

KIC 007362579

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})
007362579-01	OBS	No	0.566748	131.863182	19.9	3.300	12.5	5.4	0.95	6065	0.43	5960.25

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007362579-01	OBS	FP	0.00	1	0	1	1	LPP_DV—CENT_UNRESOLVED_OFFSET—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.

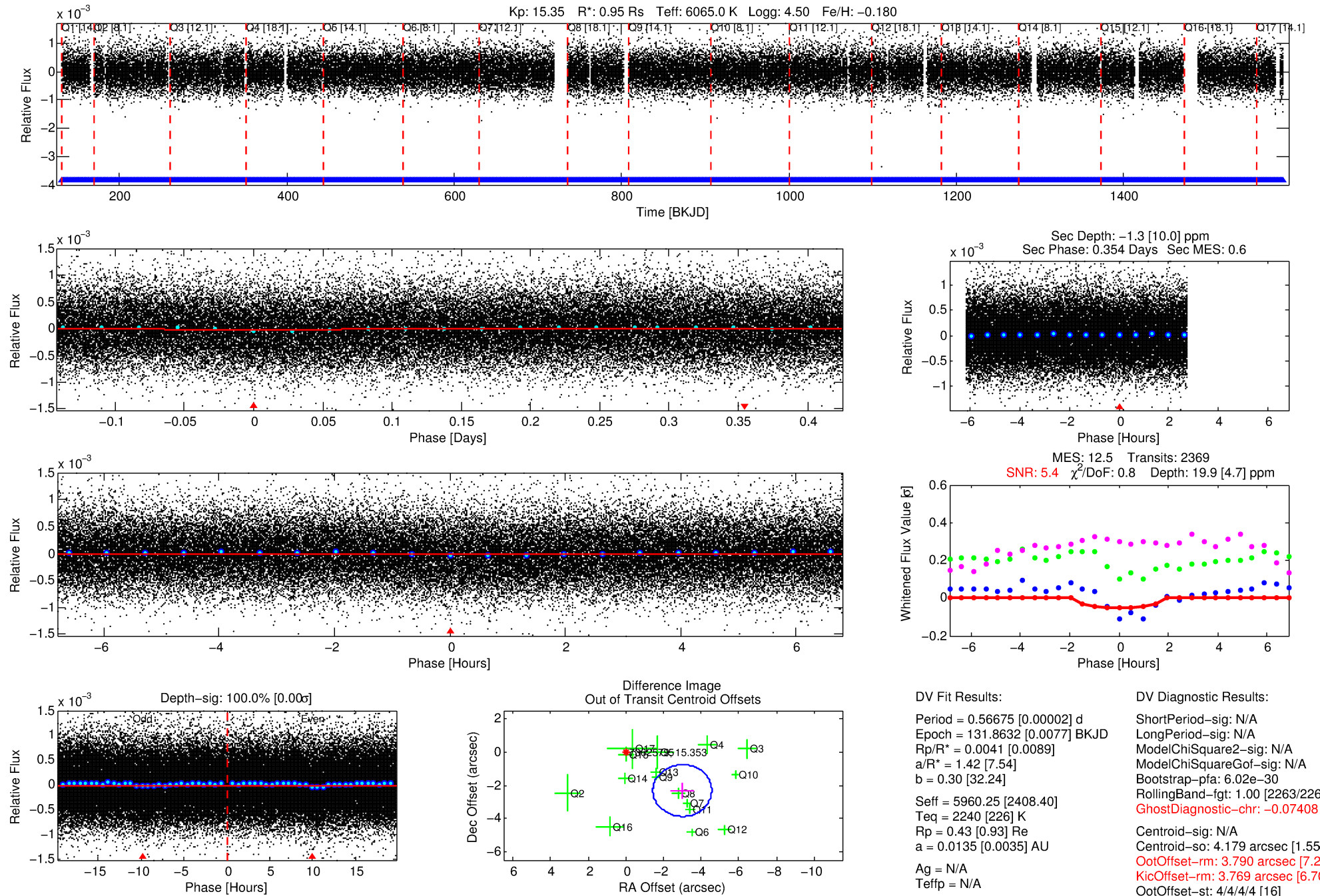
Ephemeris Match Information For 007362579-01

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
007362579-01	7362579	RR-Lyr-pri	7198959	1:1	1074.0	19	269	7.86	15.35	31165.00	Direct-PRF	0	0.04	22.09

Notes: P₁:P₂ 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. m₂ and m₁ are the magnitudes of the parent and child. D₂/D₁ 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

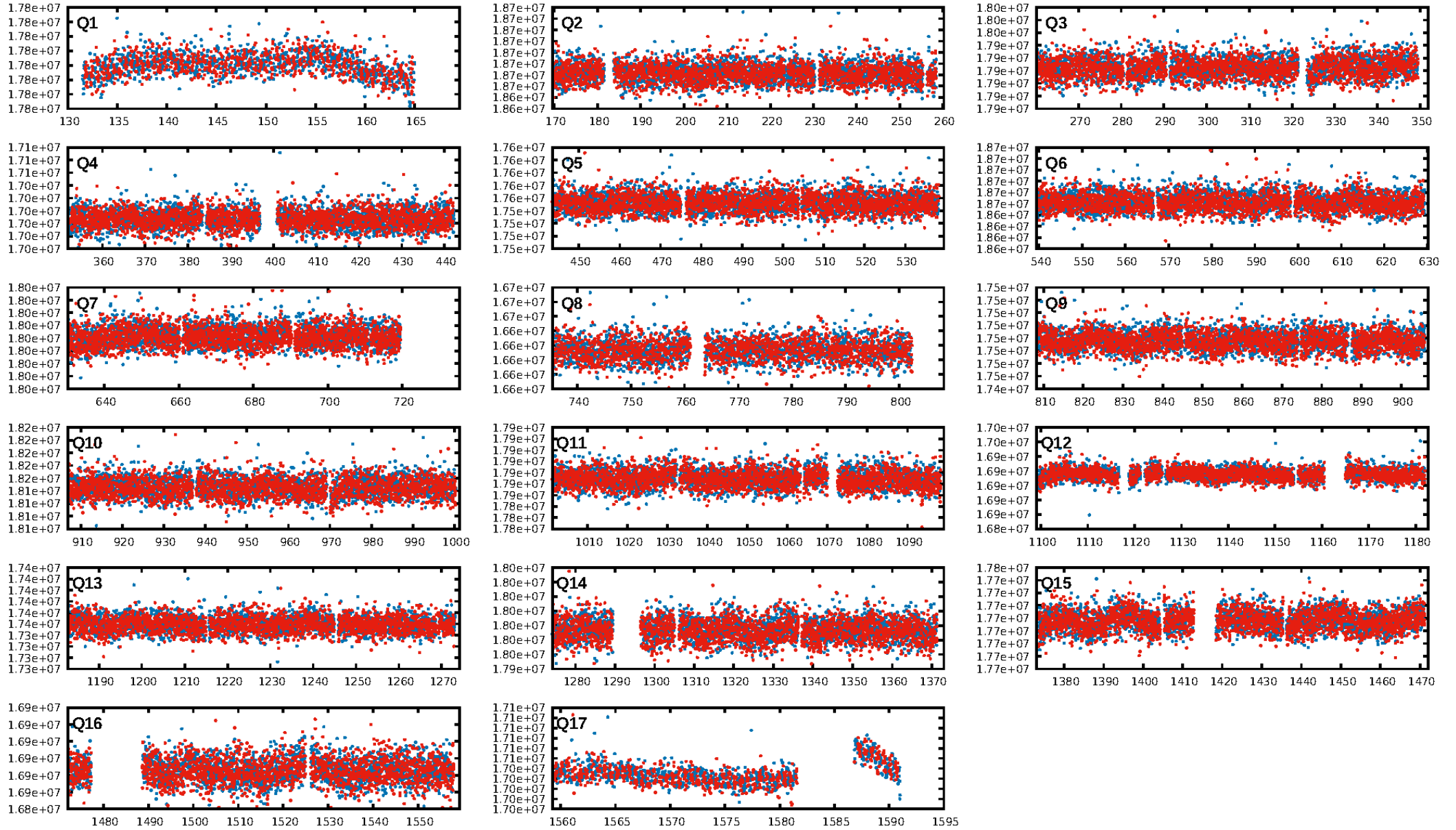
KIC: 7362579 Candidate: 1 of 1 Period: 0.567 d



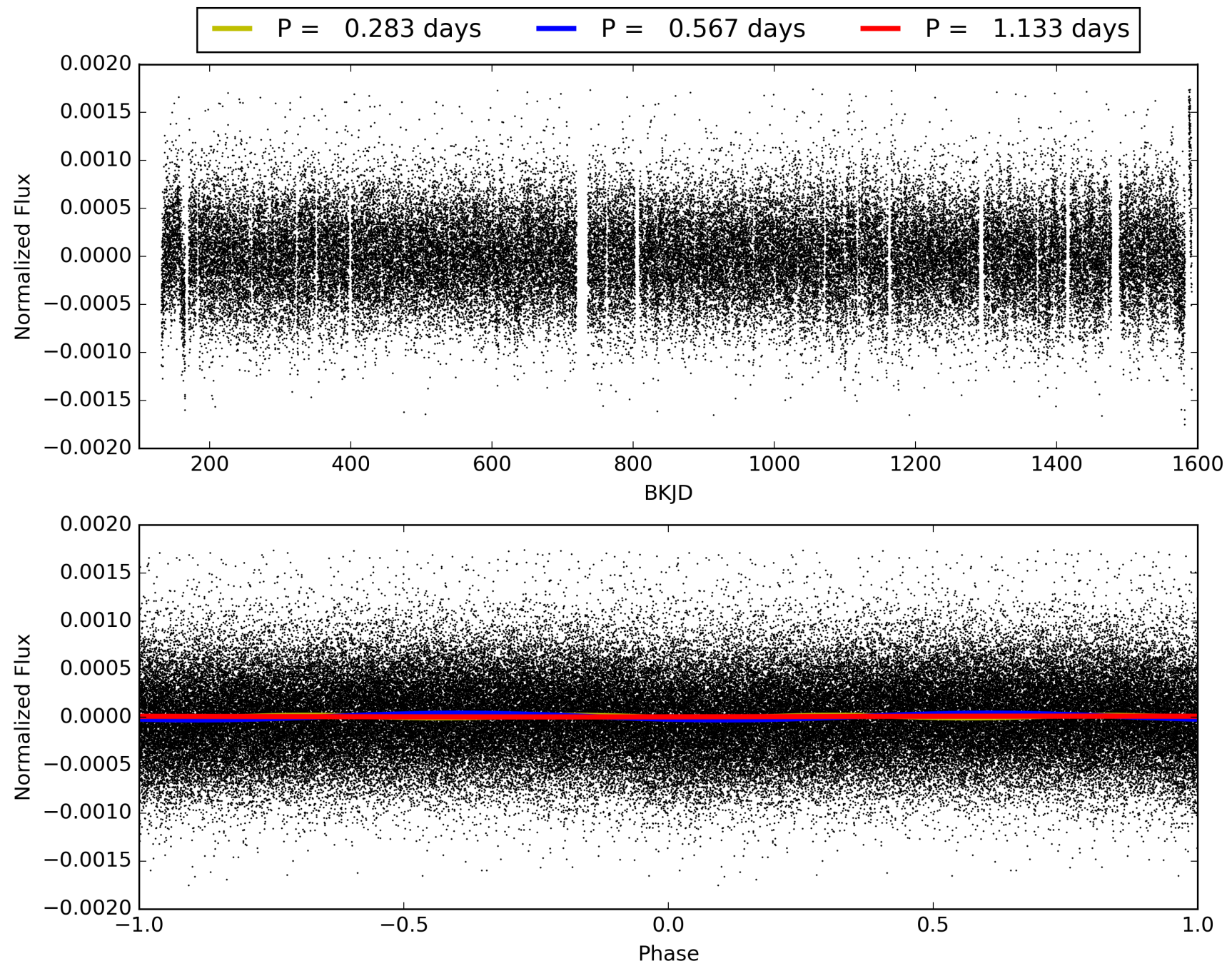
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 10:34:31 Z

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

TCE 007362579-01, PDC Light Curves

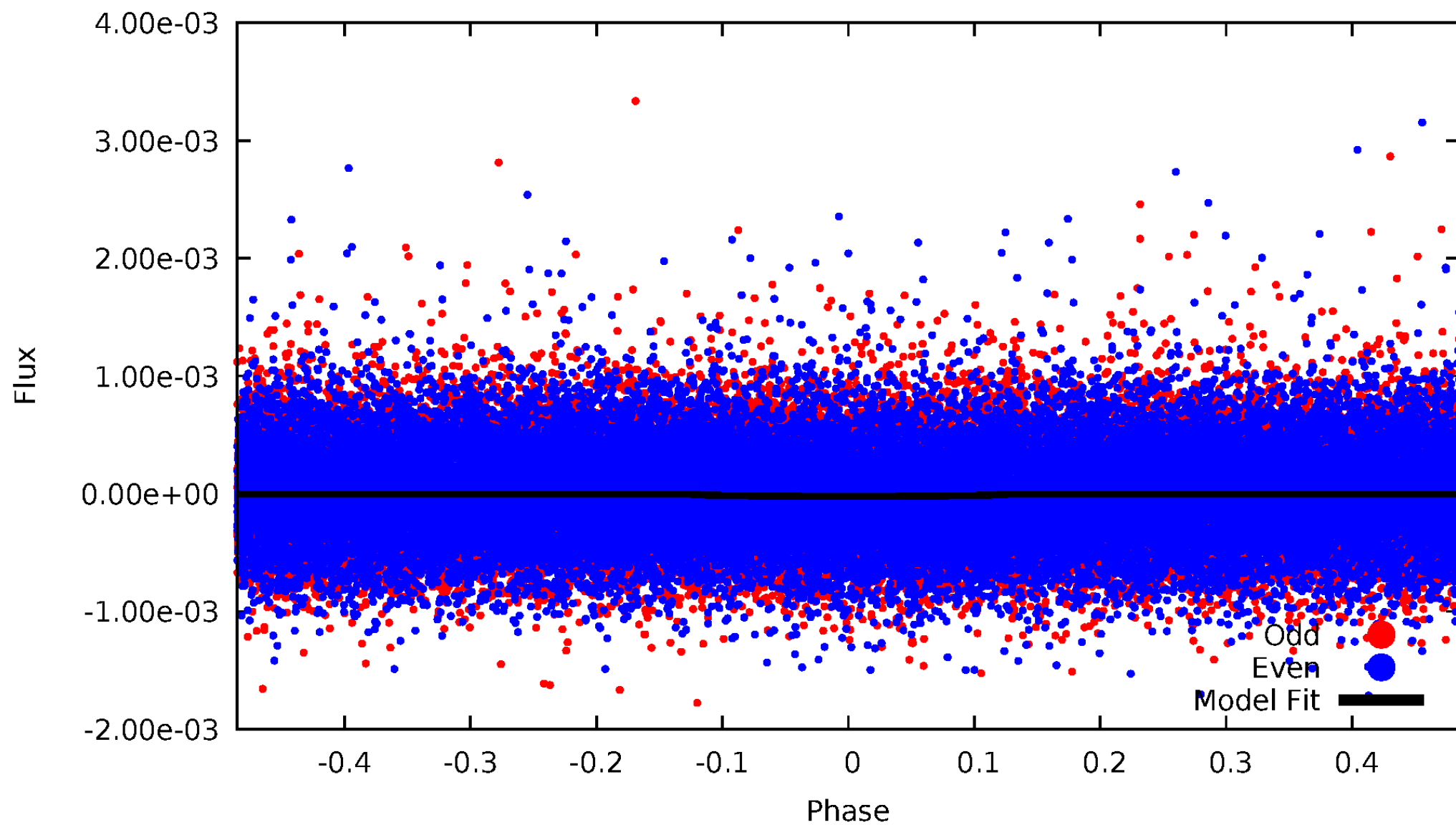


TCE 007362579-01



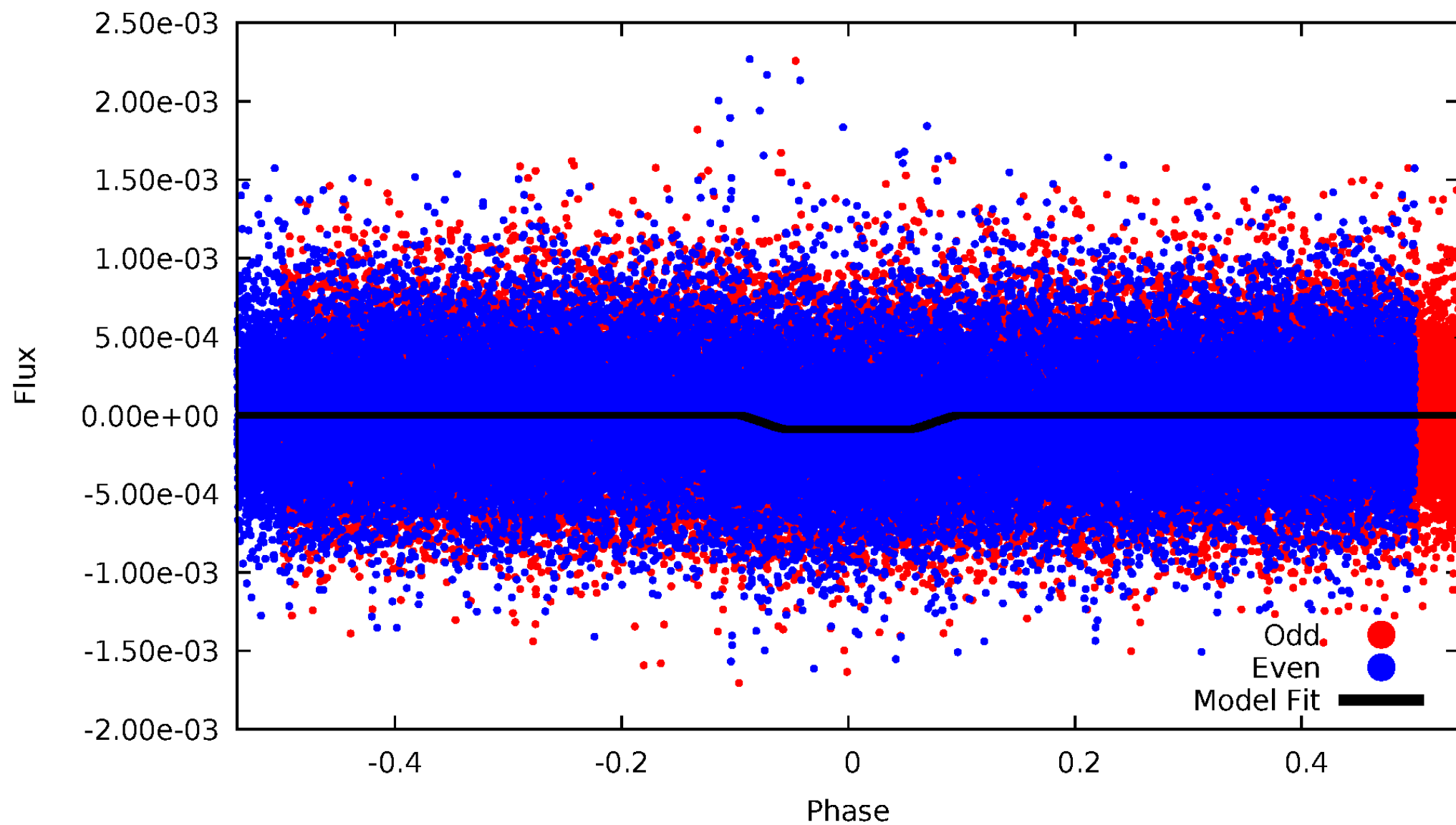
DV Odd/Even

TCE 007362579-01



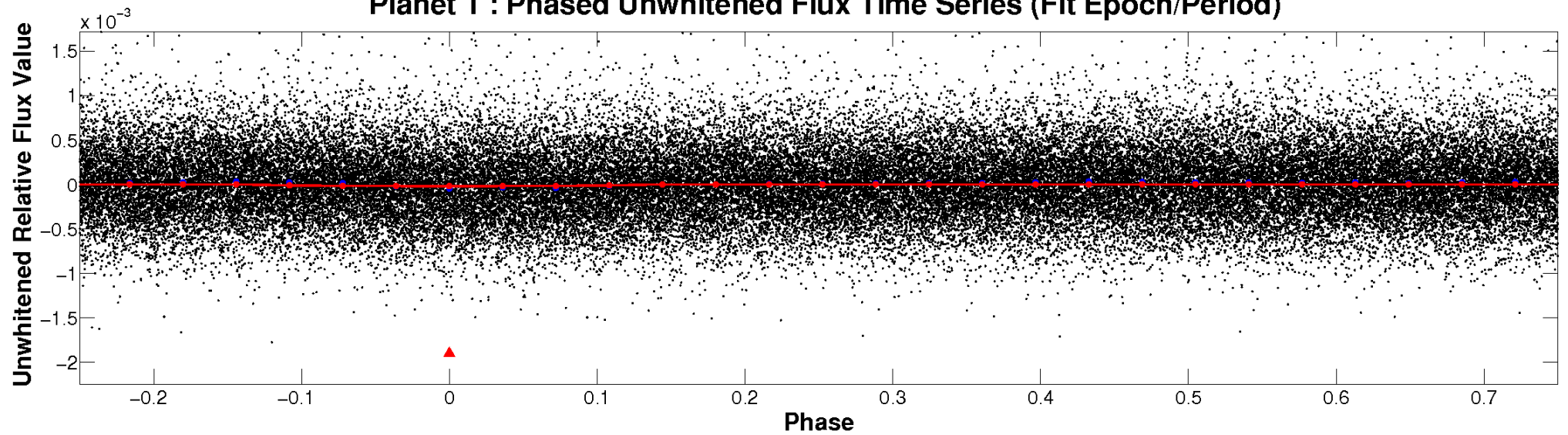
ALT Odd/Even

TCE 007362579-01

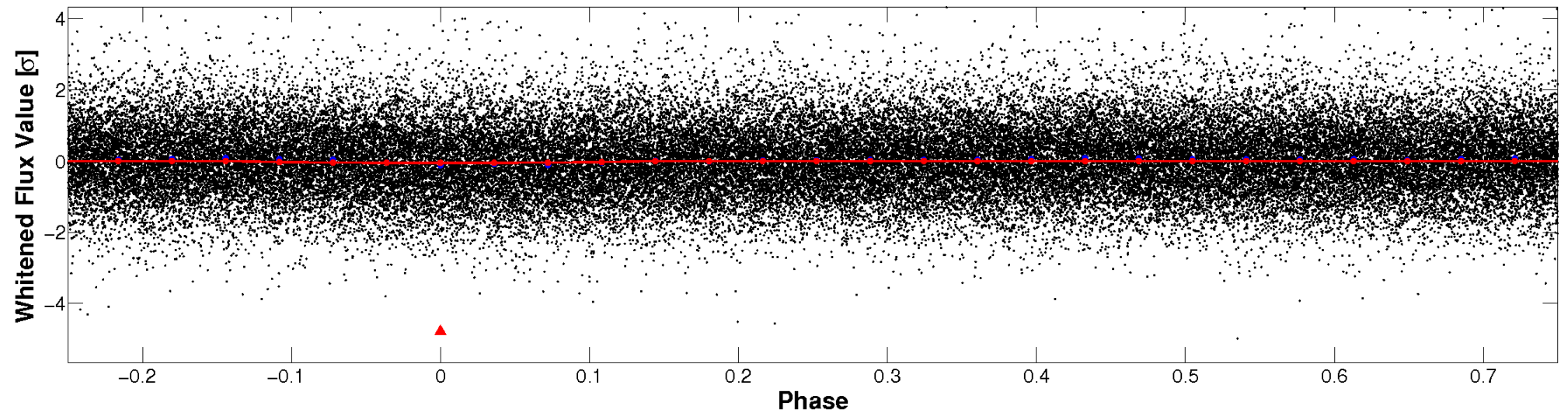


Non-Whitened Vs. Whitened Light Curve

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

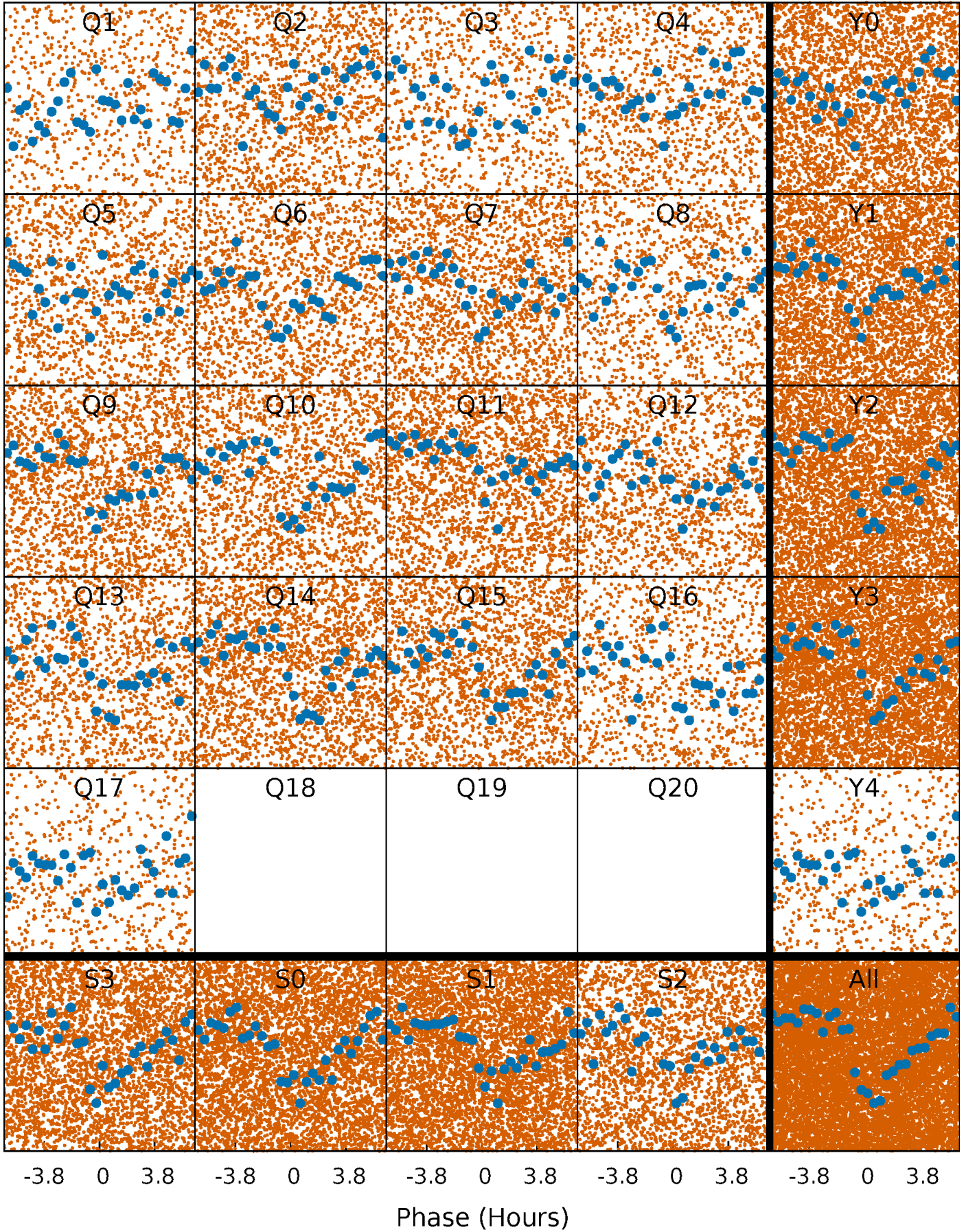


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



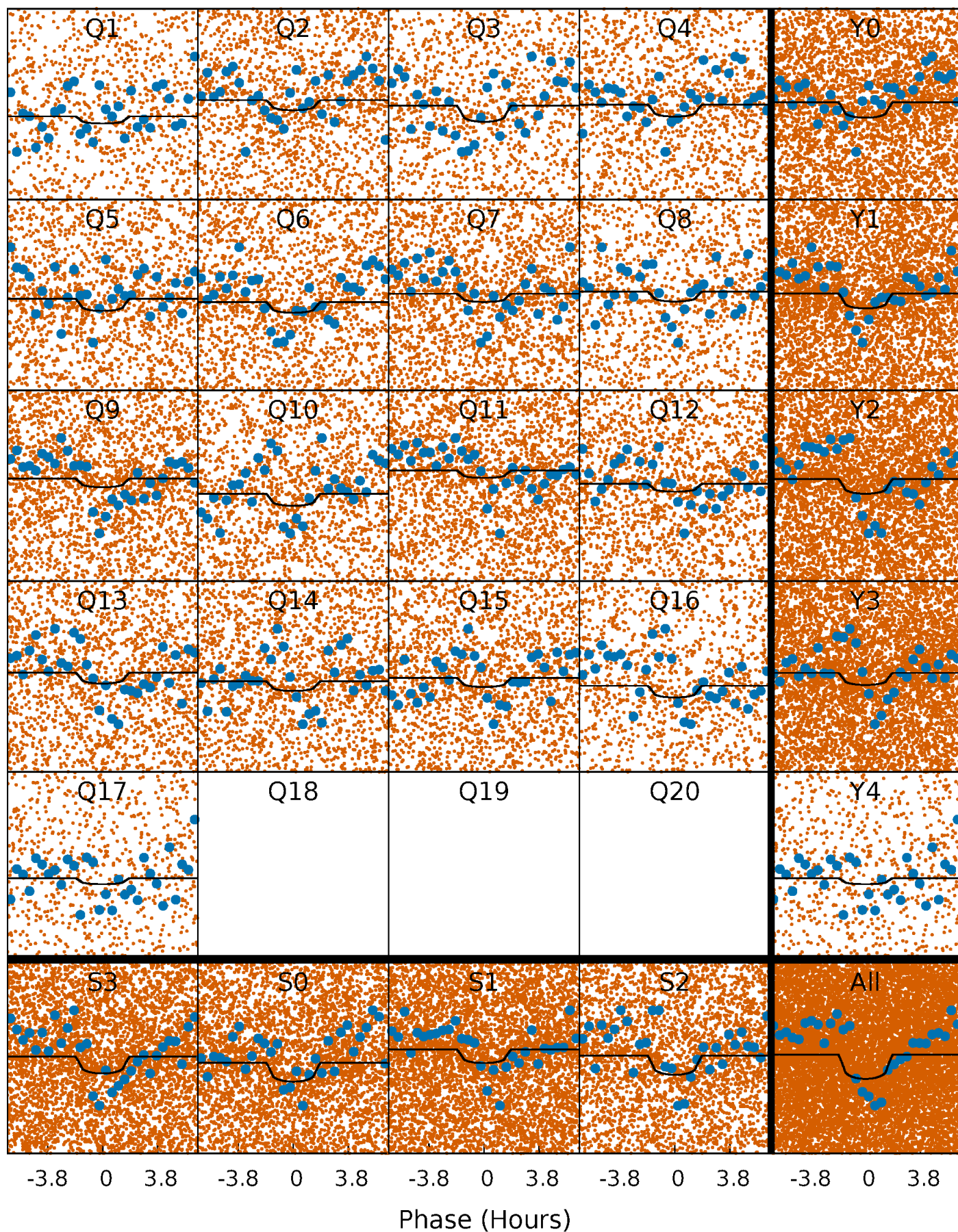
PDC Quarter-Phased Transit Curves

TCE 007362579-01 P= 0.566748 Days $T_0=131.863182$ (BKJD)



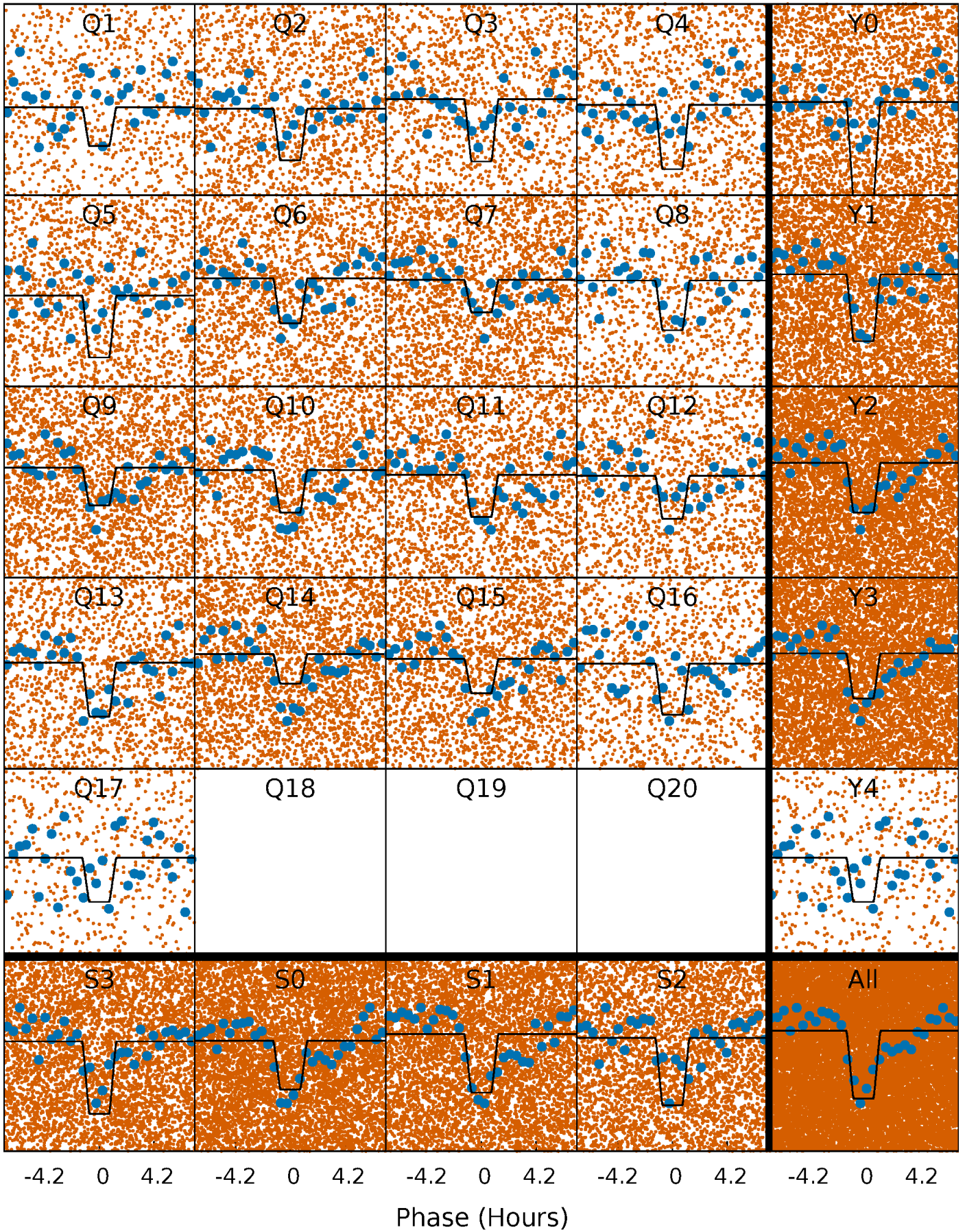
DV Quarter-Phased Transit Curves

TCE 007362579-01 P= 0.566748 Days $T_0=131.863182$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

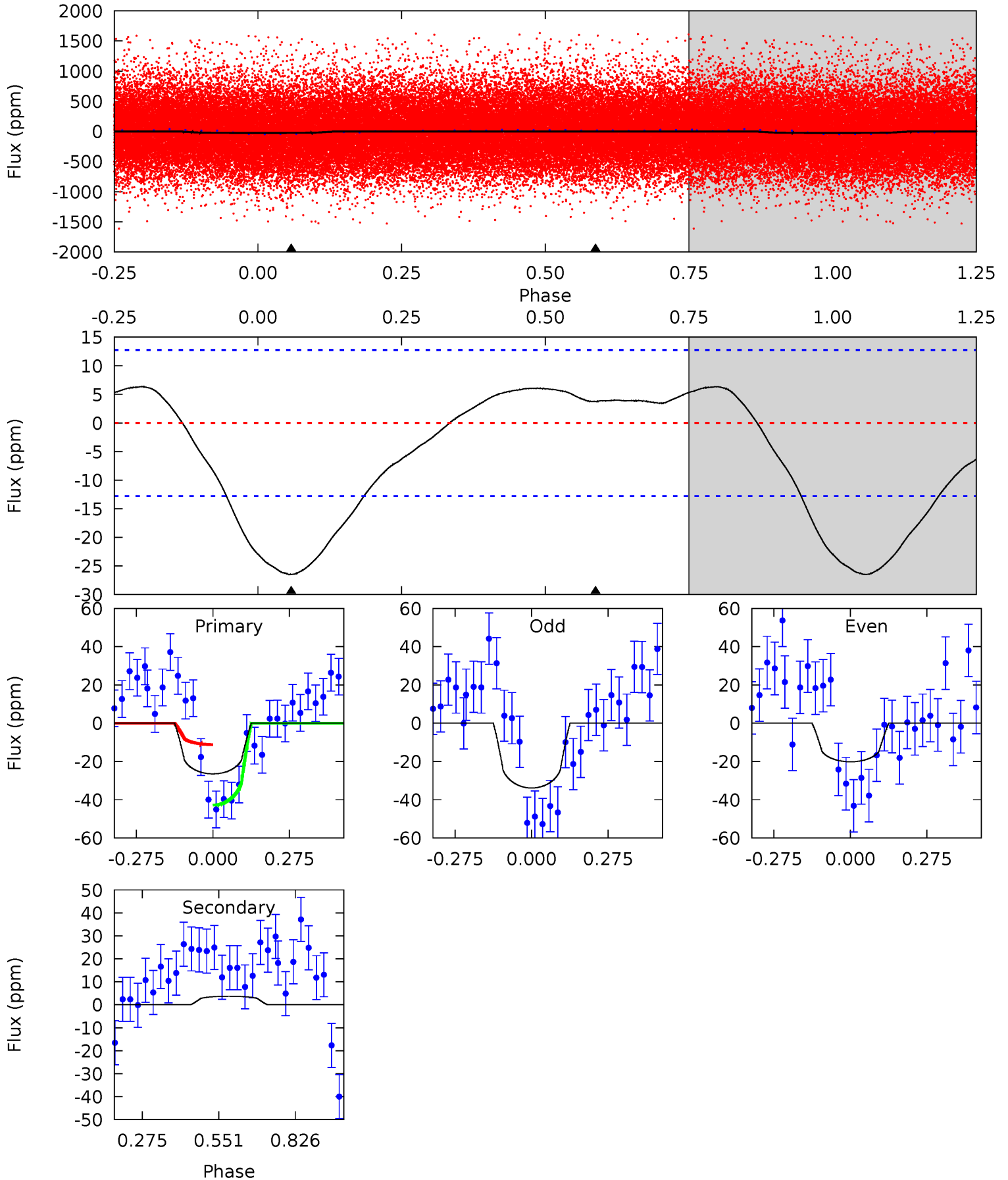
TCE 007362579-01 P= 0.566795 Days $T_0=131.813710$ (BKJD)



DV Model-Shift Uniqueness Test

007362579-01, $P = 0.566748$ Days, $E = 131.296434$ Days

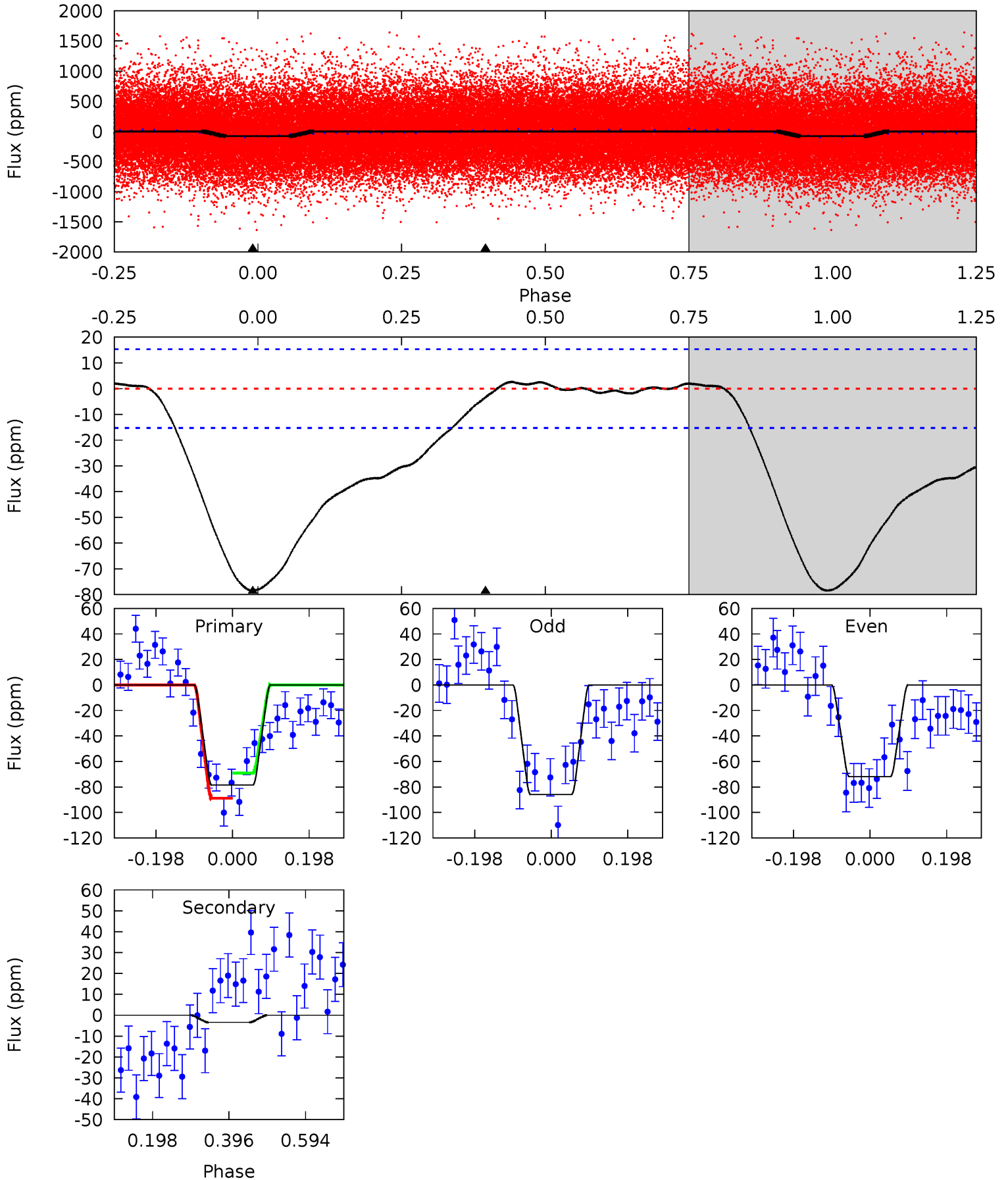
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.03	-1.27	0	0	4.35	1.09	1.05	9.03	9.03	-1.27	-1.27	2.32	1.13	0.19	0



Alt Model-Shift Uniqueness Test

007362579-01, P = 0.566795 Days, E = 131.246915 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.7	0.99	0	0	4.42	1.29	2.10	22.7	22.7	0.99	0.99	2.02	1.02	0.03	2.85



Stellar Parameters For KIC 007362579

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6065^{+169}_{-211}	$4.495^{+0.052}_{-0.208}$	$-0.180^{+0.250}_{-0.300}$	$0.947^{+0.291}_{-0.097}$	$1.022^{+0.126}_{-0.140}$	$1.695^{+0.380}_{-0.910}$
	+3%/-3%	+1%/-5%	+139%/-167%	+31%/-10%	+12%/-14%	+22%/-54%
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 007362579-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	4 ± 3	$0.87^{+0.81}_{-0.60}$	3188^{+236}_{-150}	-3673^{+394}_{-1606}	$-0.364^{+0.321}_{-4.220}$
Alt.	-3 ± 3	$1.19^{+0.94}_{-0.70}$	3188^{+252}_{-140}	-2827^{+6862}_{-428}	$0.176^{+1.287}_{-0.172}$

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 $A_{obs} \gg 1.0$

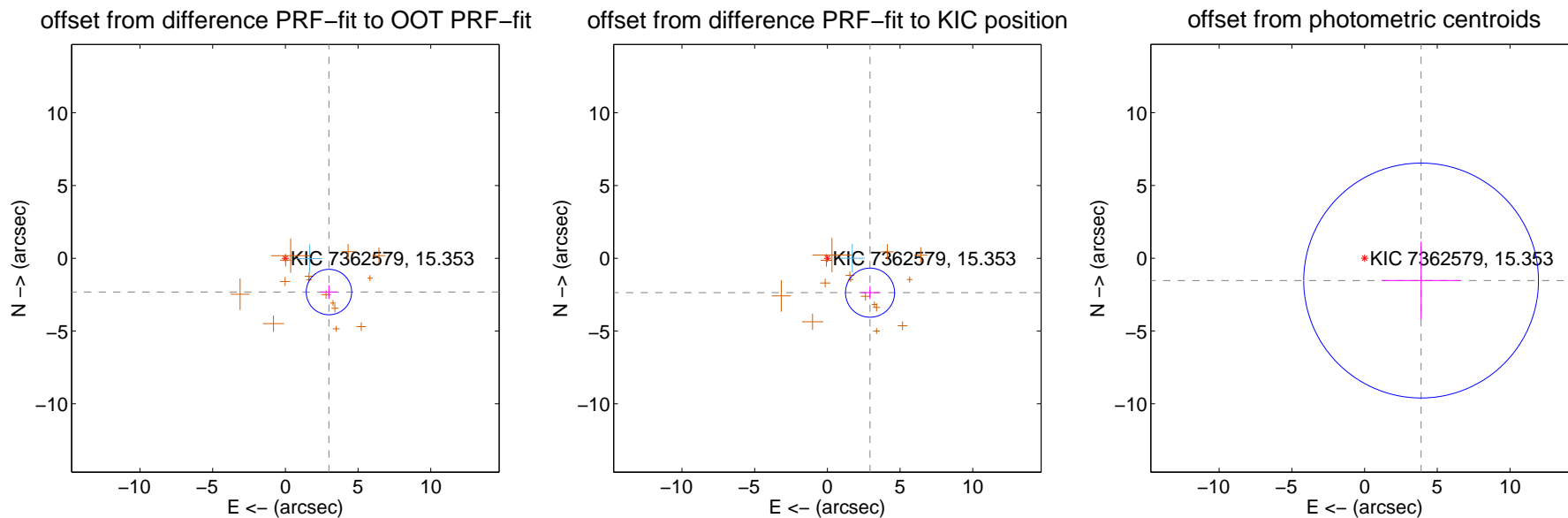
DV Centroid Data

Supplemental centroid analysis for 007362579-01. Kepler magnitude: 15.35. Transit SNR 5.39

There are 1 quarters with good PRF difference image offsets

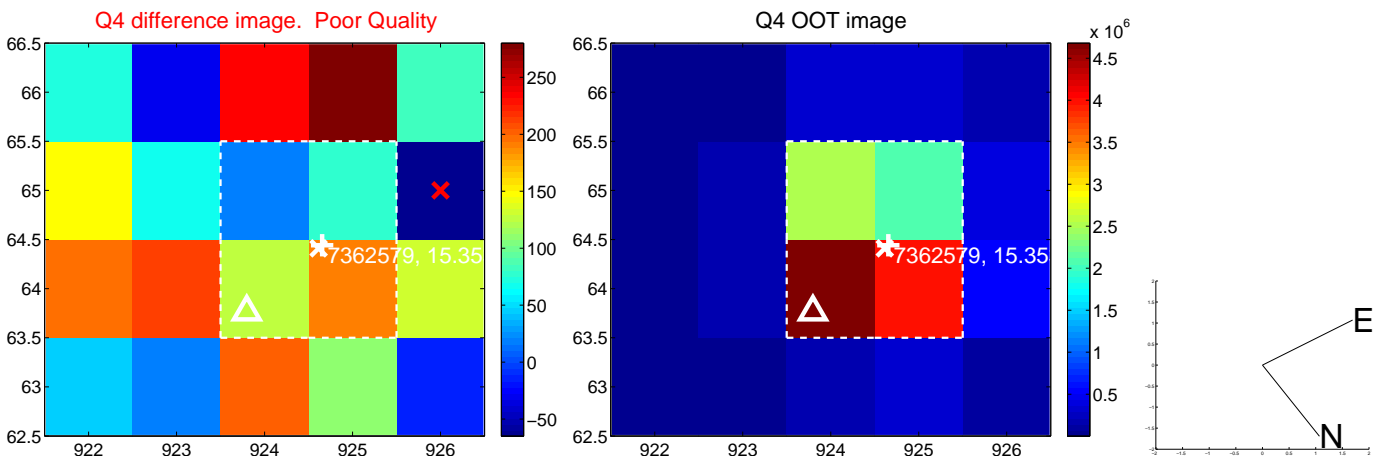
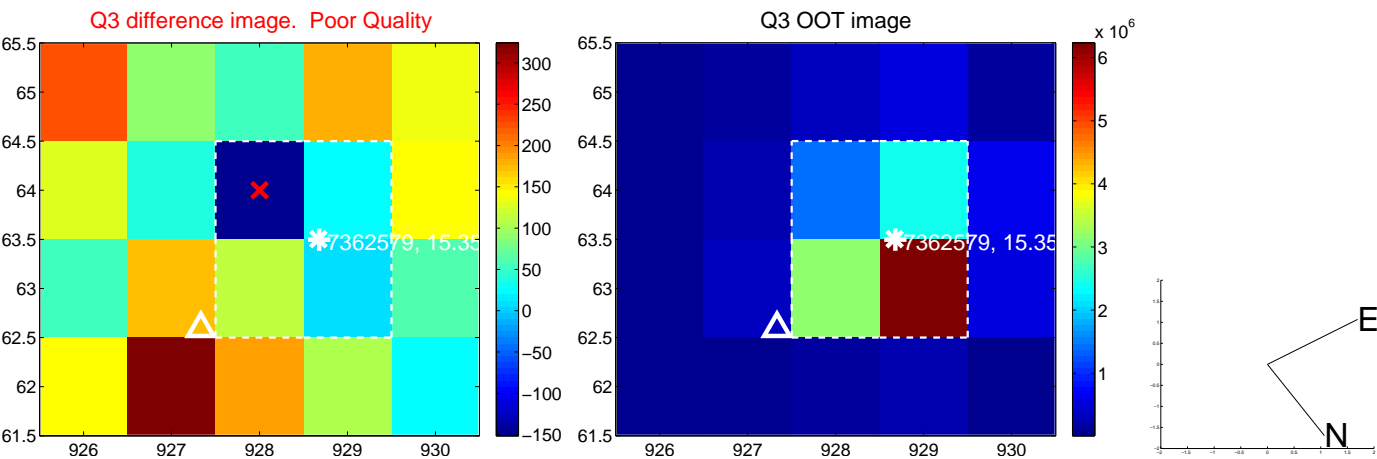
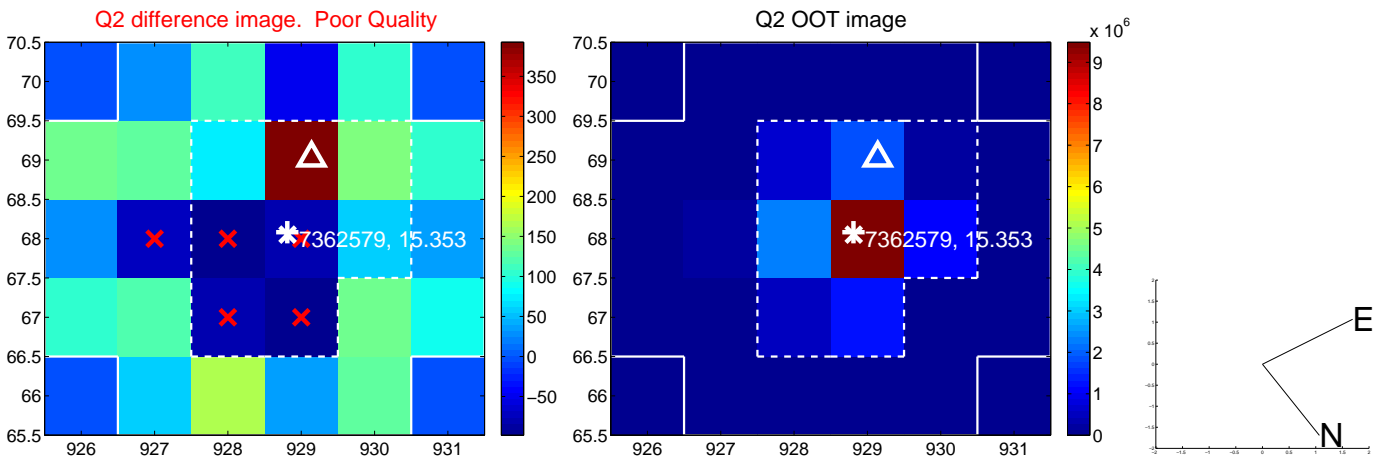
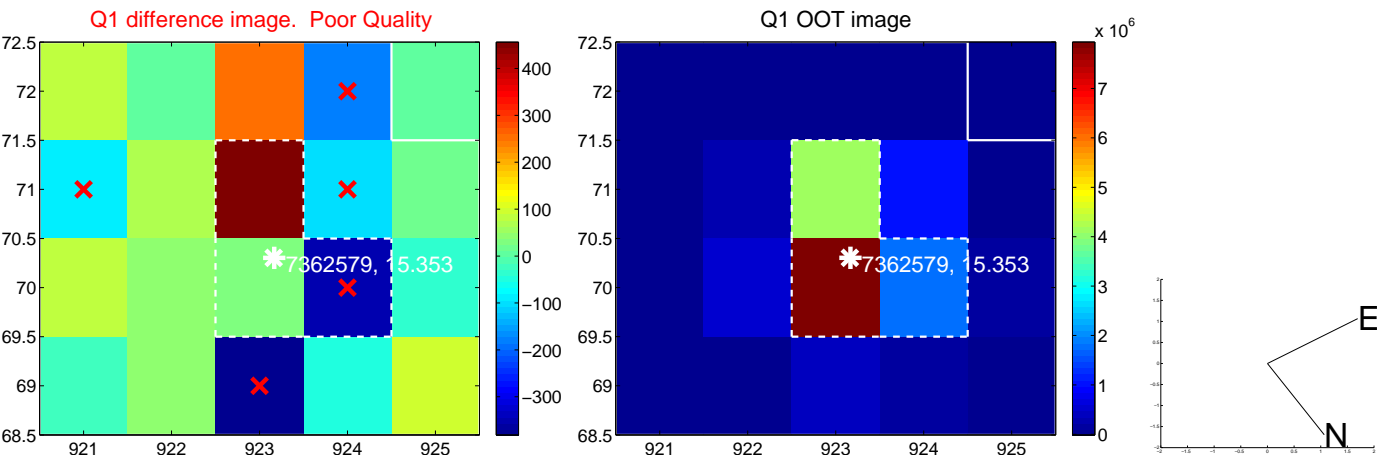
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.790 ± 0.520	7.28	-2.997 ± 0.576	-2.321 ± 0.462
PRF-fit source offset from KIC position	3.769 ± 0.562	6.70	-2.935 ± 0.632	-2.364 ± 0.453
photometric centroid source offset	4.18 ± 2.69	1.55	-3.89 ± 2.69	-1.53 ± 2.67

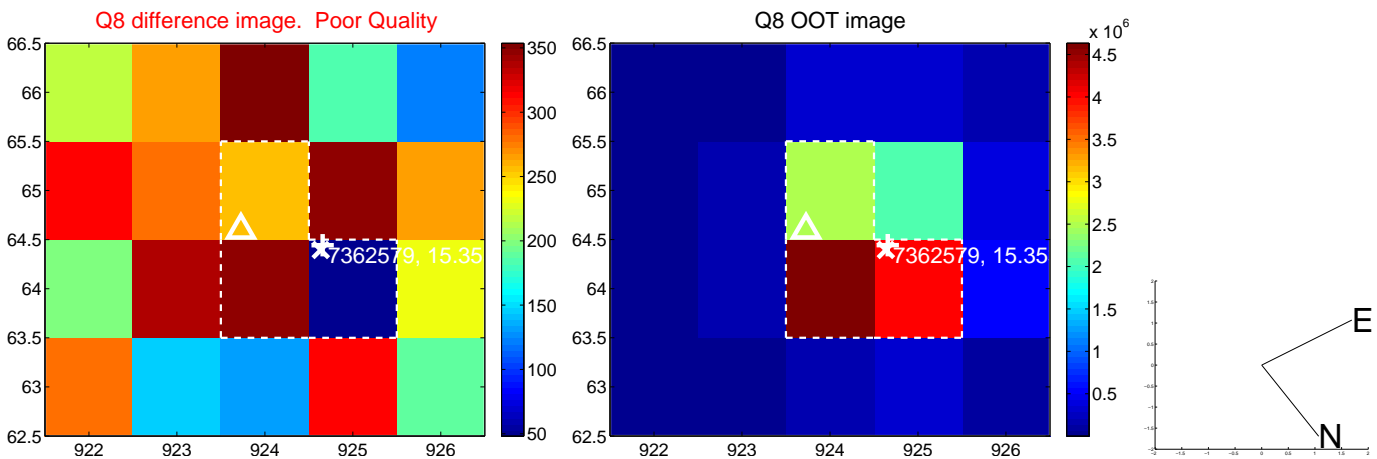
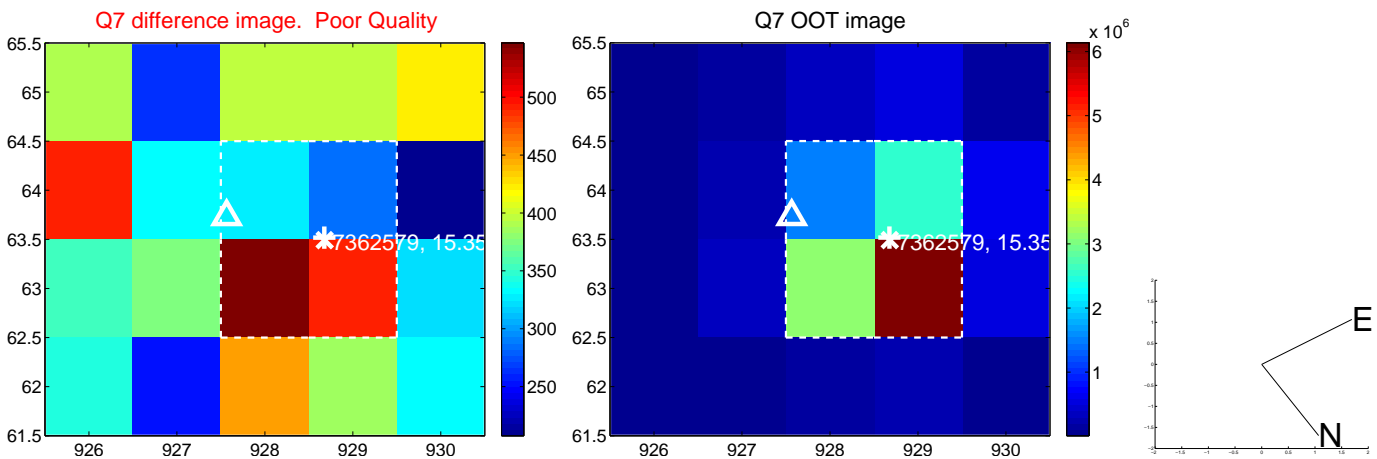
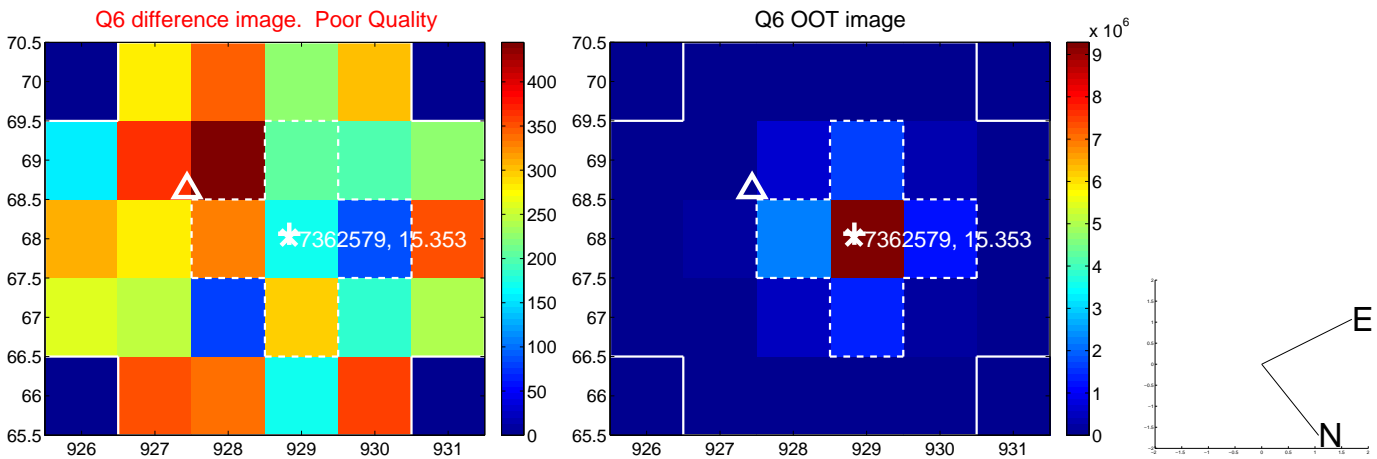
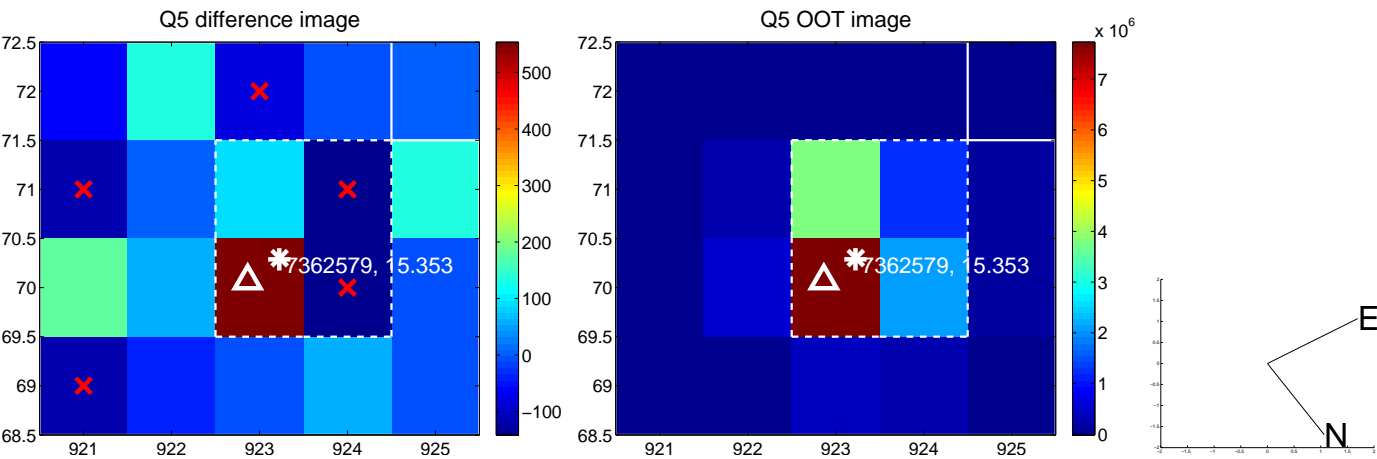


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

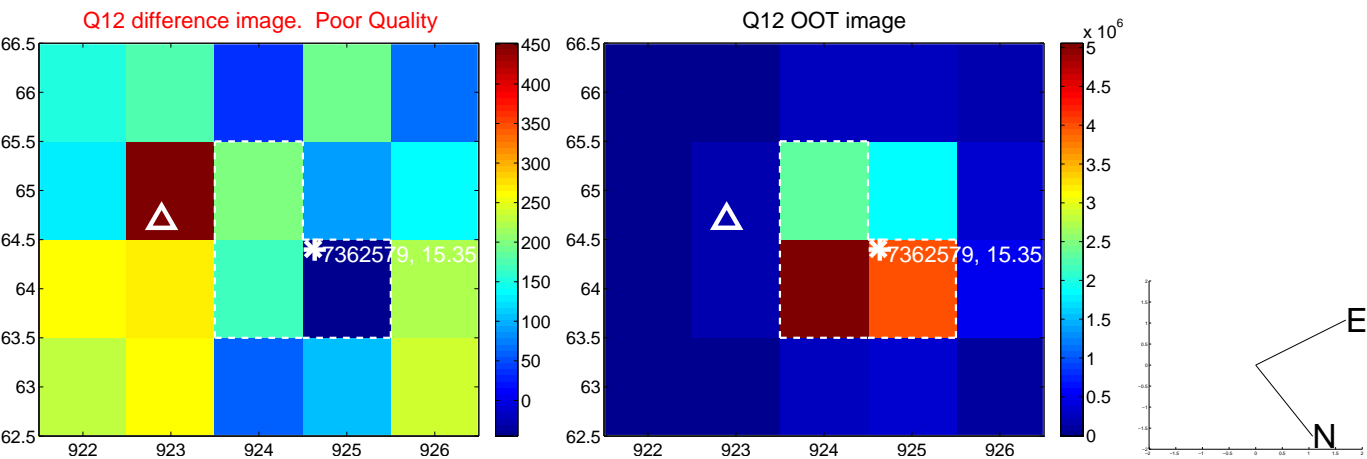
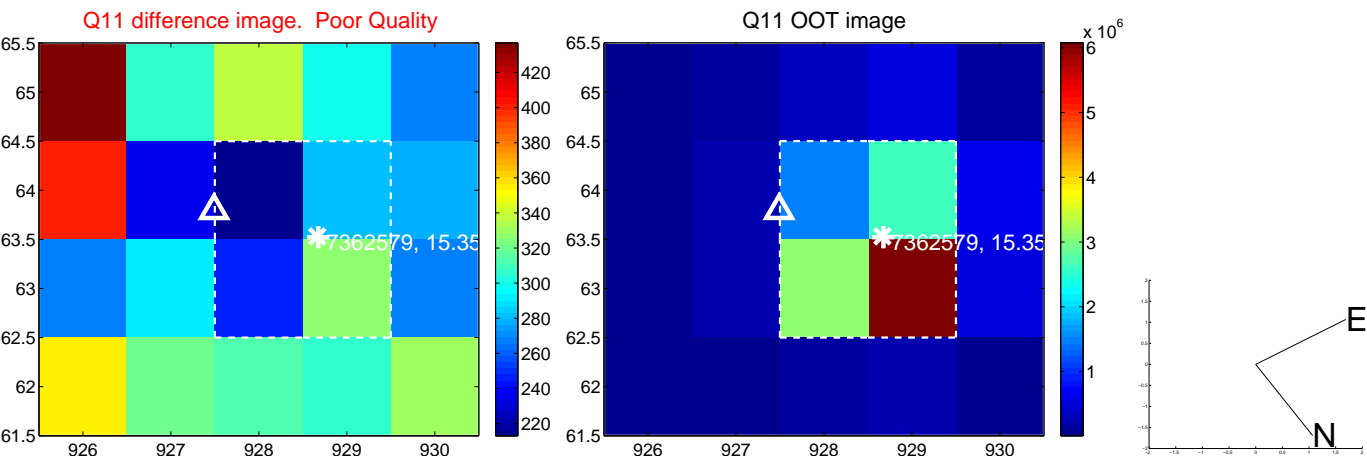
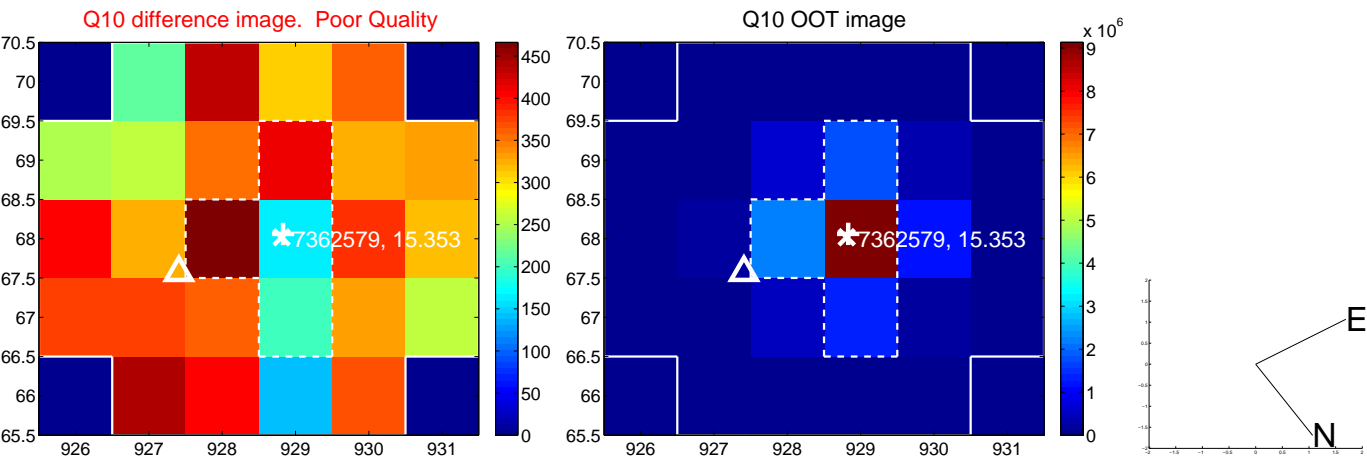
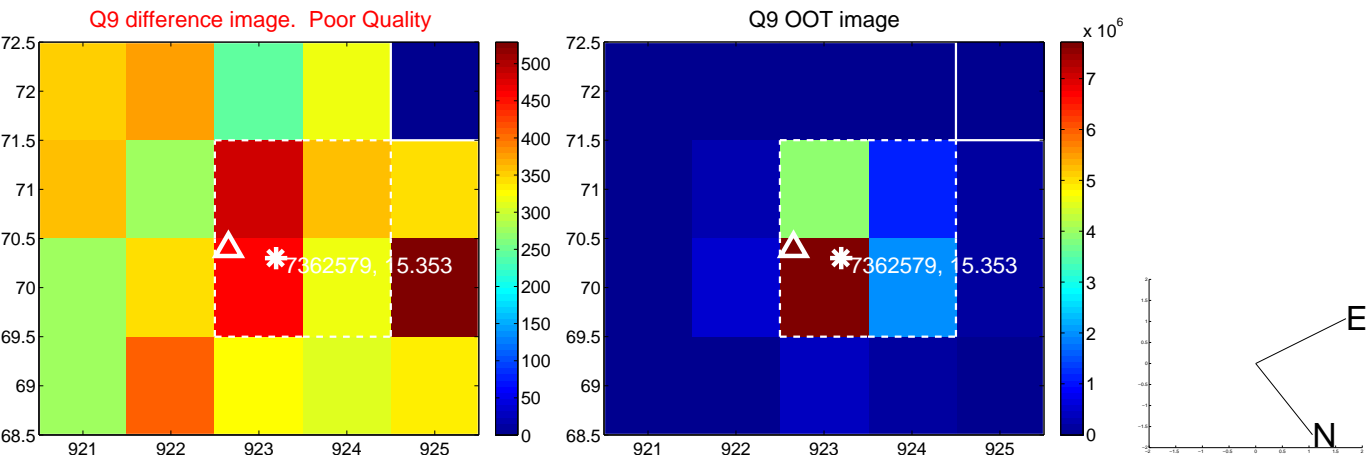
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



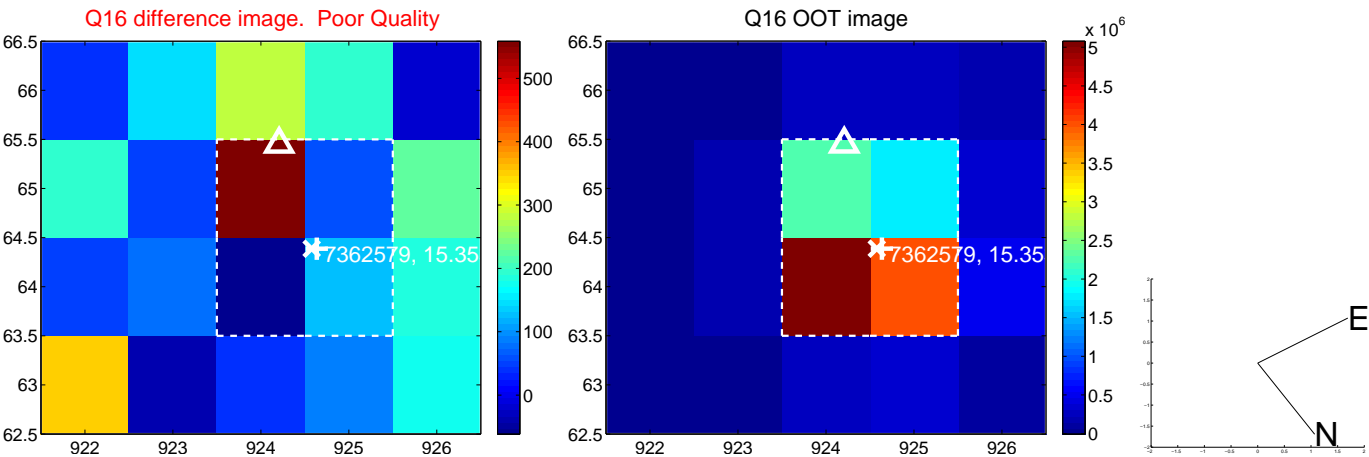
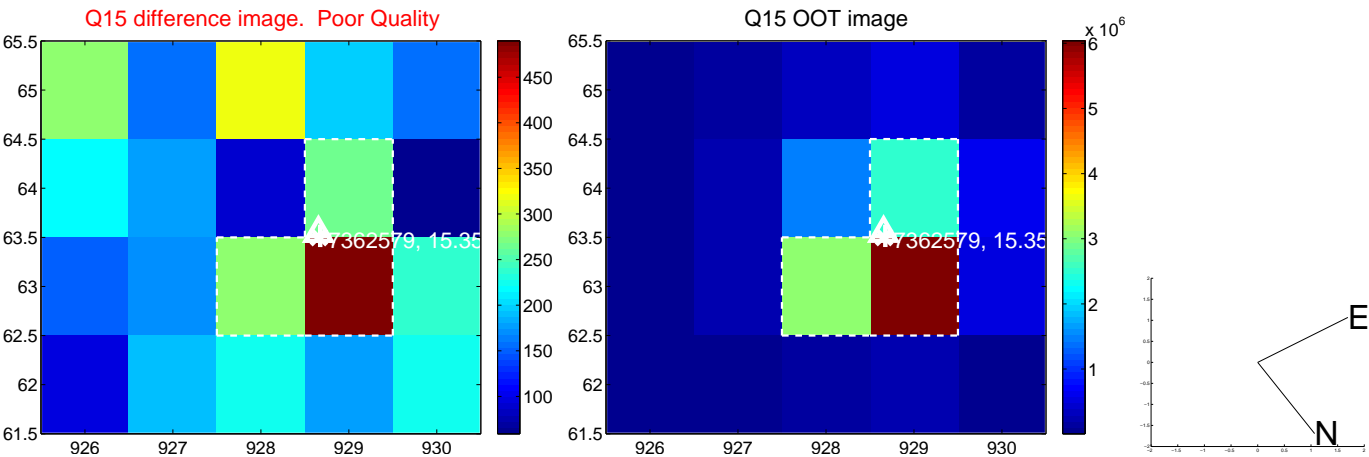
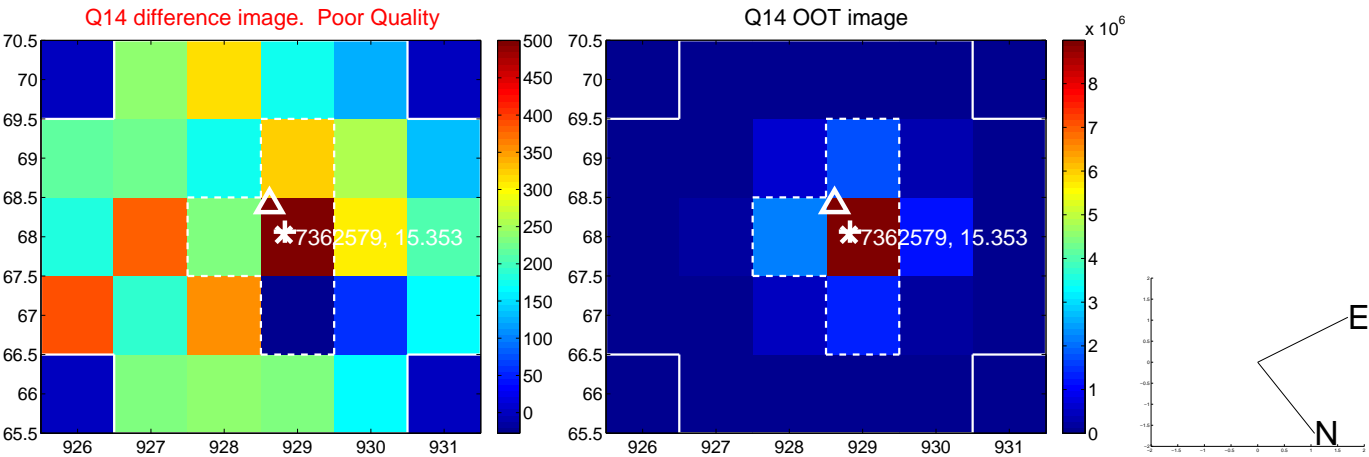
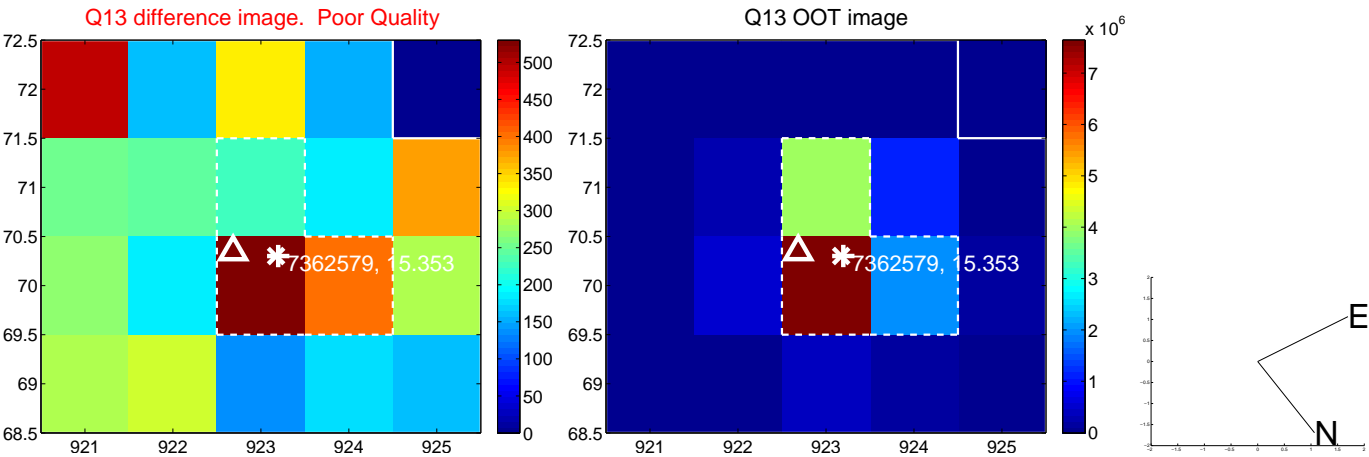
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



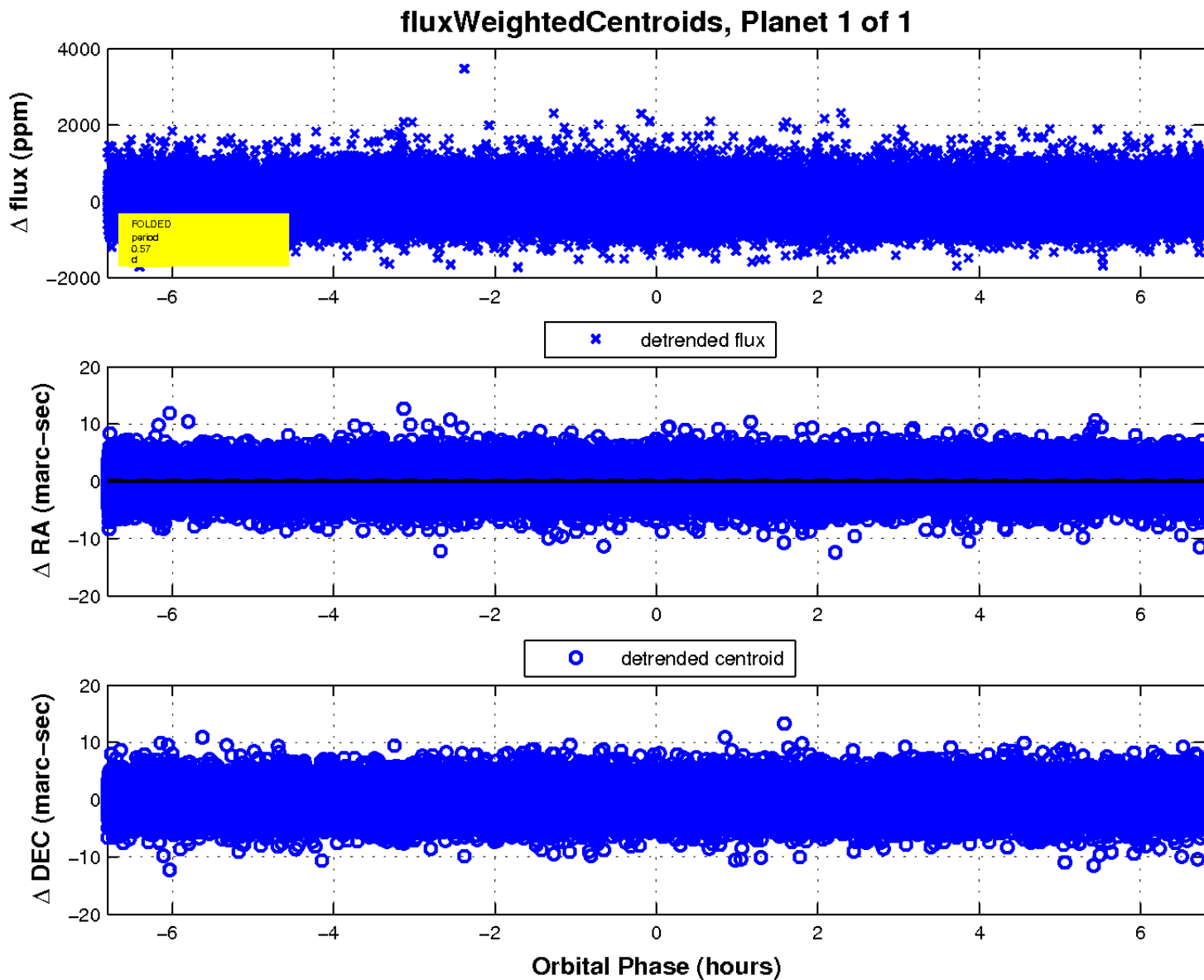
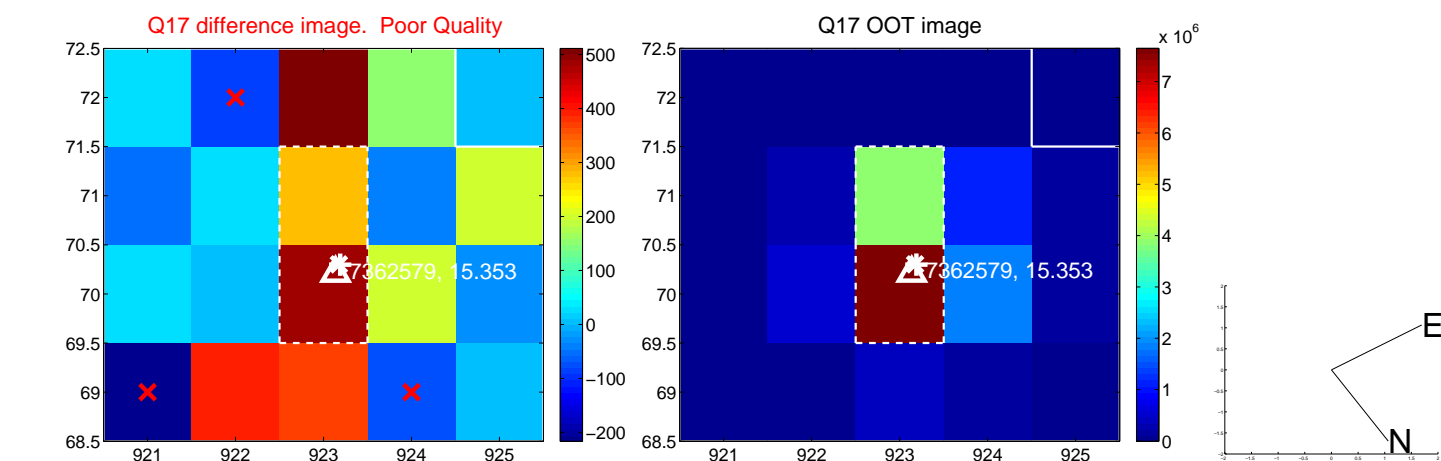
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UKIRT Image

Declination

