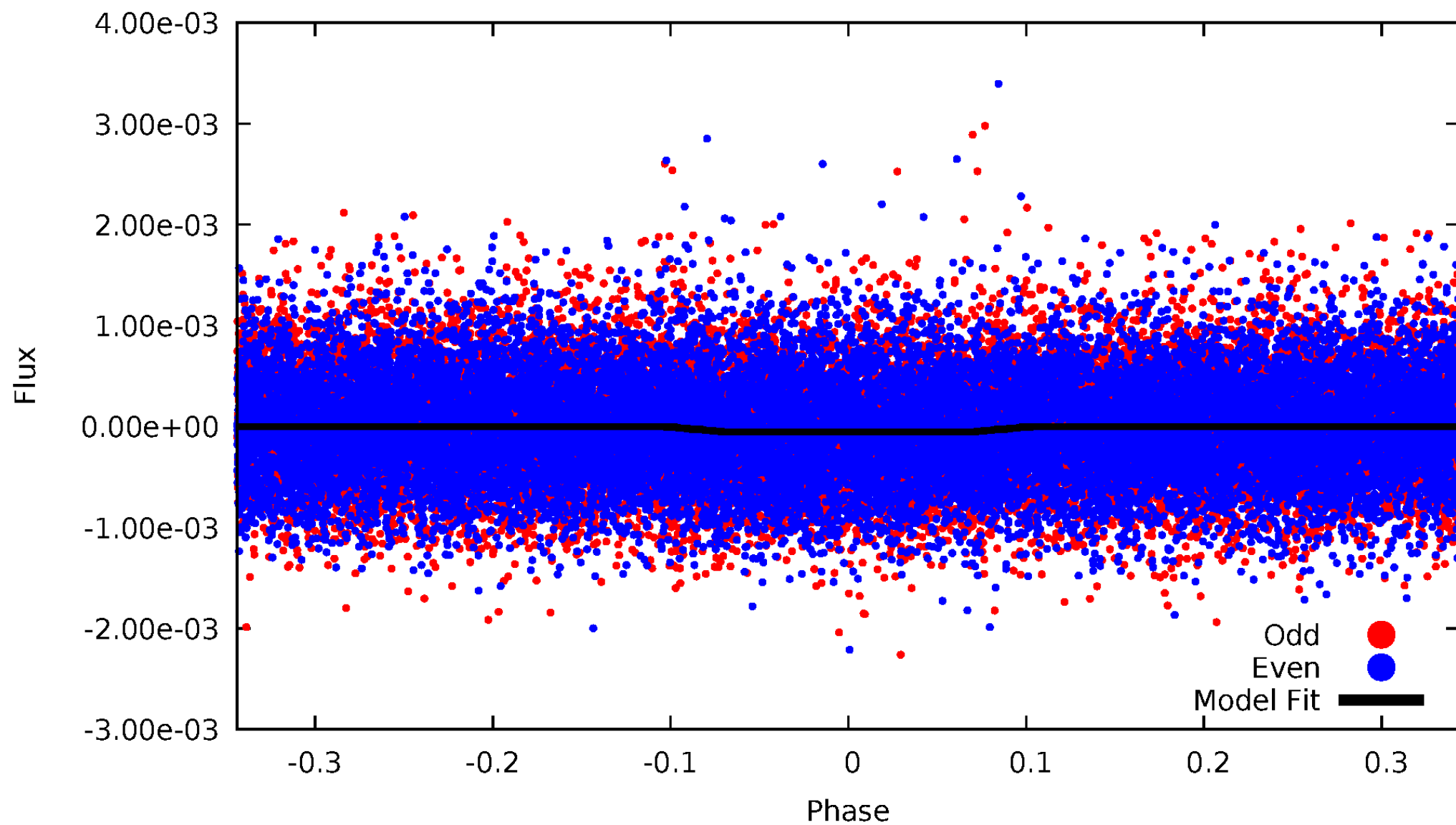
DV Odd/Even

TCE 007117561-01



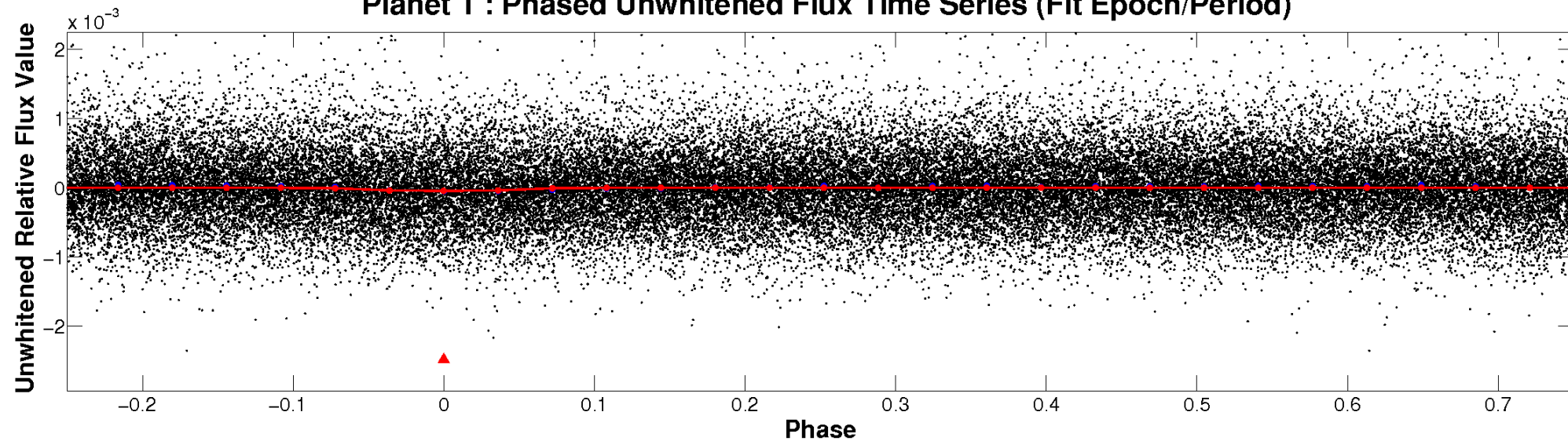
ALT Odd/Even

TCE 007117561-01

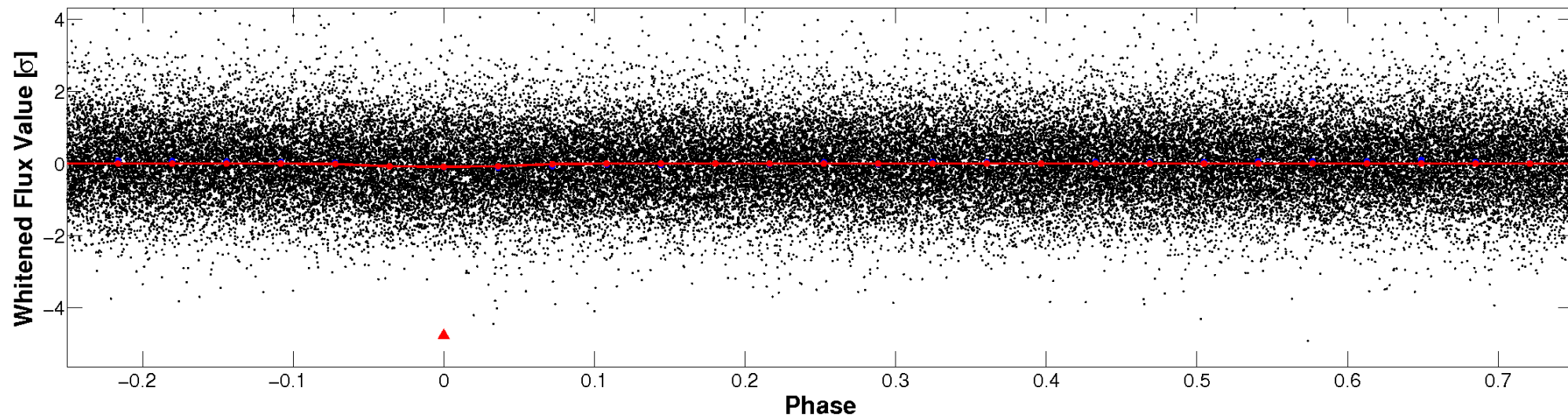


Non-Whitened Vs. Whitened Light Curve

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

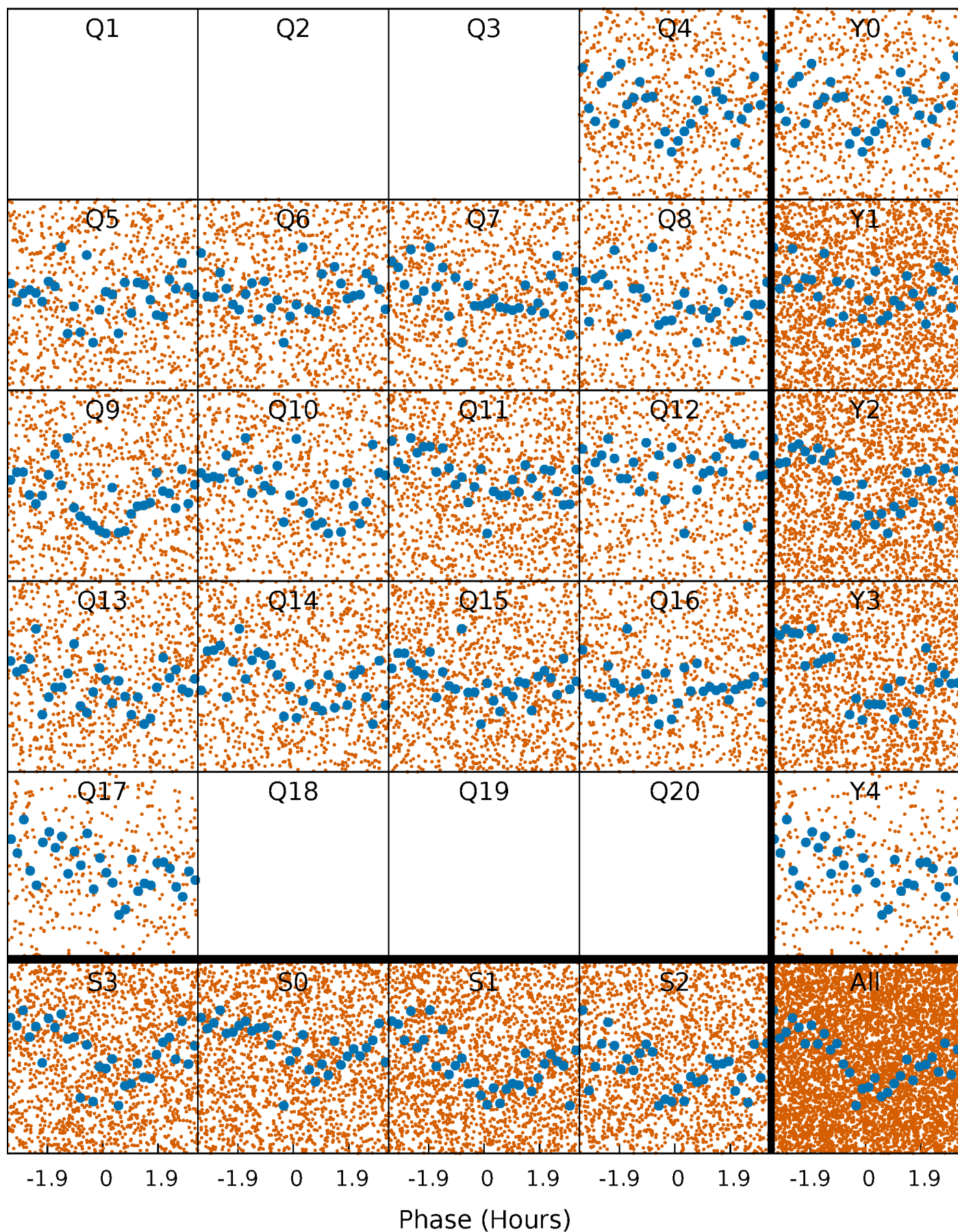


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



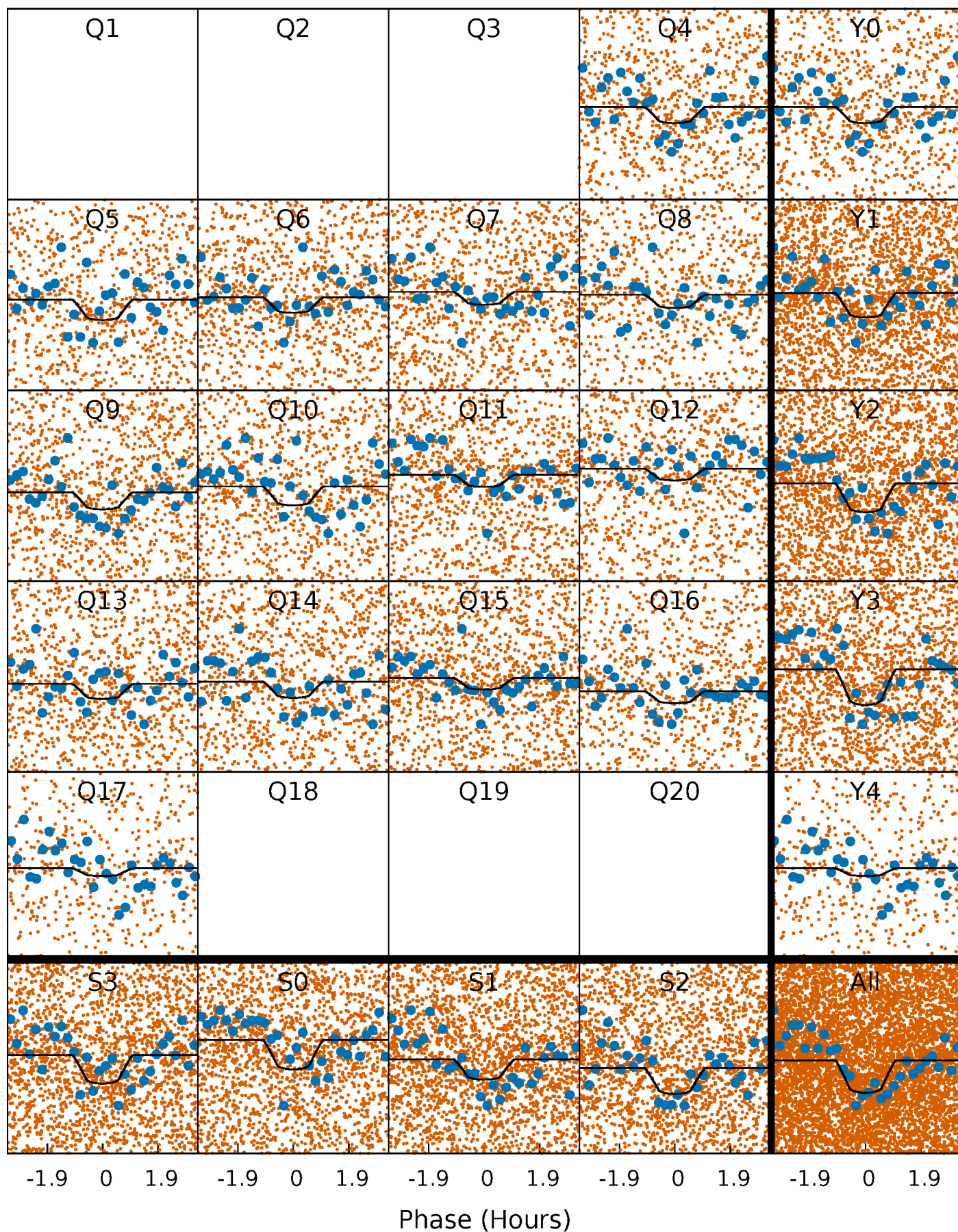
PDC Quarter-Phased Transit Curves

TCE 007117561-01 P= 0.566782 Days $T_0=131.818755$ (BKJD)



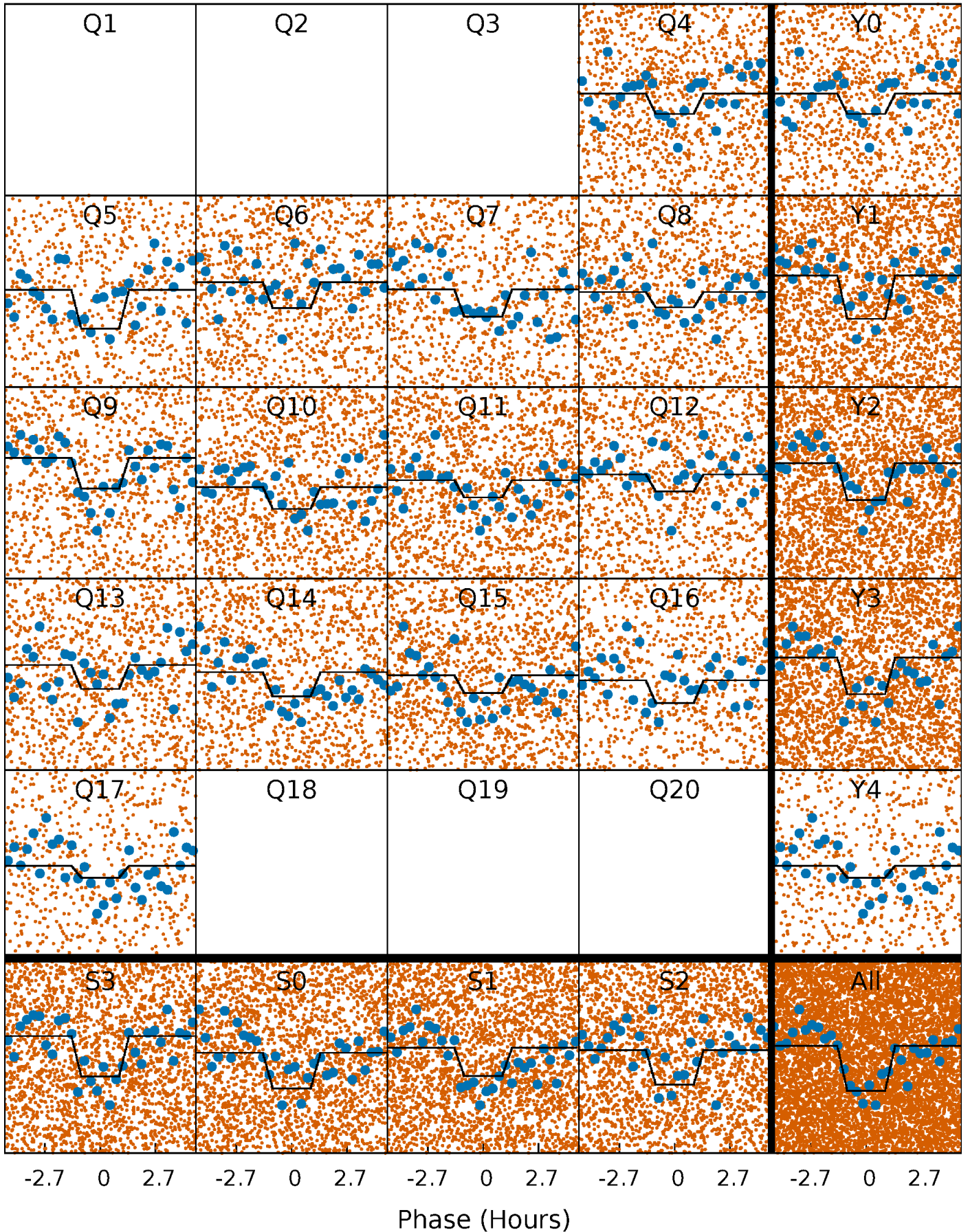
DV Quarter-Phased Transit Curves

TCE 007117561-01 P= 0.566782 Days $T_0=131.818755$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

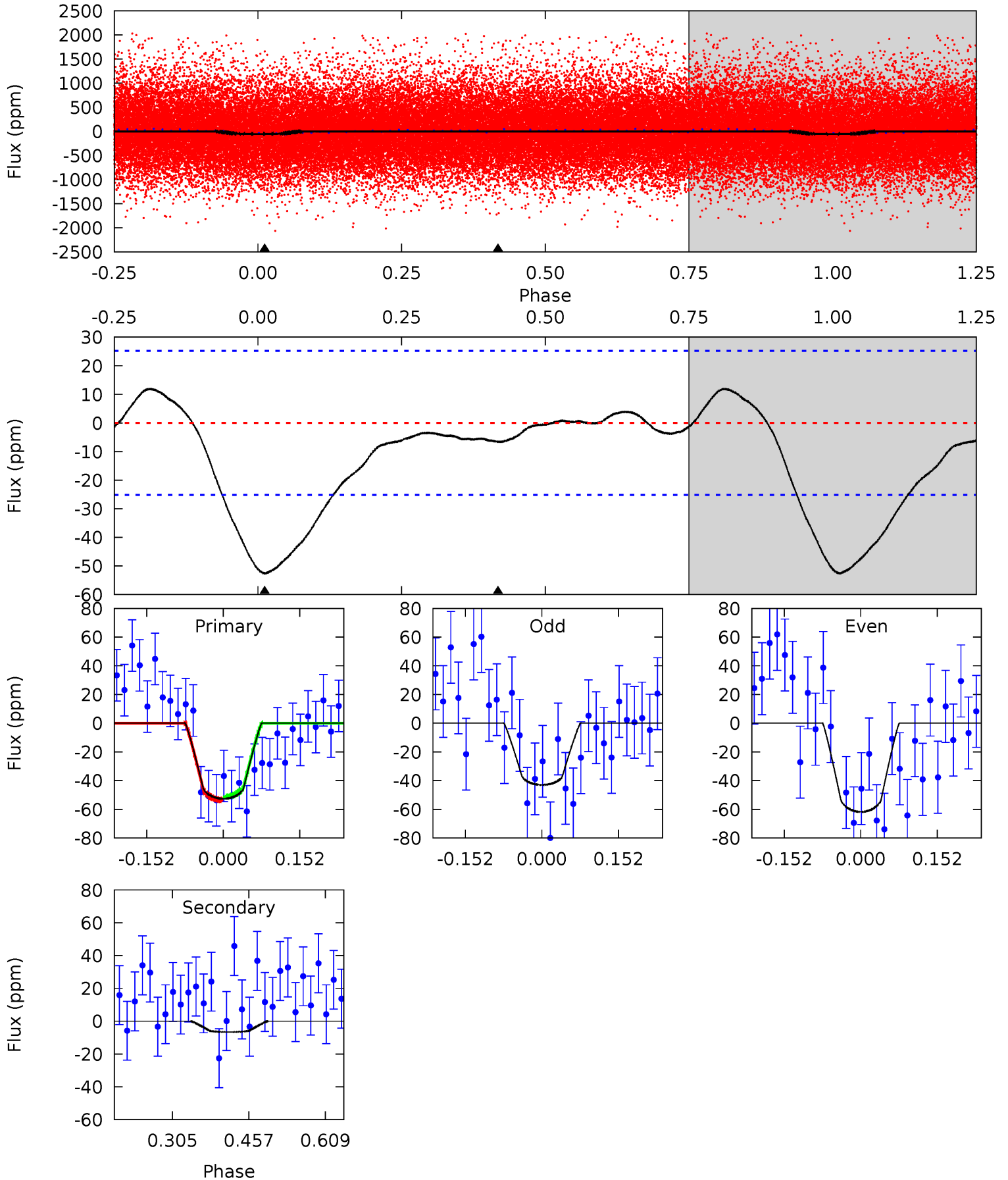
TCE 007117561-01 P= 0.566795 Days $T_0=131.815472$ (BKJD)



DV Model-Shift Uniqueness Test

007117561-01, P = 0.566782 Days, E = 131.818755 Days

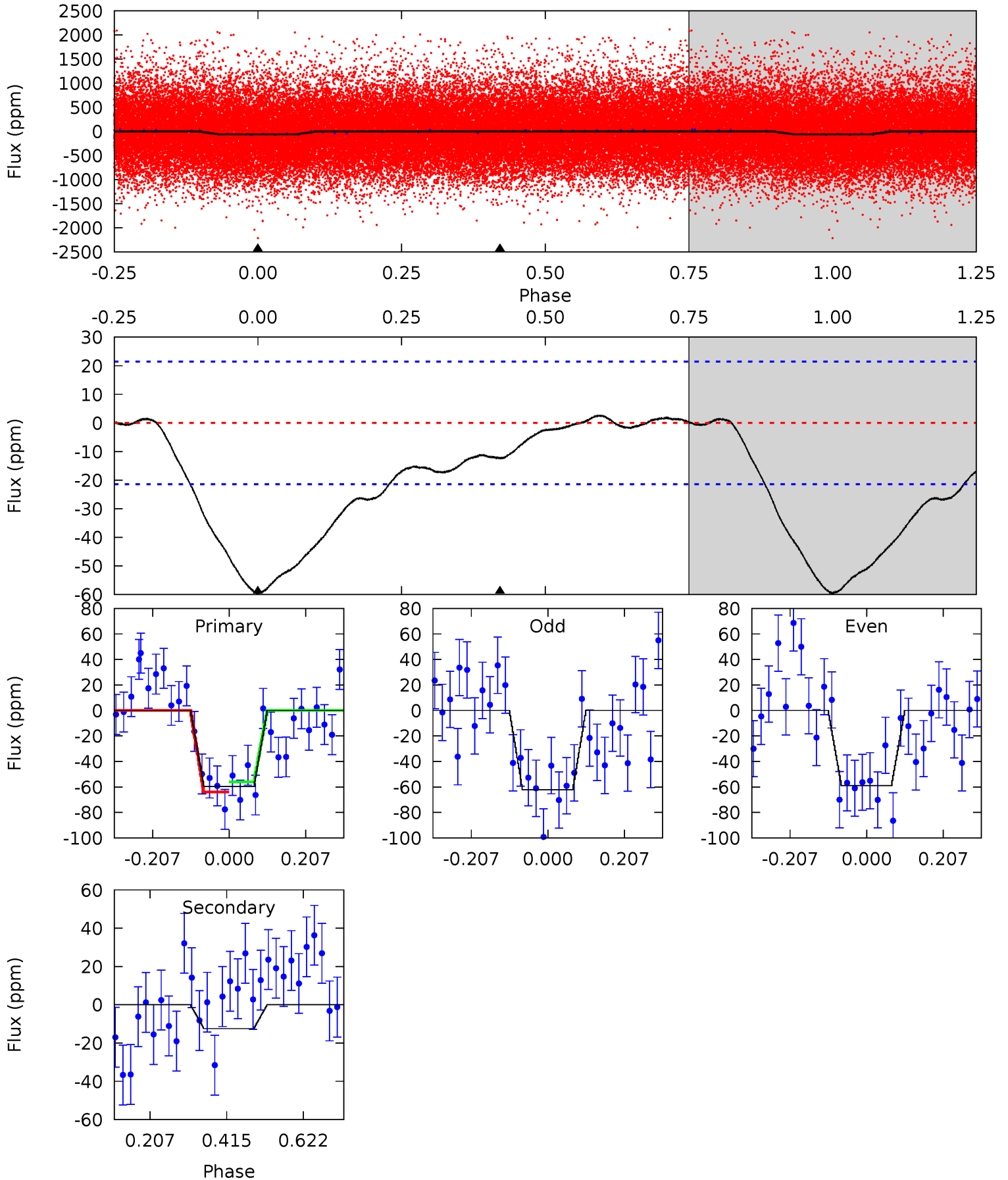
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.35	1.18	0	0	4.48	1.43	1.28	9.35	9.35	1.18	1.18	1.67	0.81	0.18	0.20



Alt Model-Shift Uniqueness Test

007117561-01, $P = 0.566795$ Days, $E = 131.815472$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.3	2.56	0	0	4.41	1.26	1.04	12.3	12.3	2.56	2.56	0.34	1.07	0.04	0.82



Stellar Parameters For KIC 007117561

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6623^{+164}_{-281}	$4.355^{+0.065}_{-0.195}$	$0.070^{+0.250}_{-0.350}$	$1.261^{+0.391}_{-0.168}$	$1.317^{+0.168}_{-0.206}$	$0.924^{+0.253}_{-0.473}$
	+2%/-4%	+1%/-4%	+357%/-500%	+31%/-13%	+13%/-16%	+27%/-51%
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 007117561-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-7 ± 6	$1.25^{+0.94}_{-0.77}$	3830^{+279}_{-186}	2862^{+2545}_{-6433}	$0.371^{+2.387}_{-0.345}$
Alt.	-12 ± 5	$1.33^{+0.99}_{-0.84}$	3831^{+267}_{-196}	3860^{+2665}_{-6860}	$0.757^{+4.604}_{-0.548}$

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 $A_{obs} \gg 1.0$

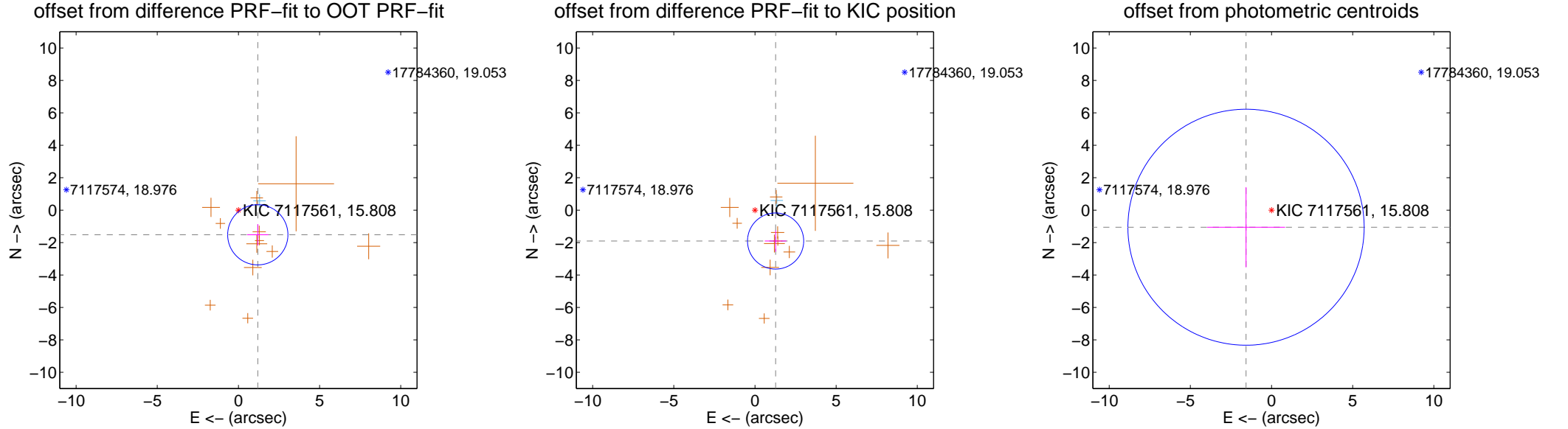
DV Centroid Data

Supplemental centroid analysis for 007117561-01. Kepler magnitude: 15.81. Transit SNR 5.95

There are 1 quarters with good PRF difference image offsets

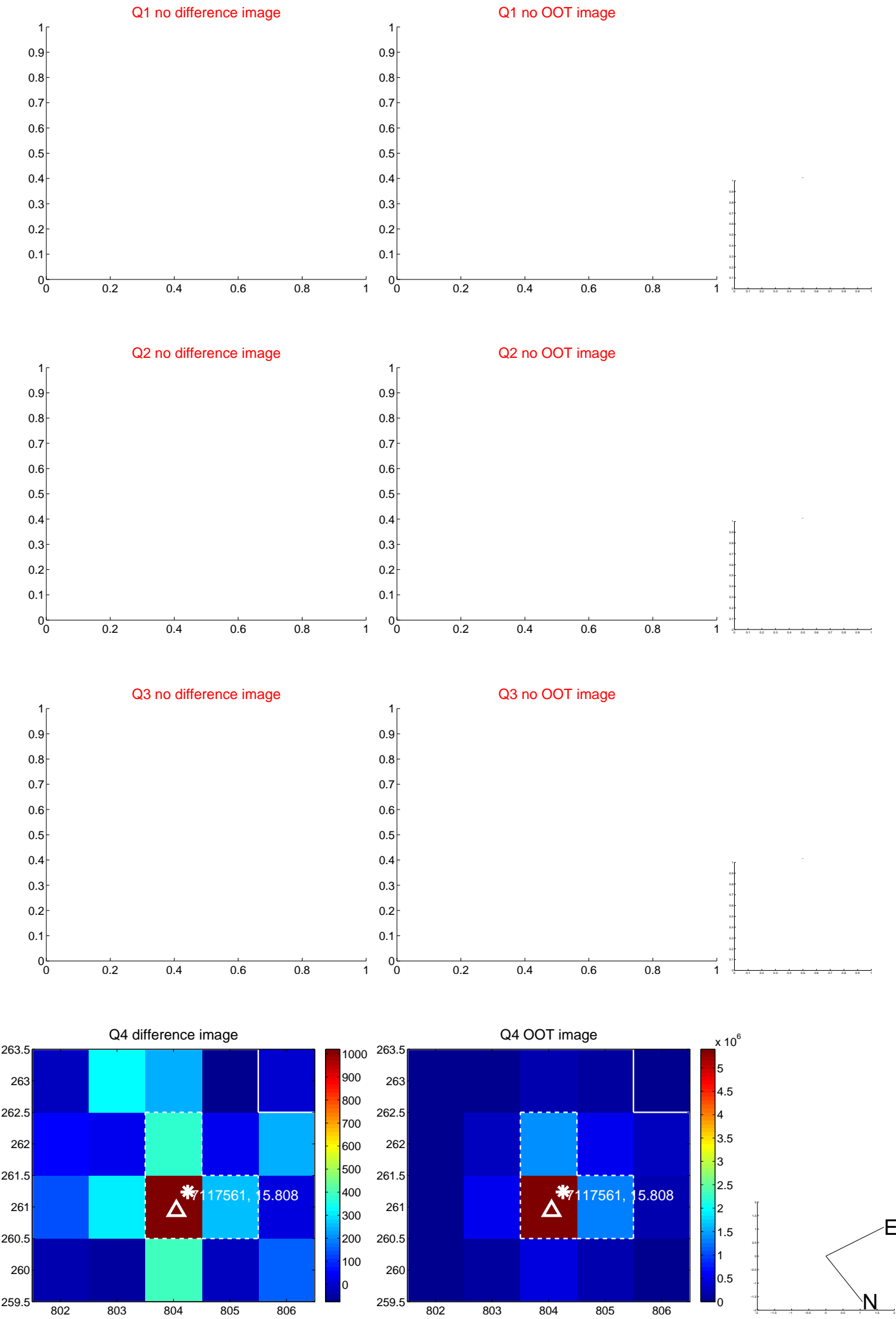
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.931 ± 0.619	3.12	-1.193 ± 0.655	-1.519 ± 0.658
PRF-fit source offset from KIC position	2.289 ± 0.577	3.97	-1.271 ± 0.665	-1.904 ± 0.659
photometric centroid source offset	1.89 ± 2.43	0.78	1.57 ± 2.41	-1.05 ± 2.47

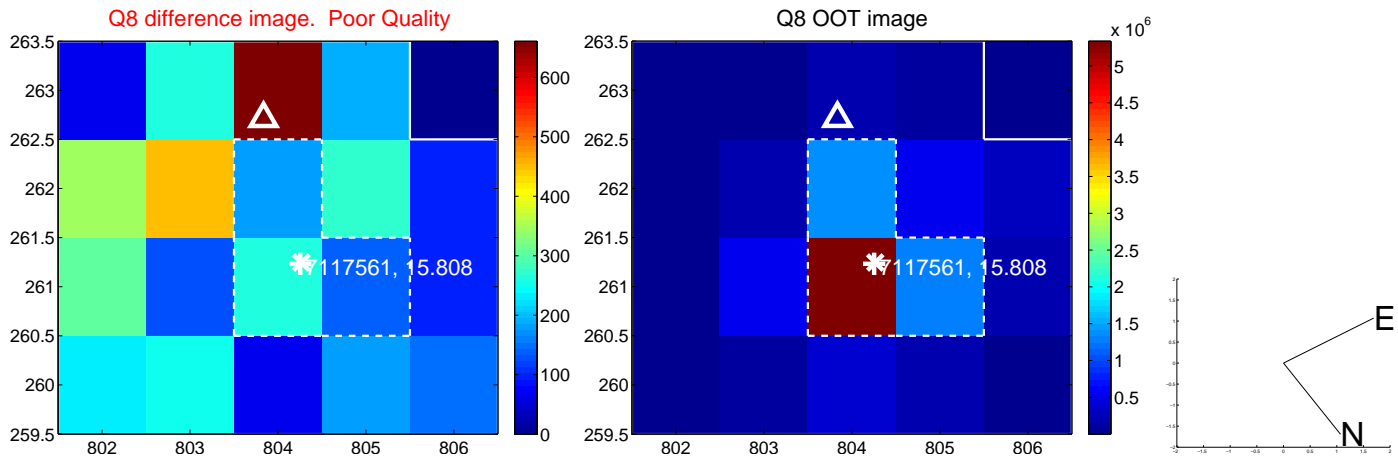
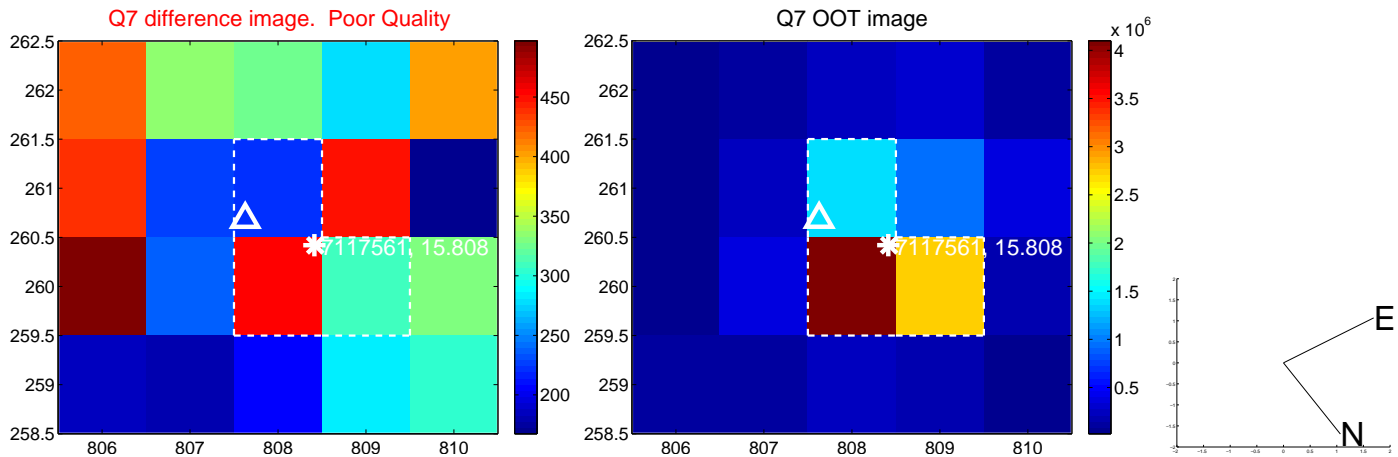
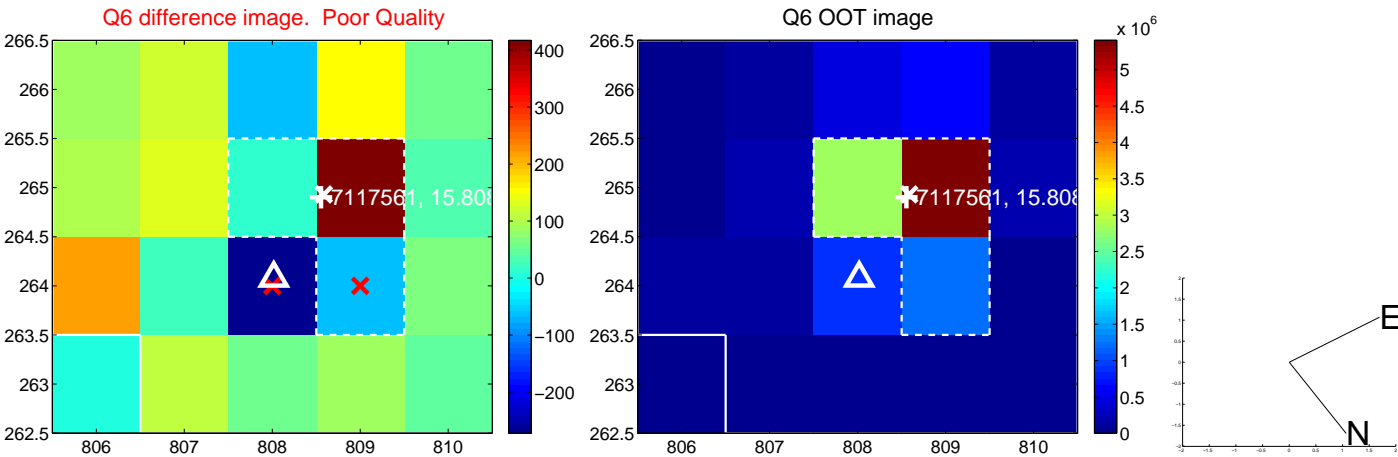
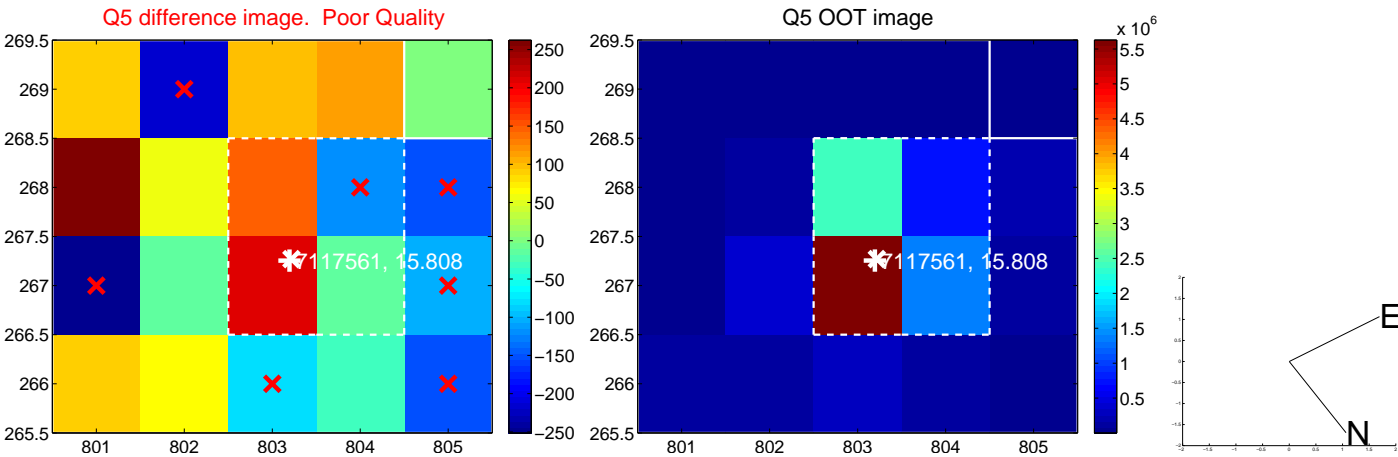


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

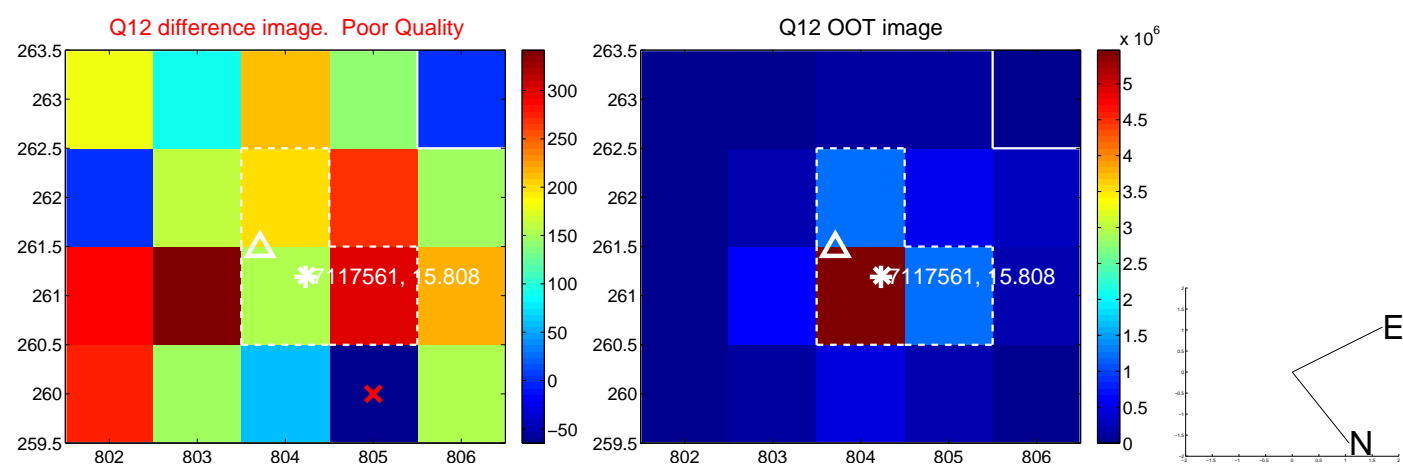
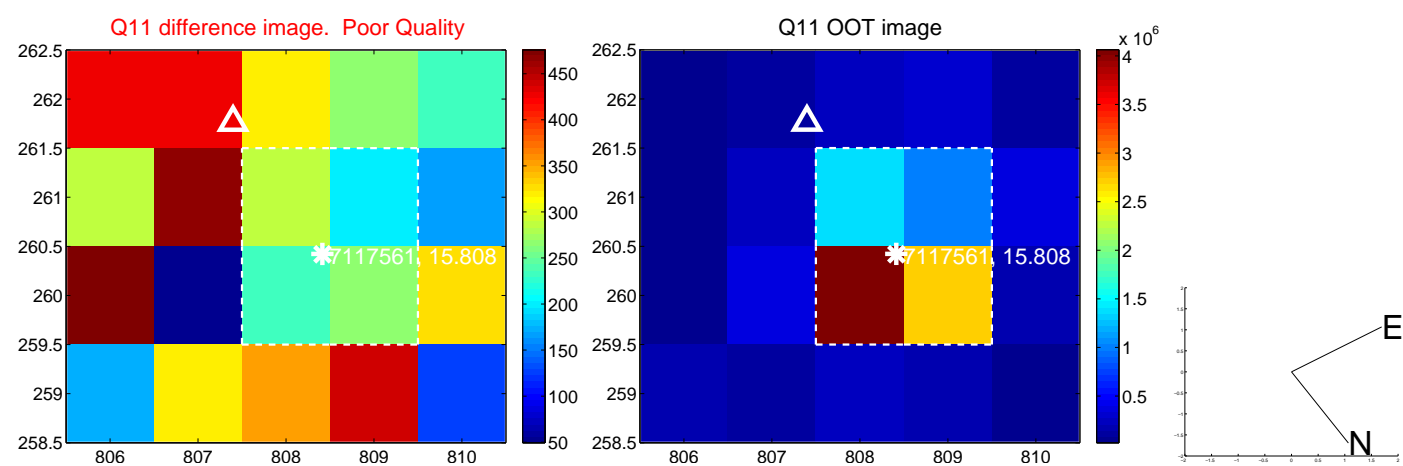
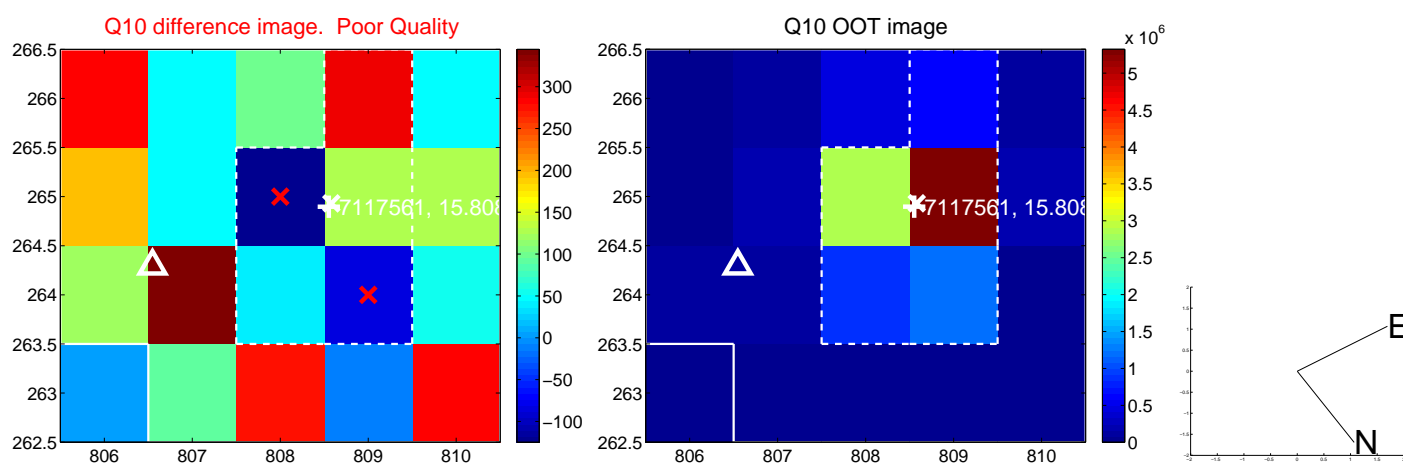
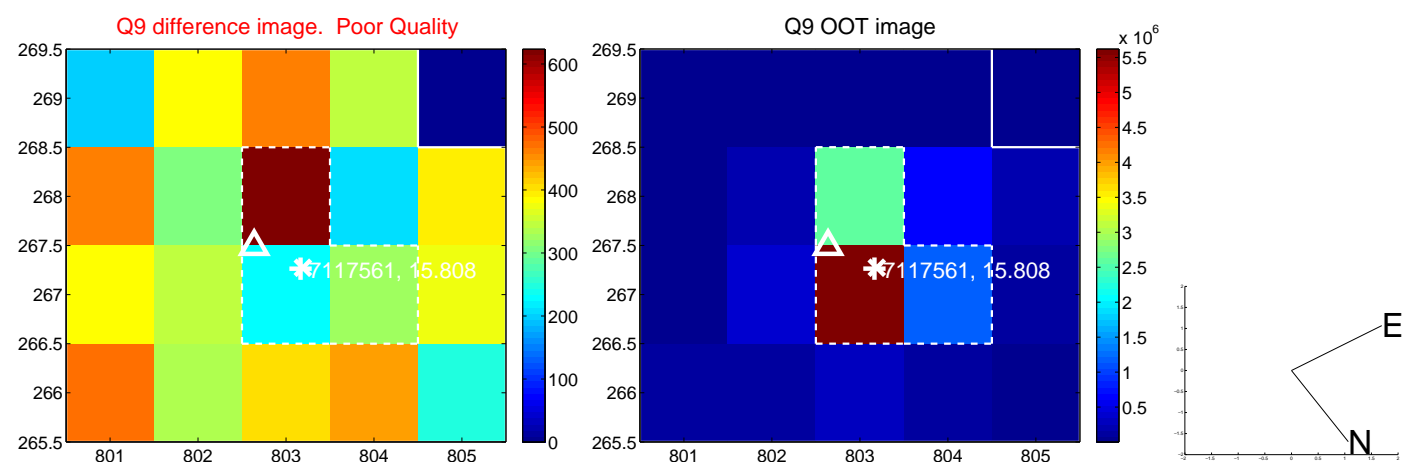
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



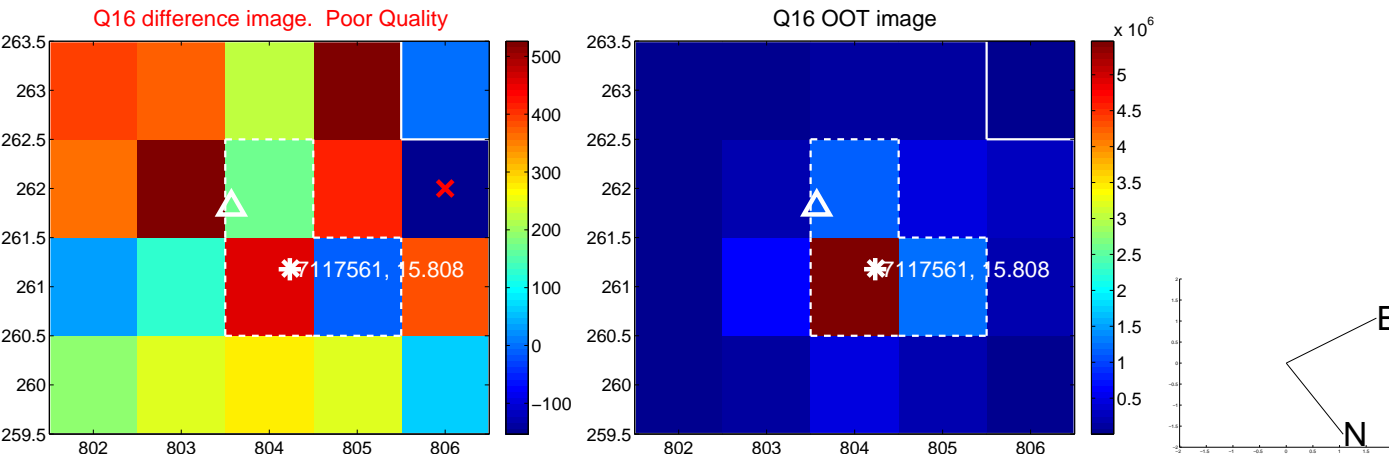
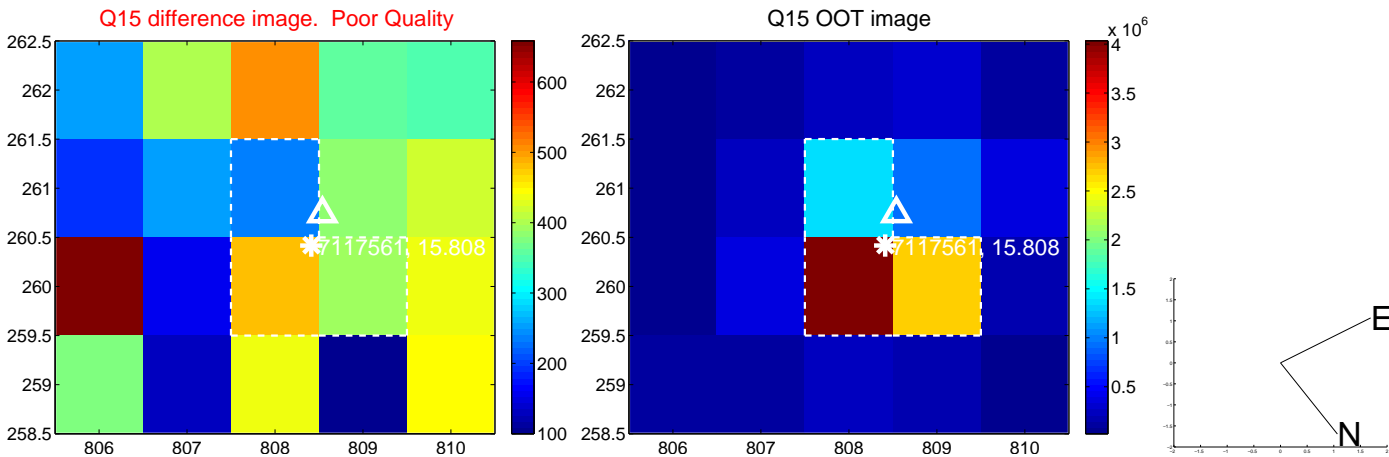
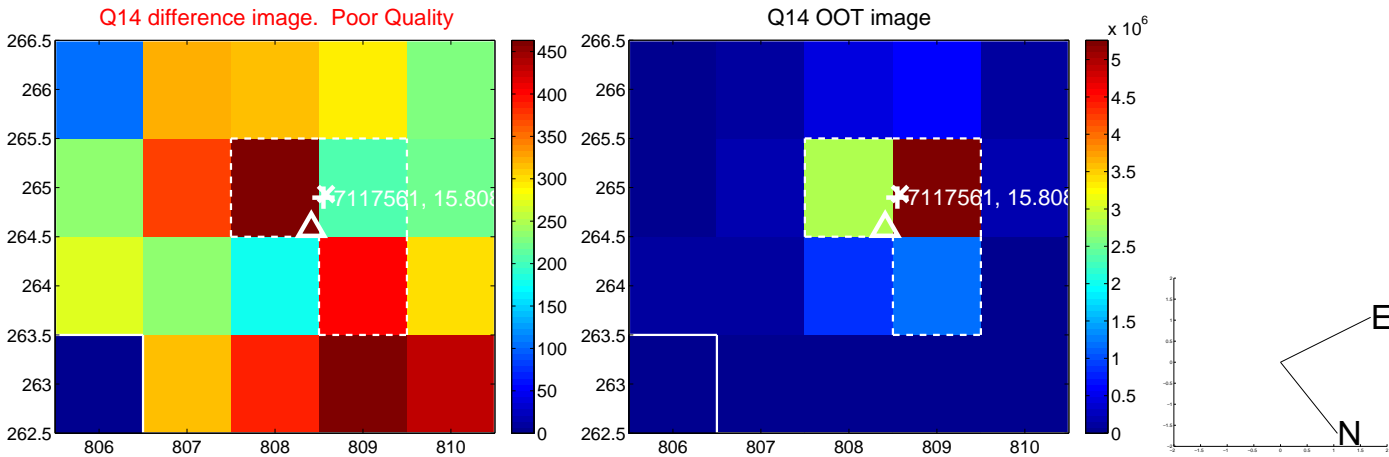
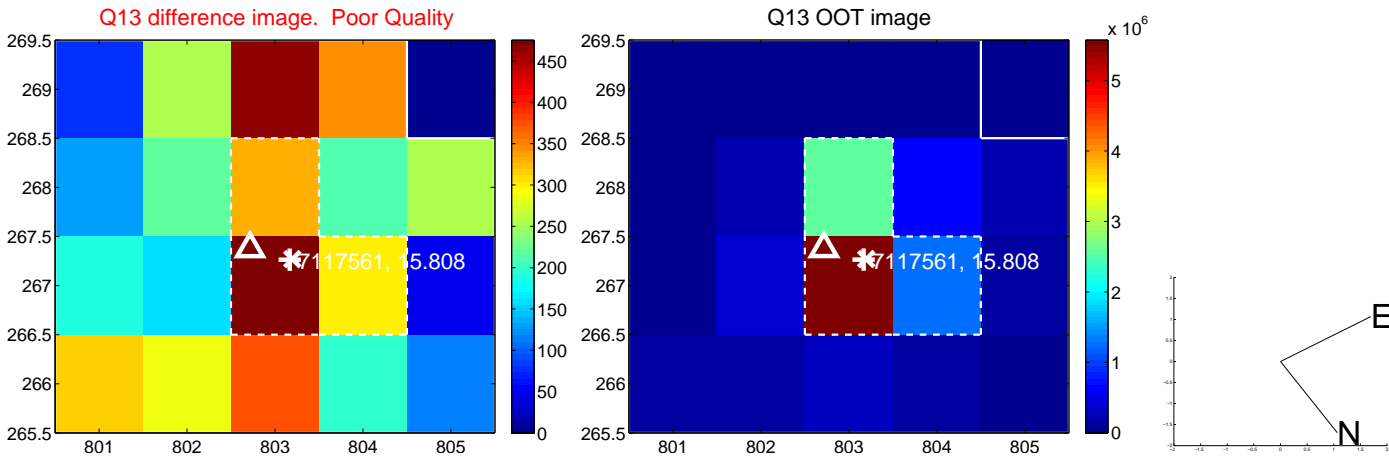
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



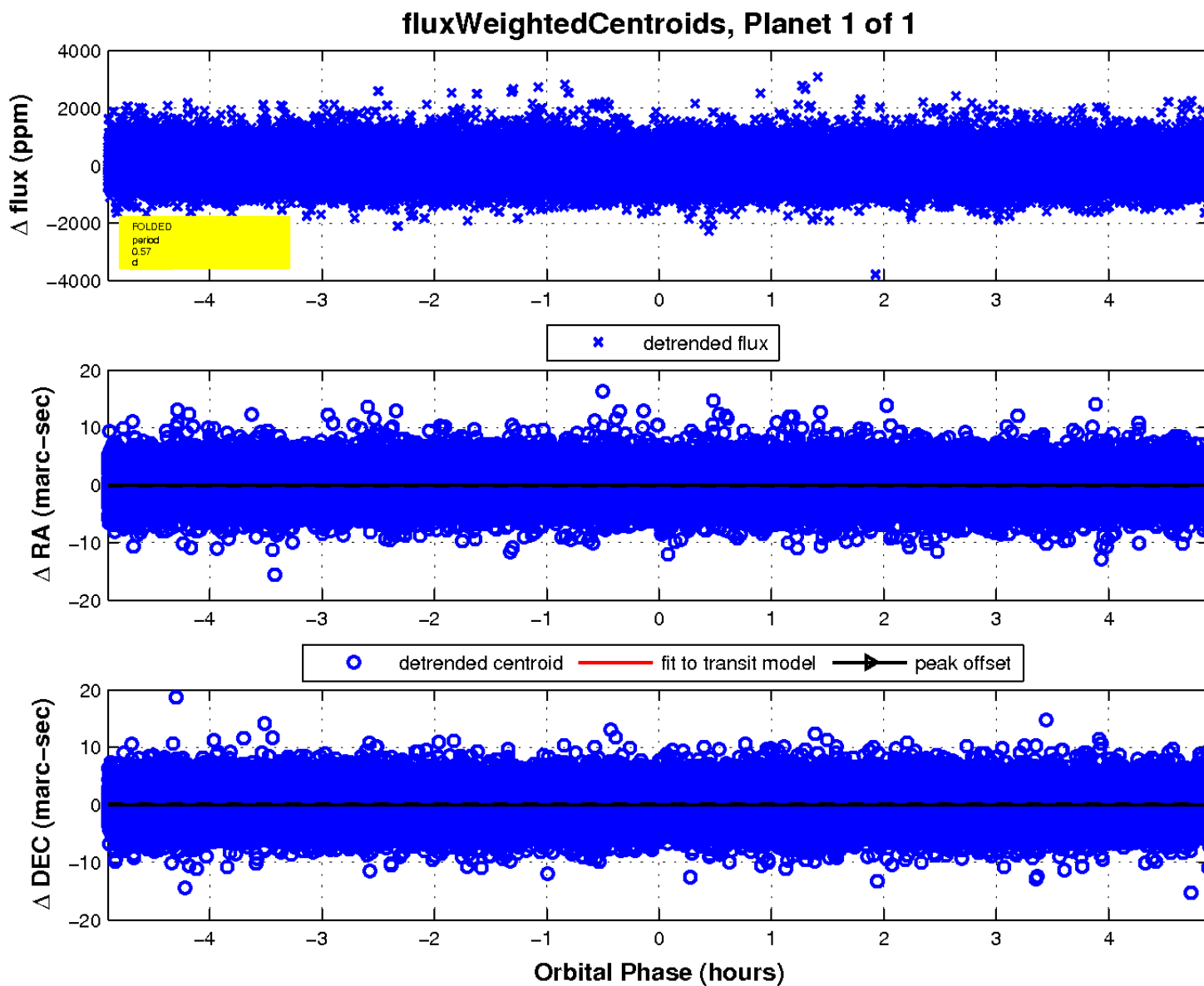
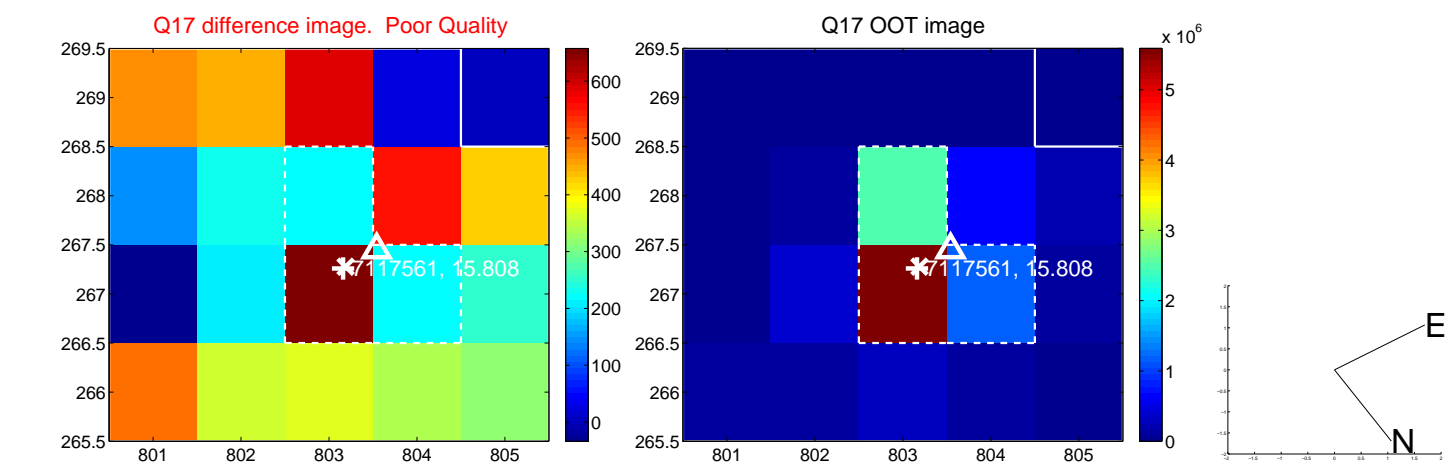
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



UKIRT Image

Declination

