

KIC 007362501

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})
007362501-01	OBS	No	0.566810	131.816068	46.2	4.450	10.4	12.7	0.97	6061	0.66	6123.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007362501-01	OBS	FP	0.00	1	0	0	1	LPP_DV—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.

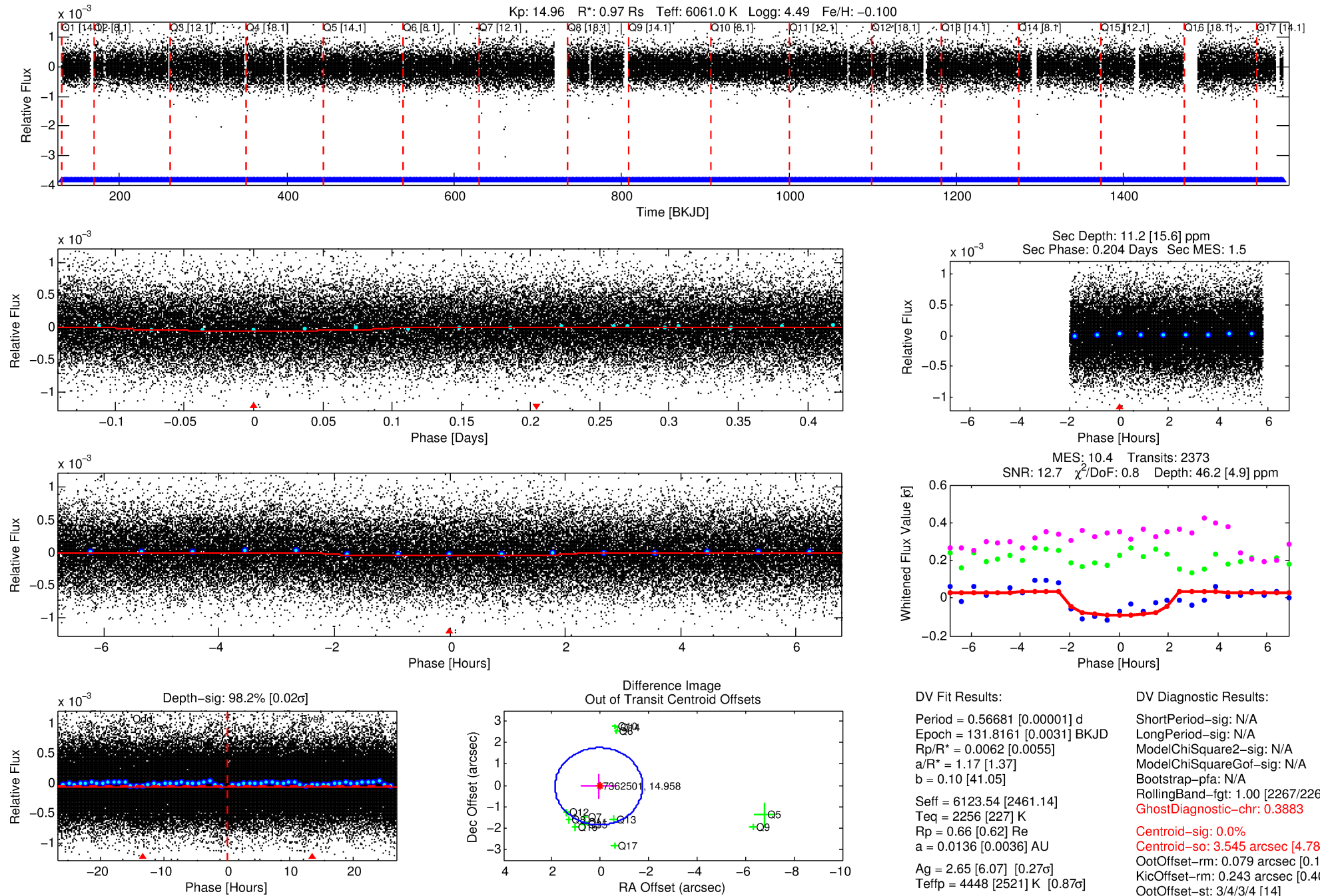
Ephemeris Match Information For 007362501-01

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
007362501-01	7362501	RR-Lyr-pri	7198959	1:1	1060.1	-11	266	7.86	14.96	13550.00	Direct-PRF	0	3.63	24.71

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

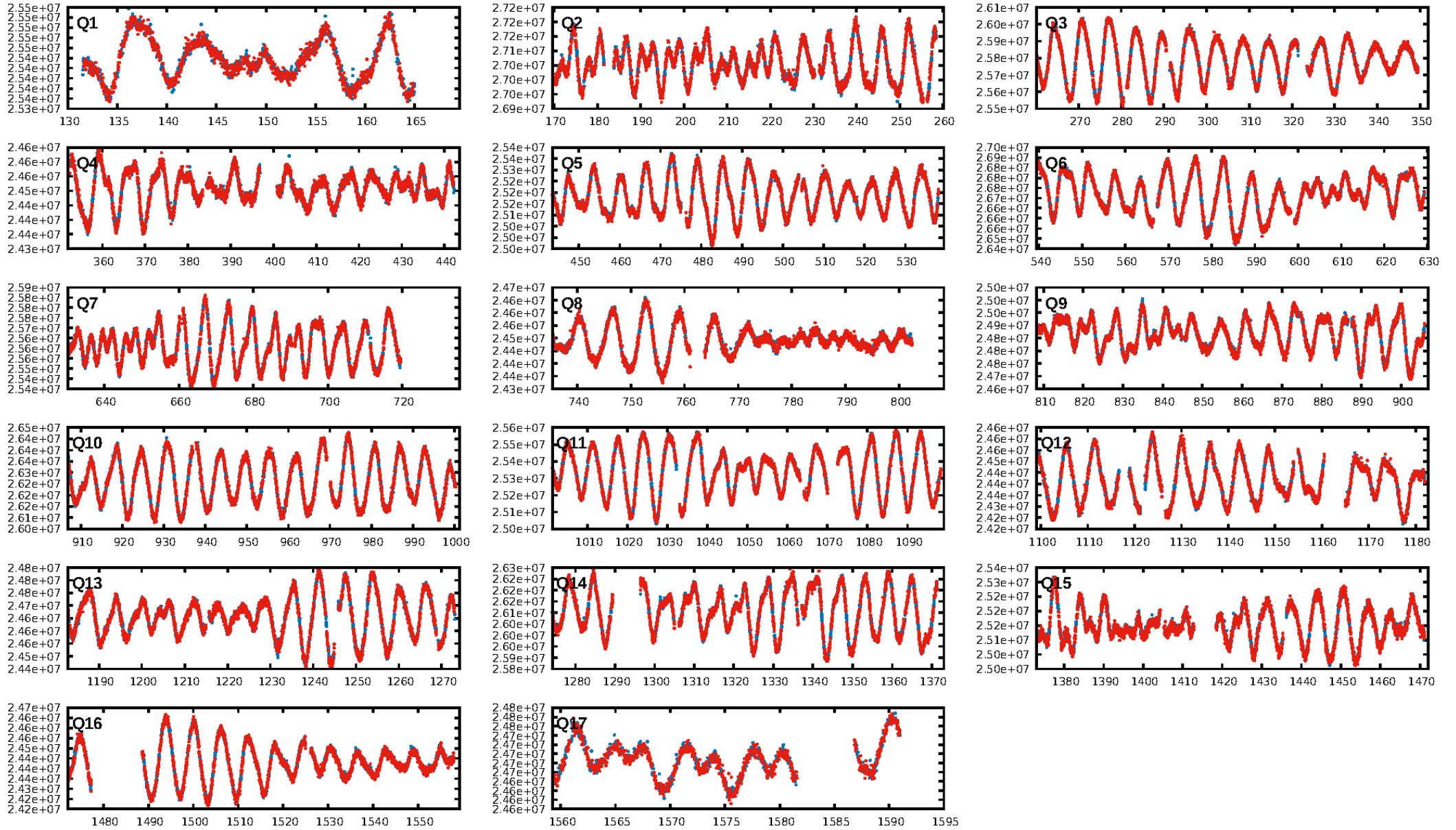
KIC: 7362501 Candidate: 1 of 1 Period: 0.567 d



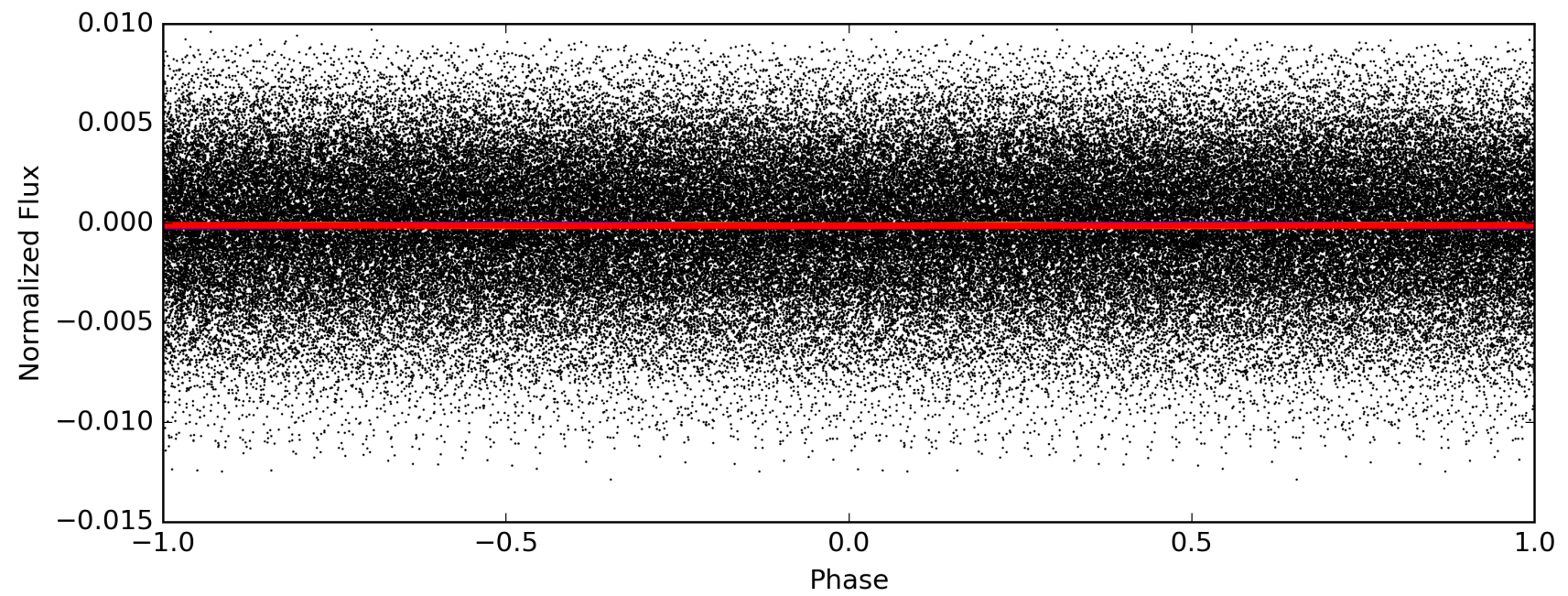
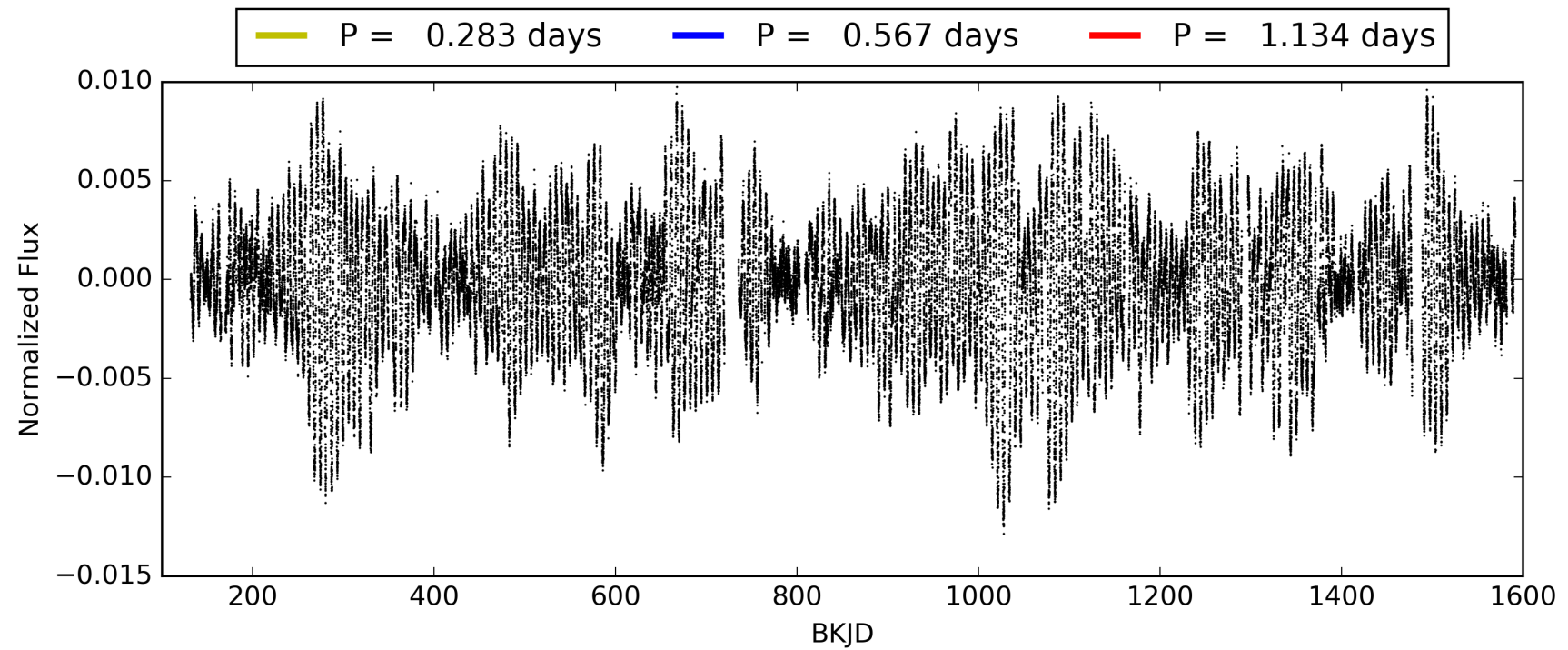
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 08:42:28 Z

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

TCE 007362501-01, PDC Light Curves

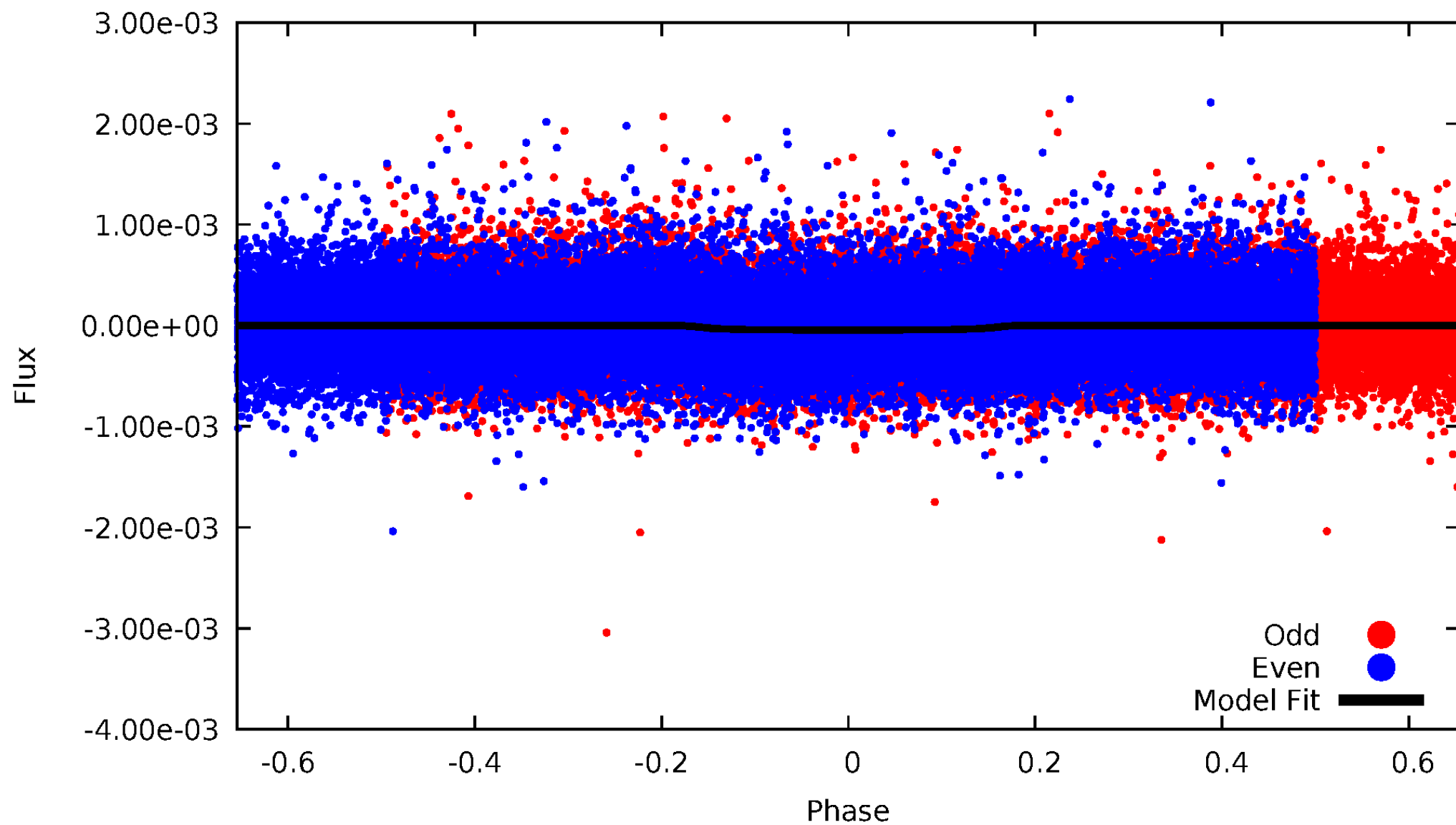


TCE 007362501-01



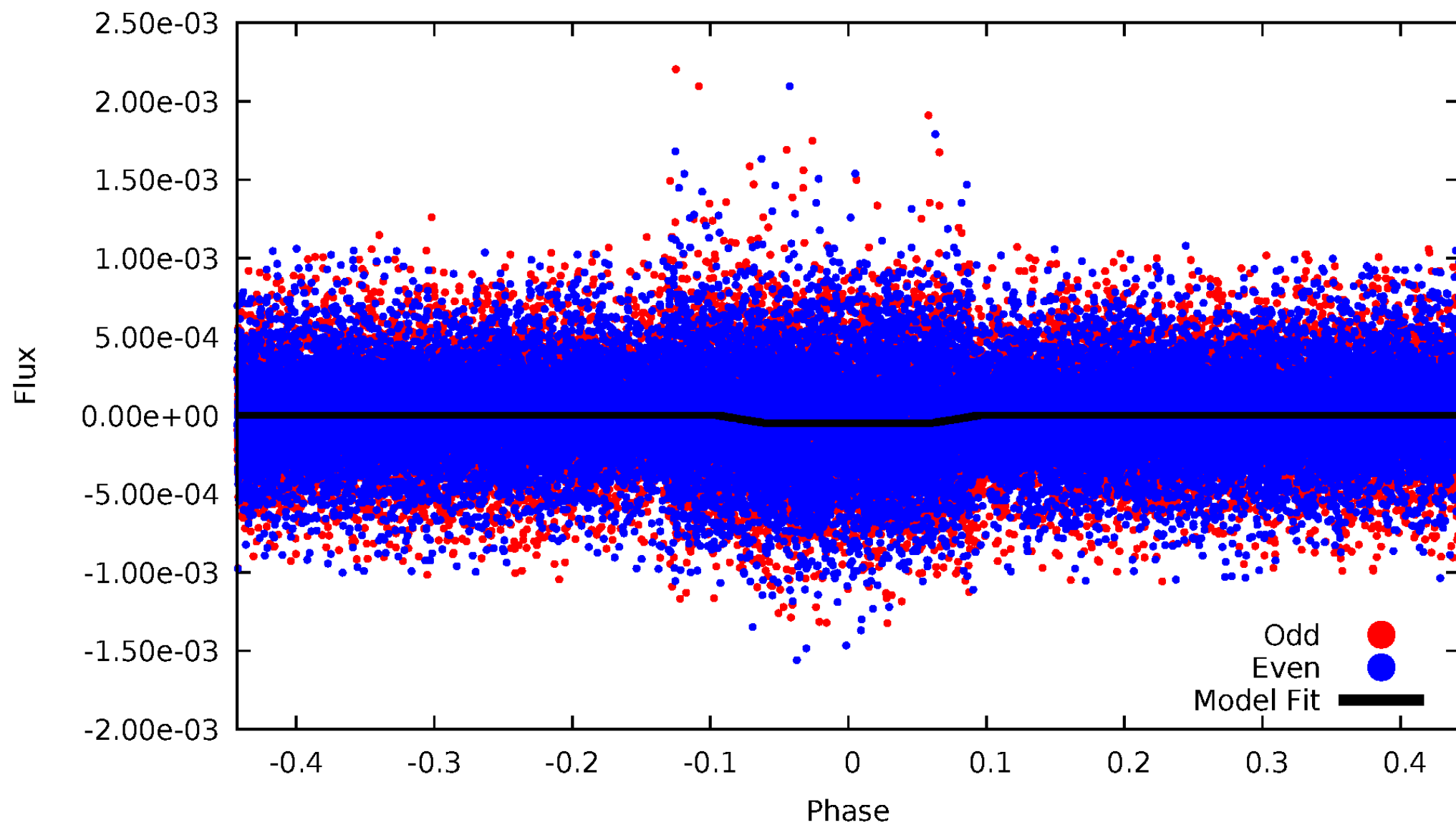
DV Odd/Even

TCE 007362501-01

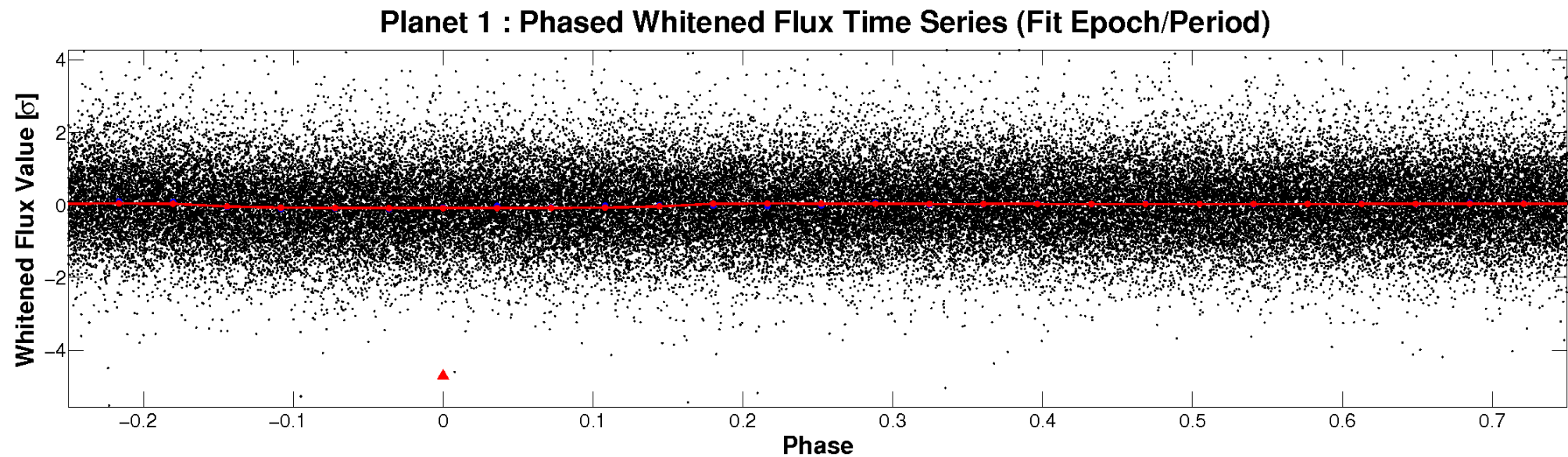
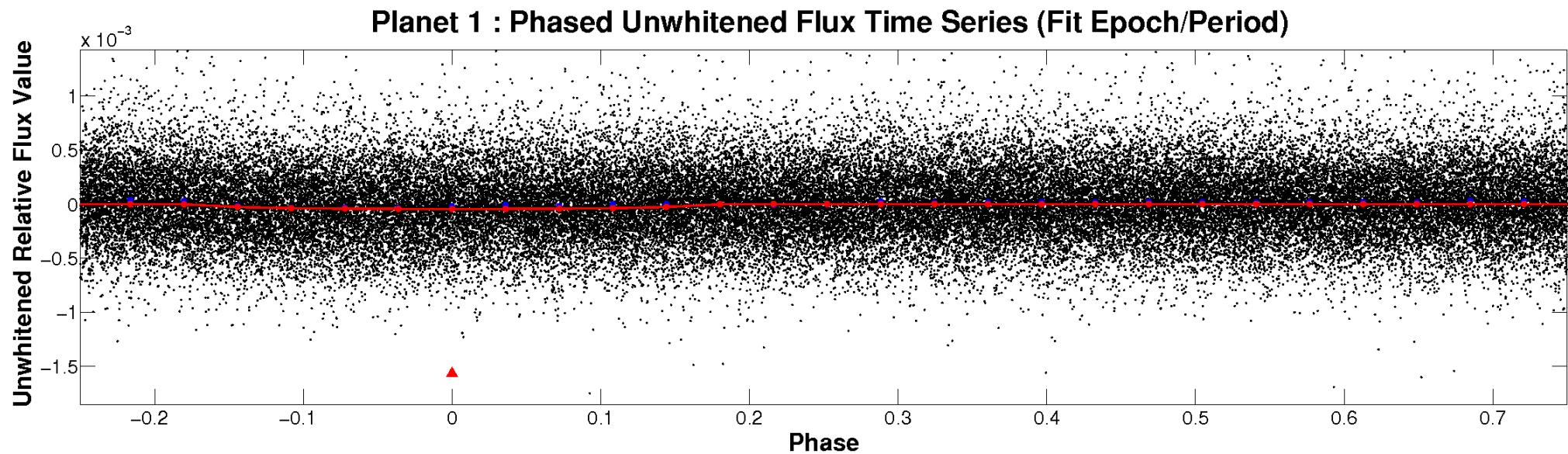


ALT Odd/Even

TCE 007362501-01

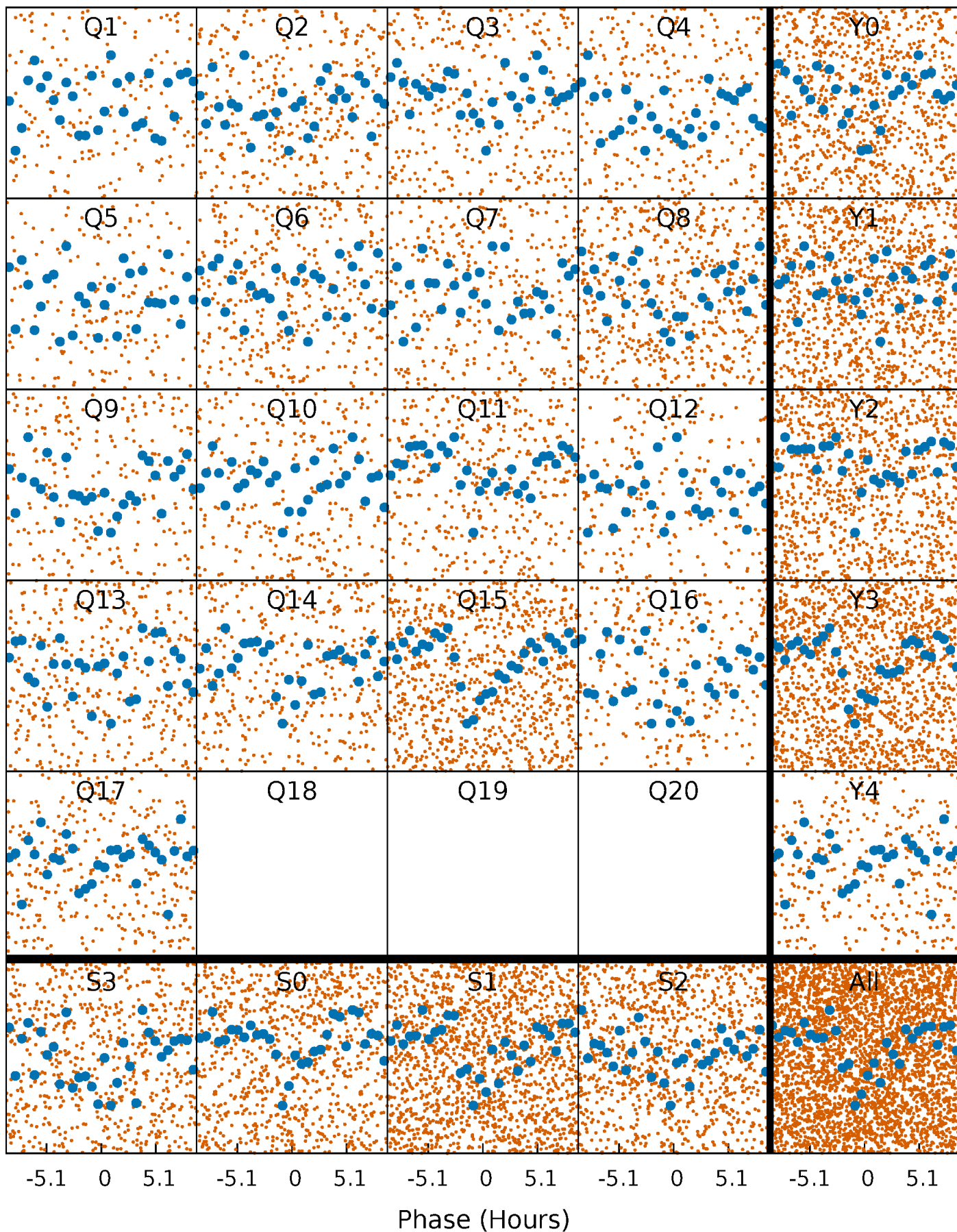


Non-Whitened Vs. Whitened Light Curve



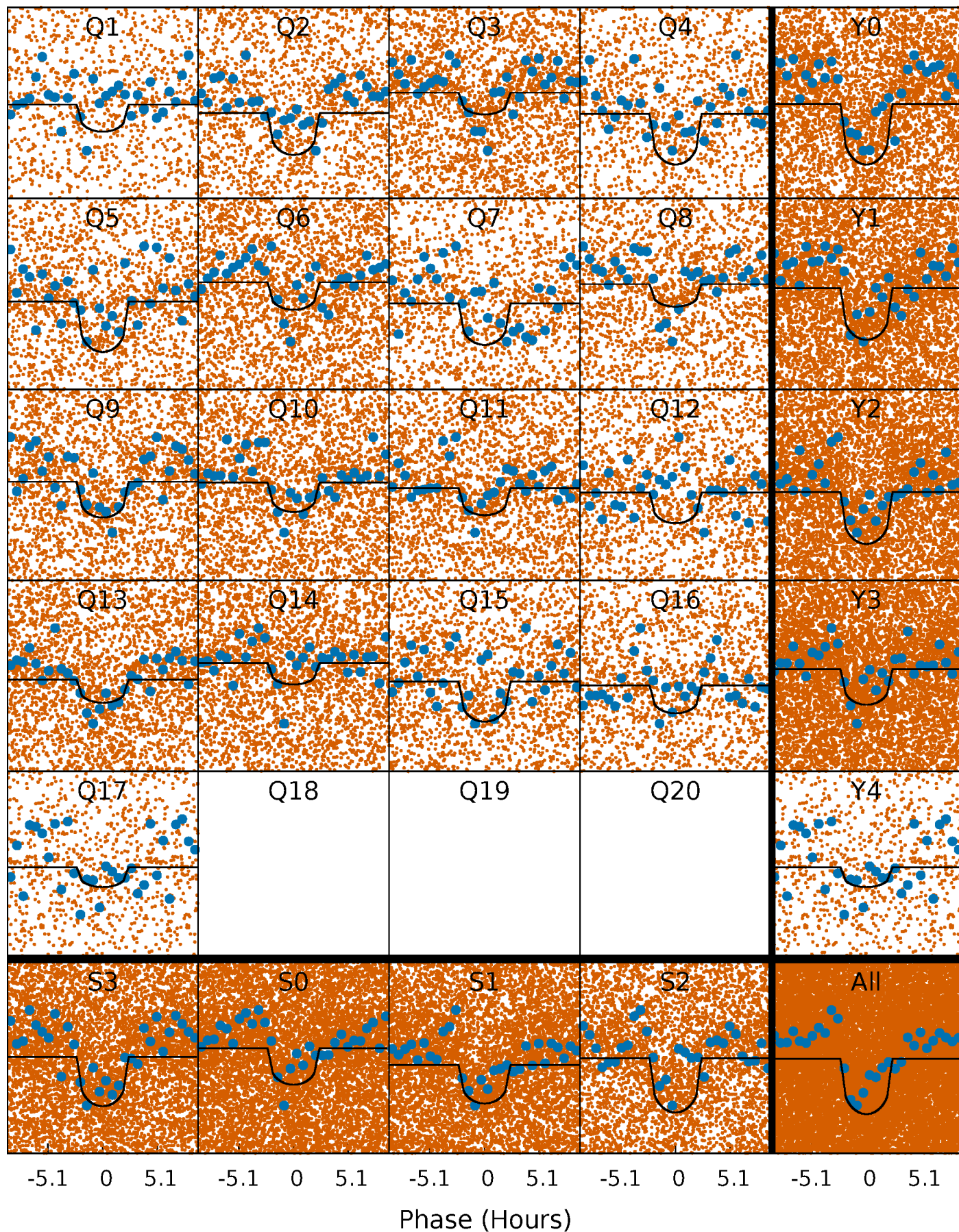
PDC Quarter-Phased Transit Curves

TCE 007362501-01 P= 0.566810 Days $T_0=131.816068$ (BKJD)



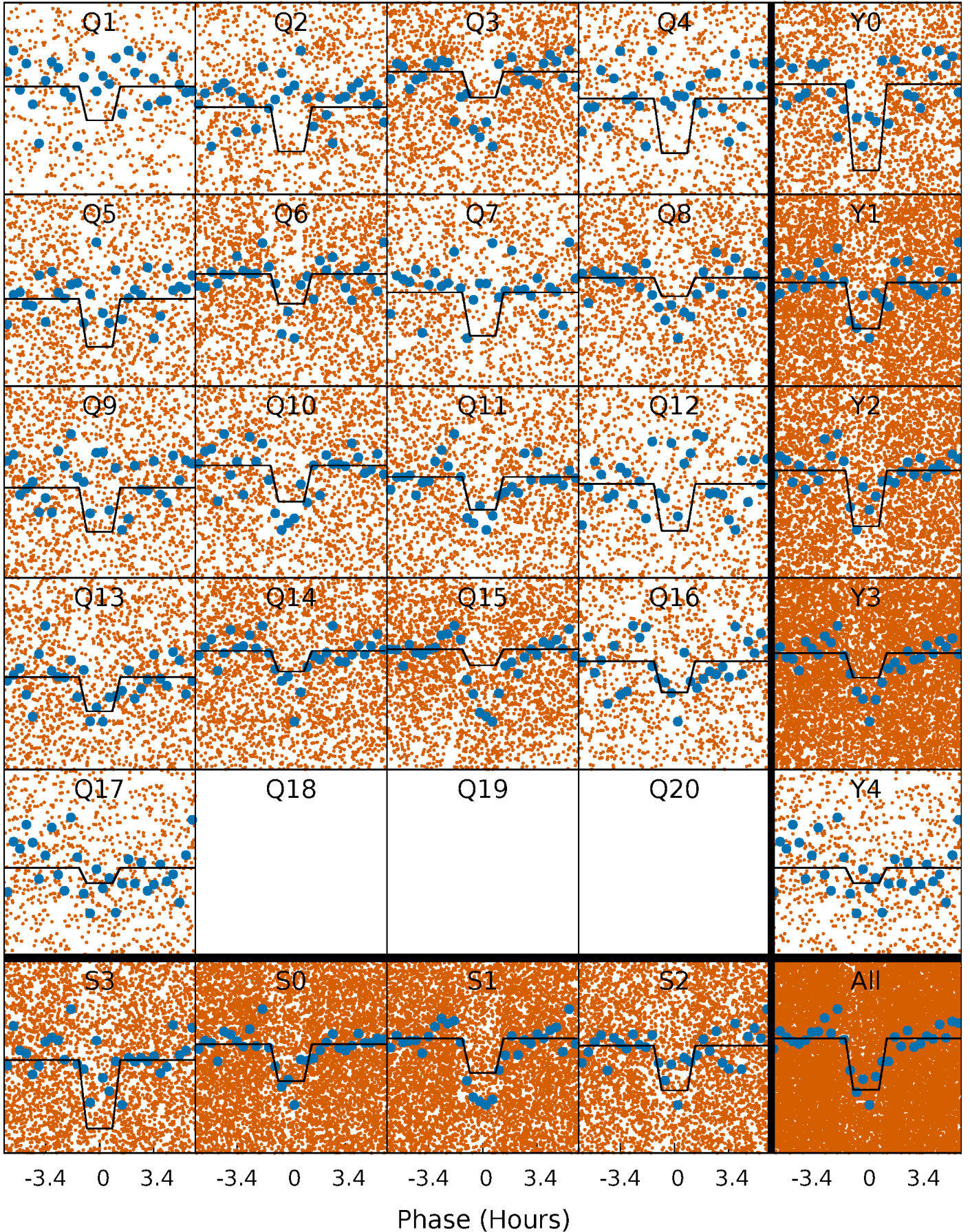
DV Quarter-Phased Transit Curves

TCE 007362501-01 P= 0.566810 Days $T_0=131.816068$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

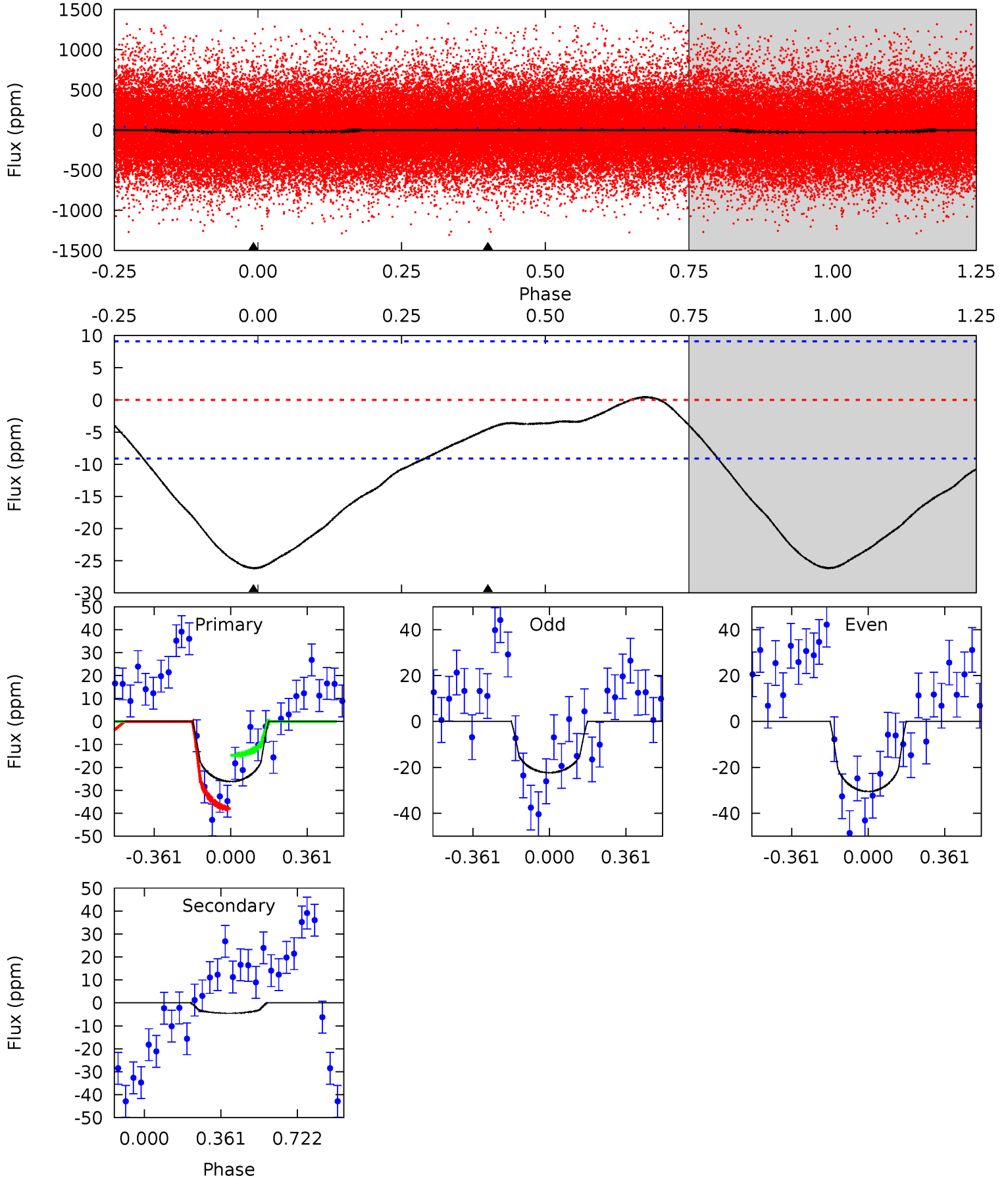
TCE 007362501-01 P= 0.566788 Days $T_0=131.810012$ (BKJD)



DV Model-Shift Uniqueness Test

007362501-01, P = 0.566810 Days, E = 131.249258 Days

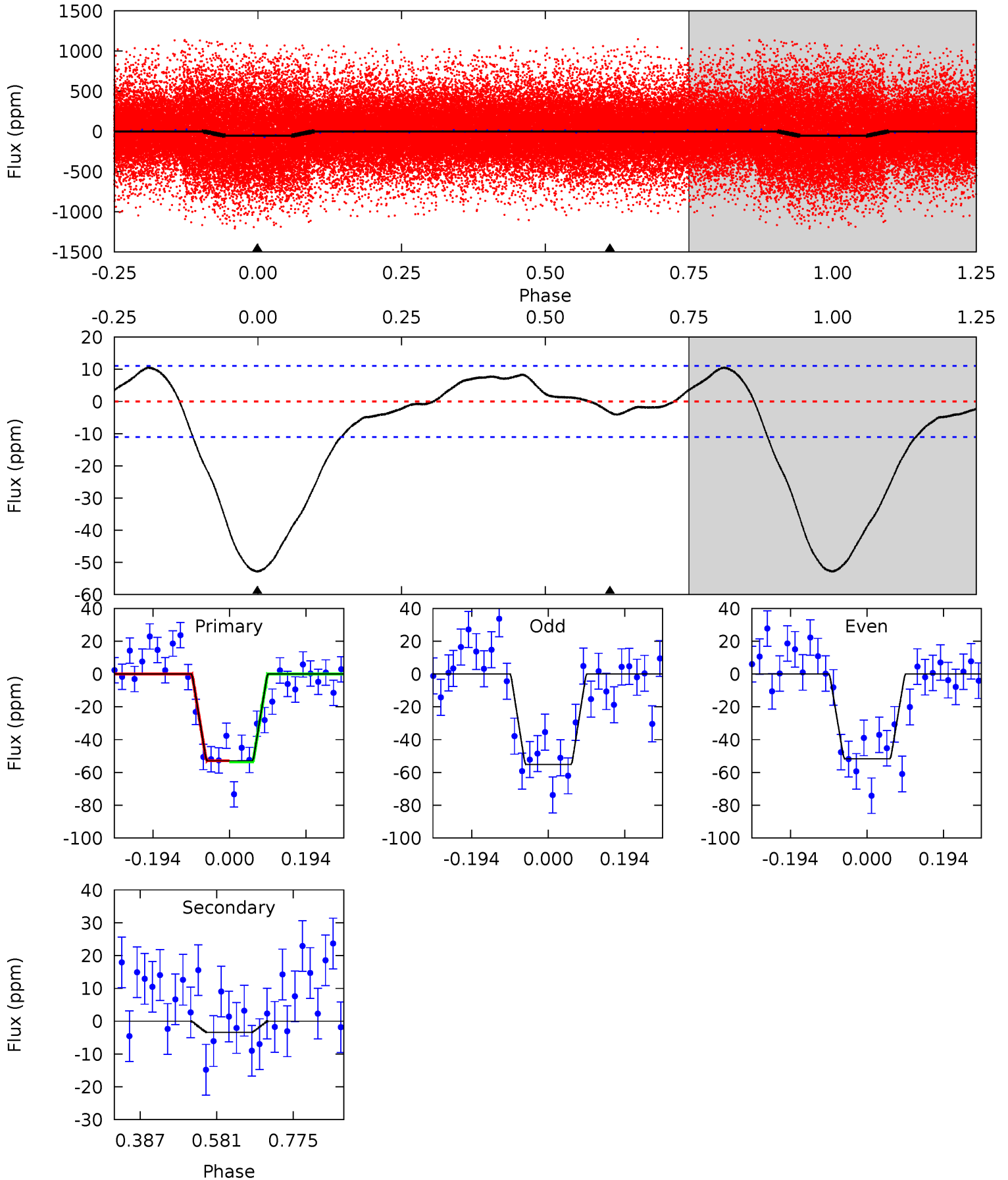
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.3	2.13	0	0	4.29	0.91	0.57	12.3	12.3	2.13	2.13	1.92	0.96	0.02	5.43



Alt Model-Shift Uniqueness Test

007362501-01, P = 0.566788 Days, E = 131.243224 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.1	1.35	0	0	4.42	1.30	1.76	21.1	21.1	1.35	1.35	0.69	1.04	0.17	0.13



Stellar Parameters For KIC 007362501

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6061^{+180}_{-198}	$4.486^{+0.052}_{-0.208}$	$-0.100^{+0.250}_{-0.350}$	$0.970^{+0.300}_{-0.100}$	$1.050^{+0.139}_{-0.139}$	$1.620^{+0.361}_{-0.863}$
	+3%/-3%	+1%/-5%	+250%/-350%	+31%/-10%	+13%/-13%	+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 007362501-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-5 ± 2	$0.76^{+0.62}_{-0.44}$	3212^{+240}_{-155}	3375^{+1772}_{-6251}	$0.704^{+3.878}_{-0.532}$
Alt.	-3 ± 2	$0.86^{+0.58}_{-0.54}$	3213^{+214}_{-142}	2676^{+1961}_{-5823}	$0.378^{+2.253}_{-0.316}$

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

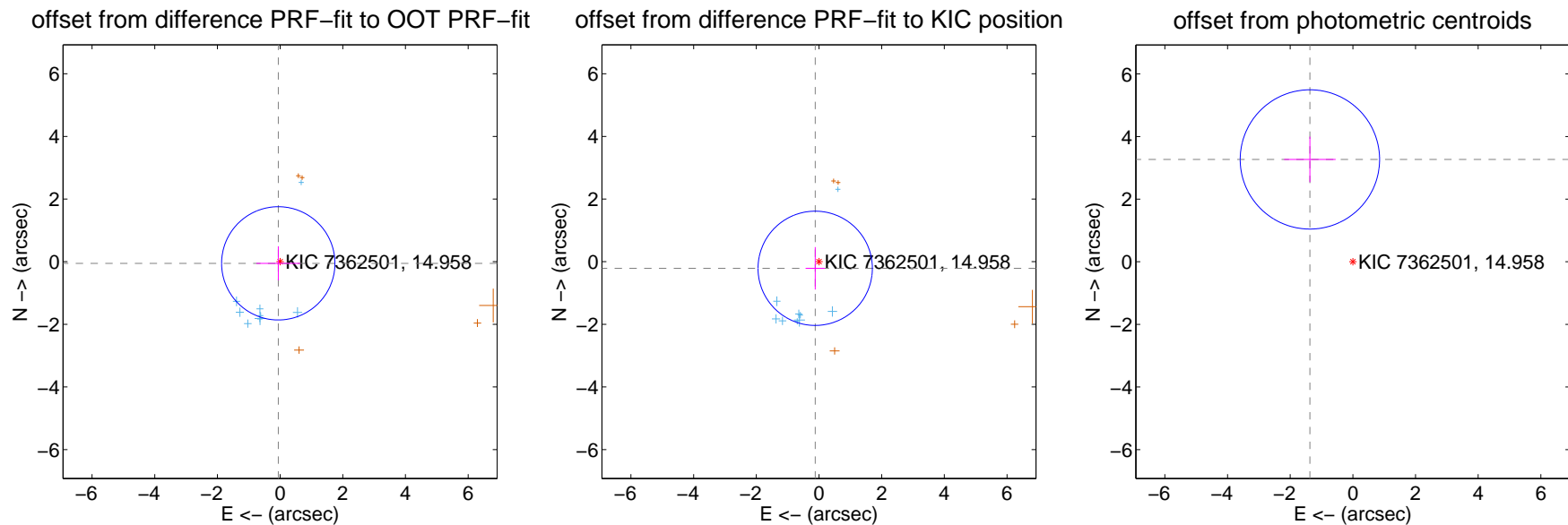
DV Centroid Data

Supplemental centroid analysis for 007362501-01. Kepler magnitude: 14.96. Transit SNR 12.66

There are 9 quarters with good PRF difference image offsets

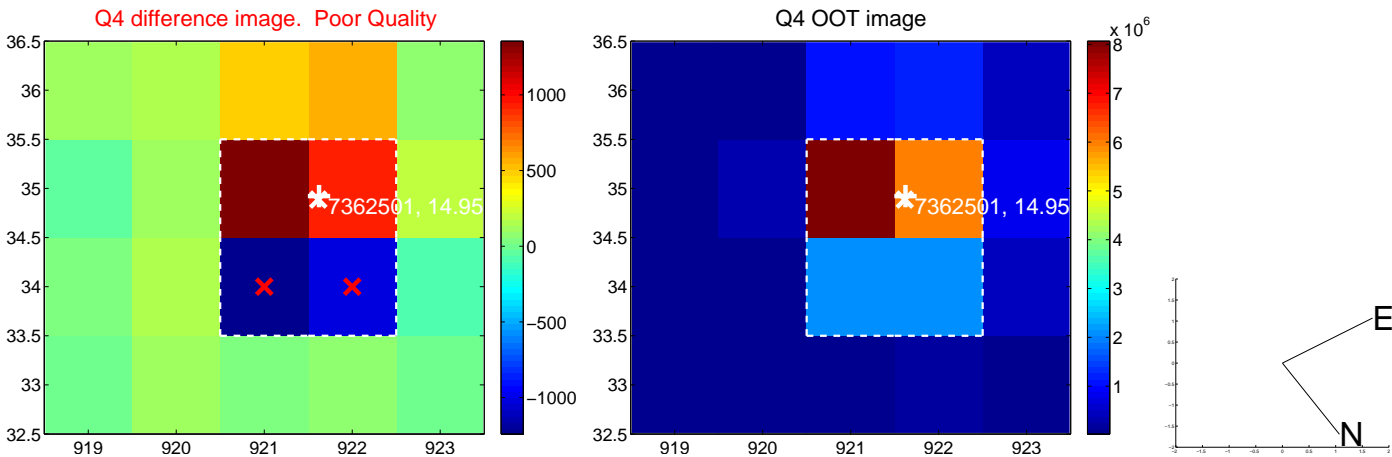
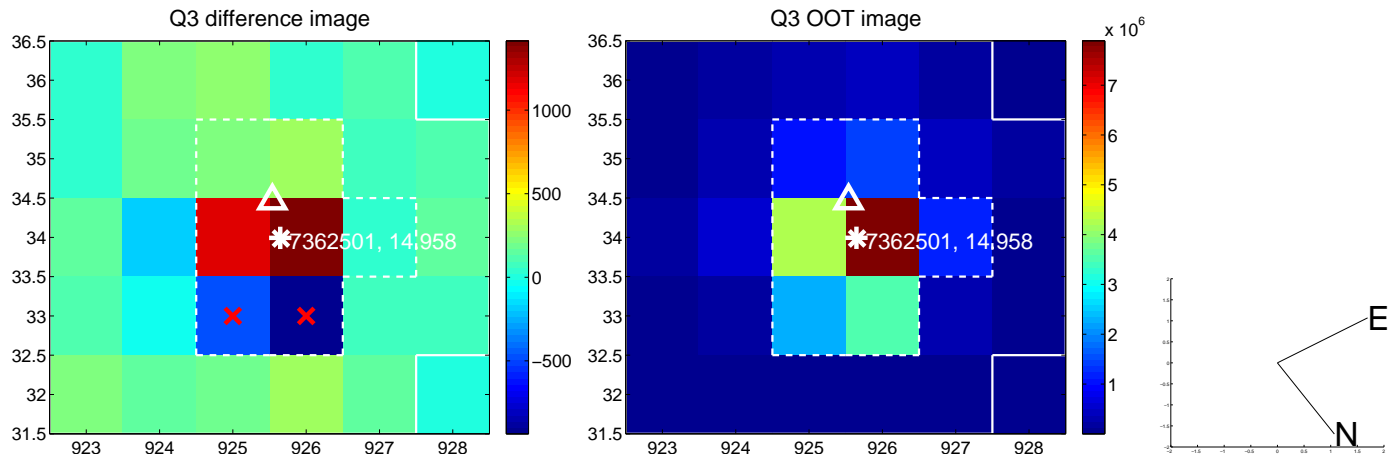
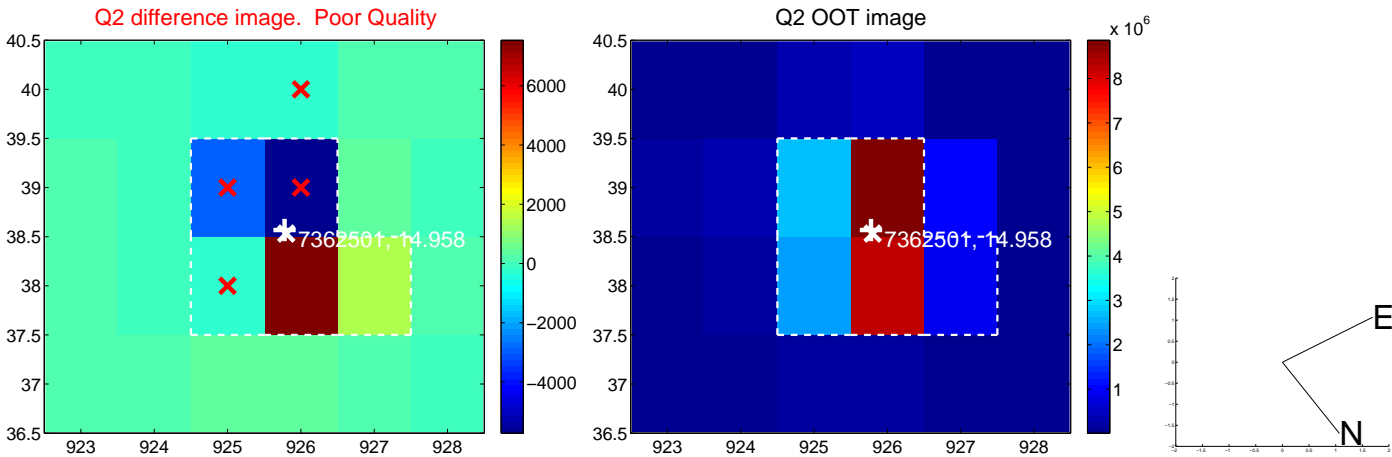
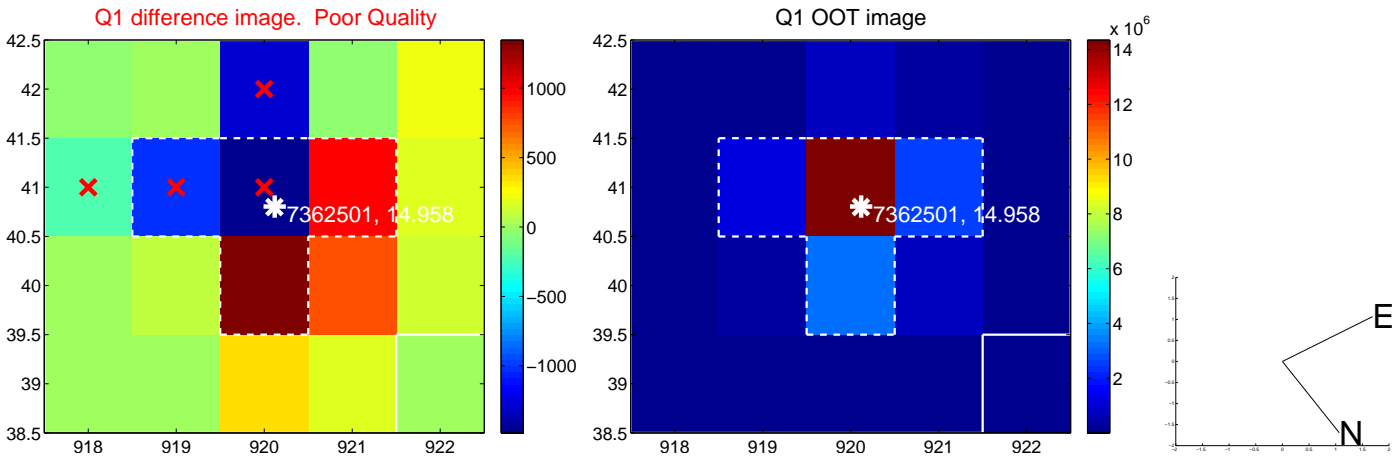
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.079 ± 0.603	0.13	0.059 ± 0.700	-0.052 ± 0.545
PRF-fit source offset from KIC position	0.243 ± 0.608	0.40	0.121 ± 0.307	-0.211 ± 0.678
photometric centroid source offset	3.55 ± 0.74	4.78	1.37 ± 0.82	3.27 ± 0.73

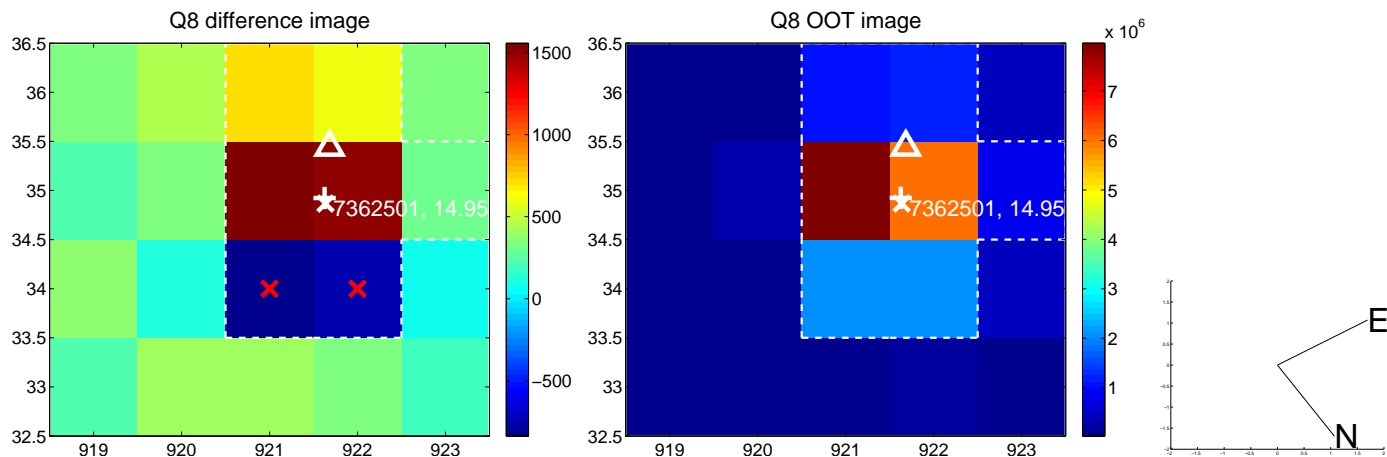
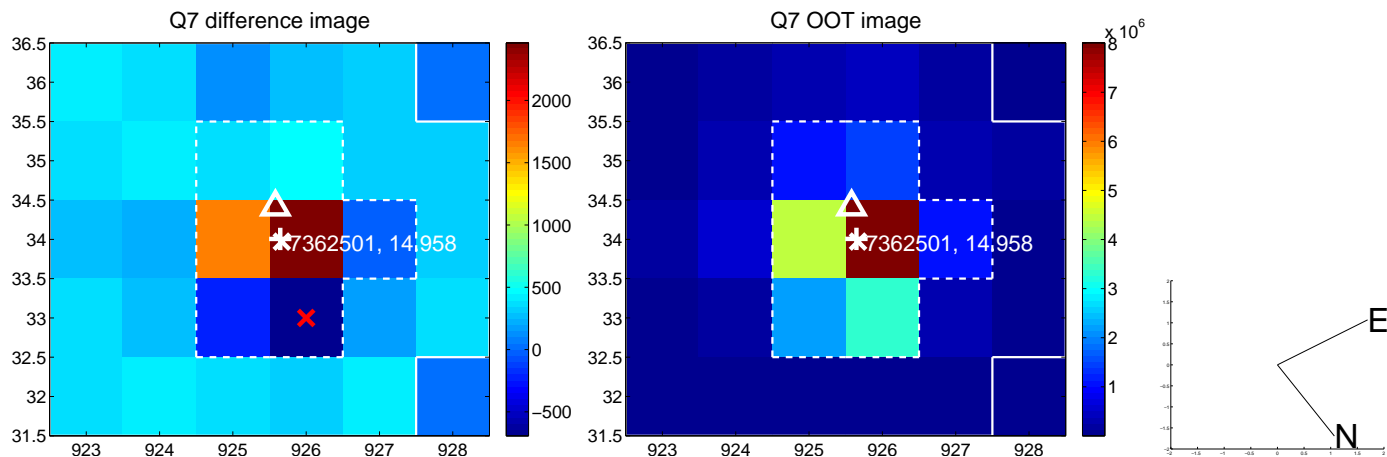
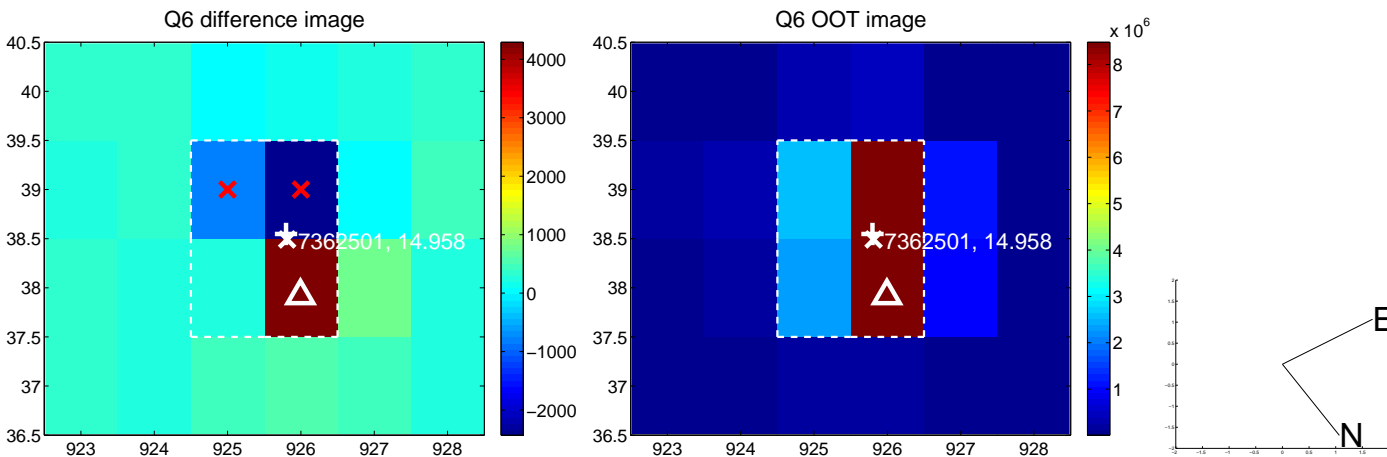
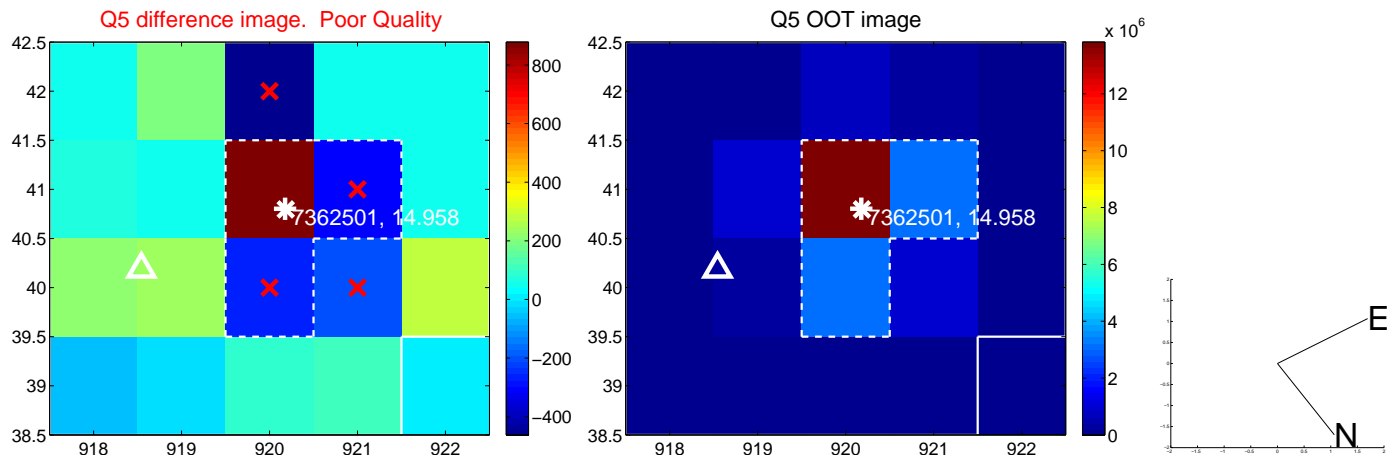


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

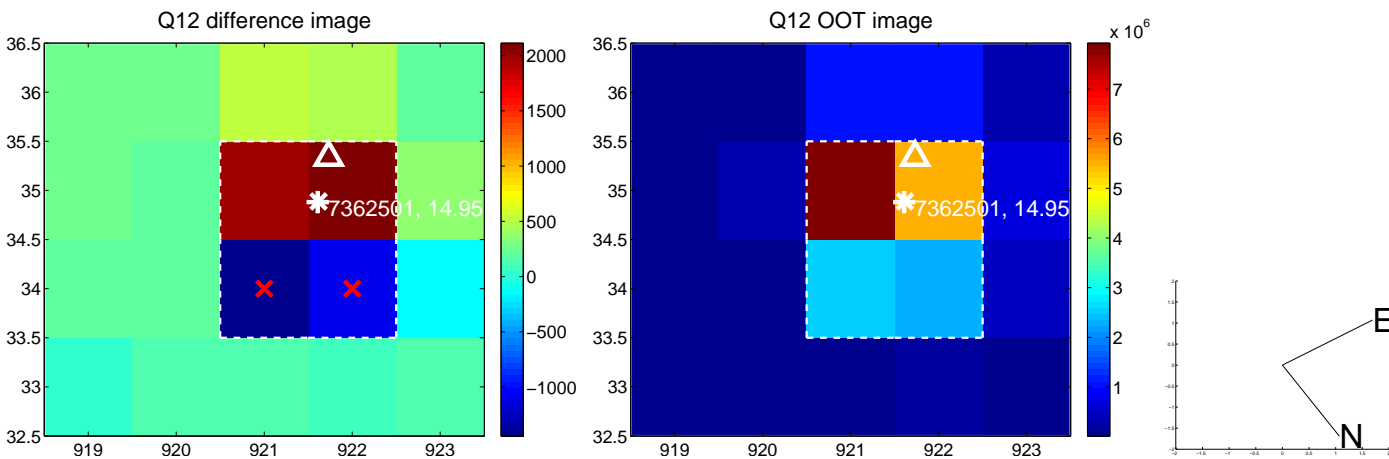
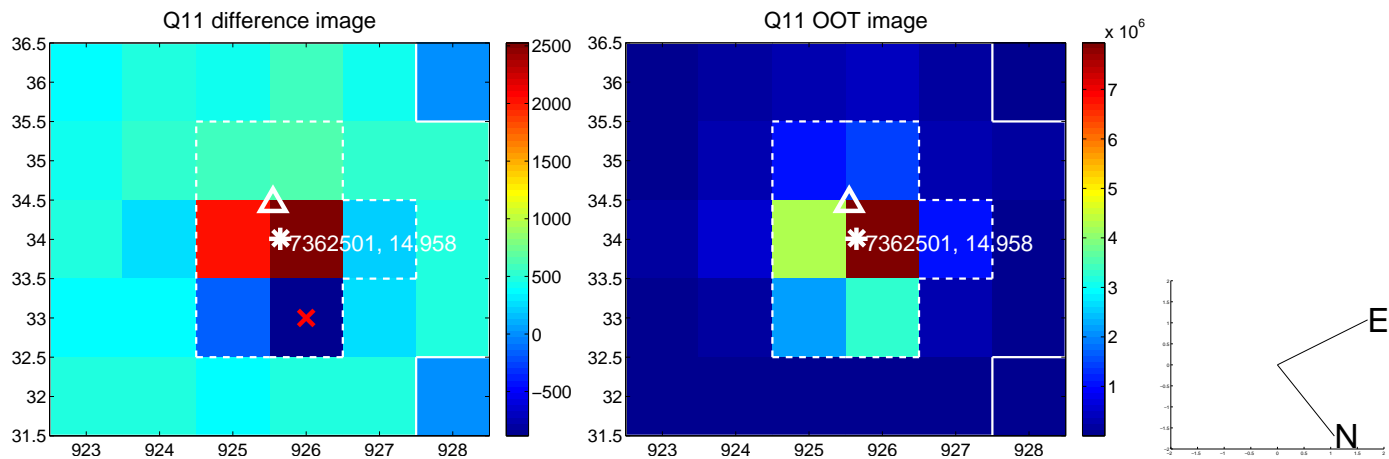
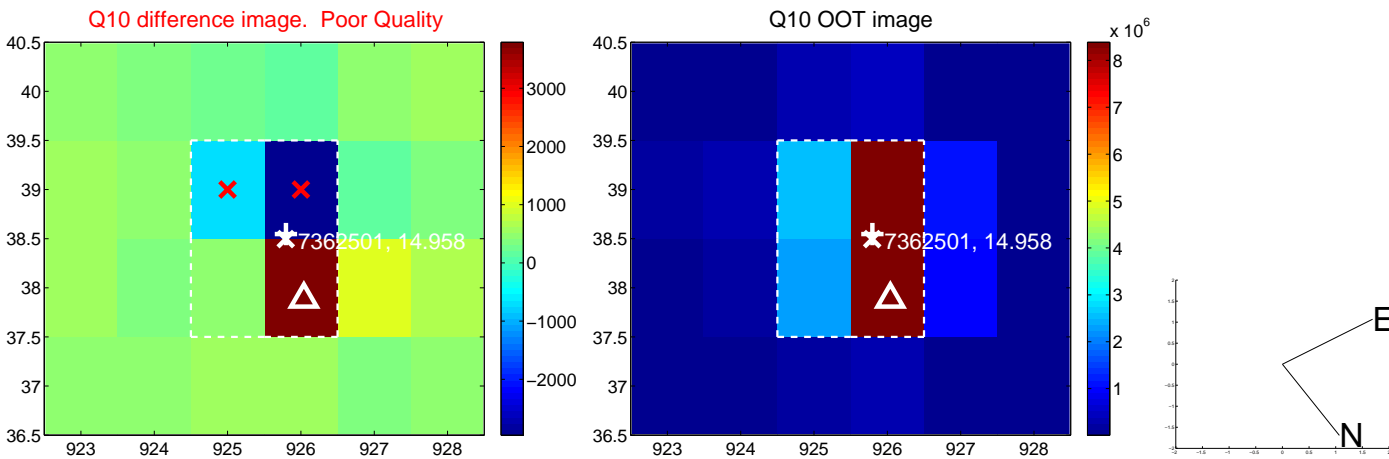
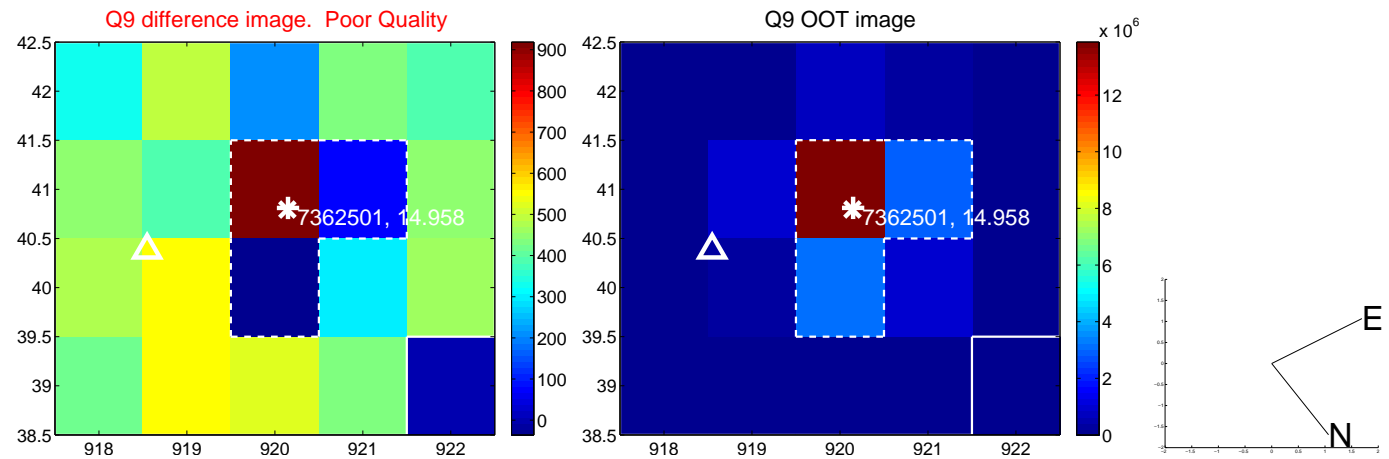
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



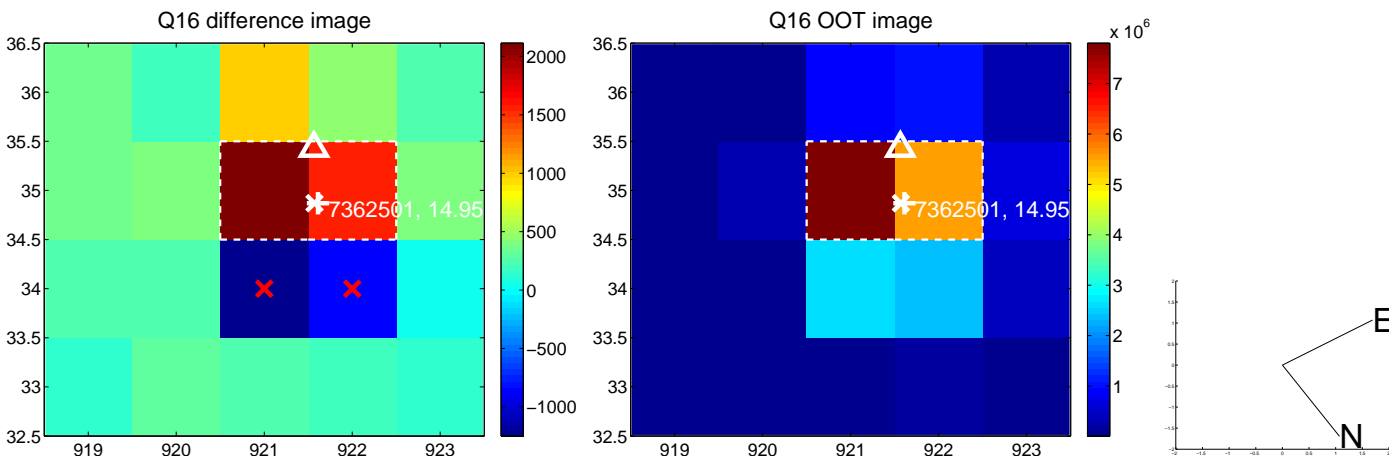
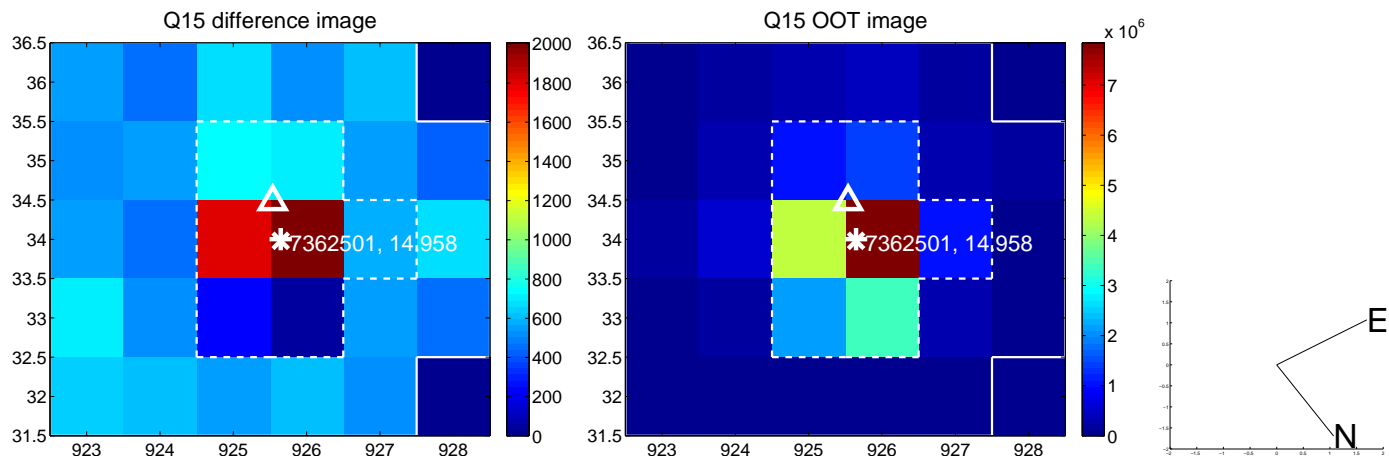
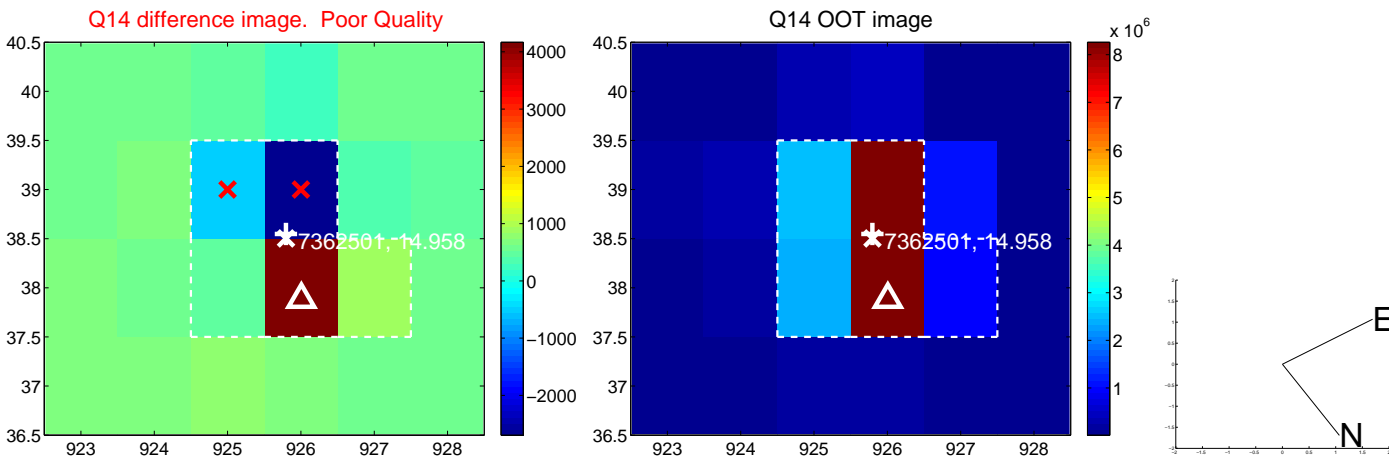
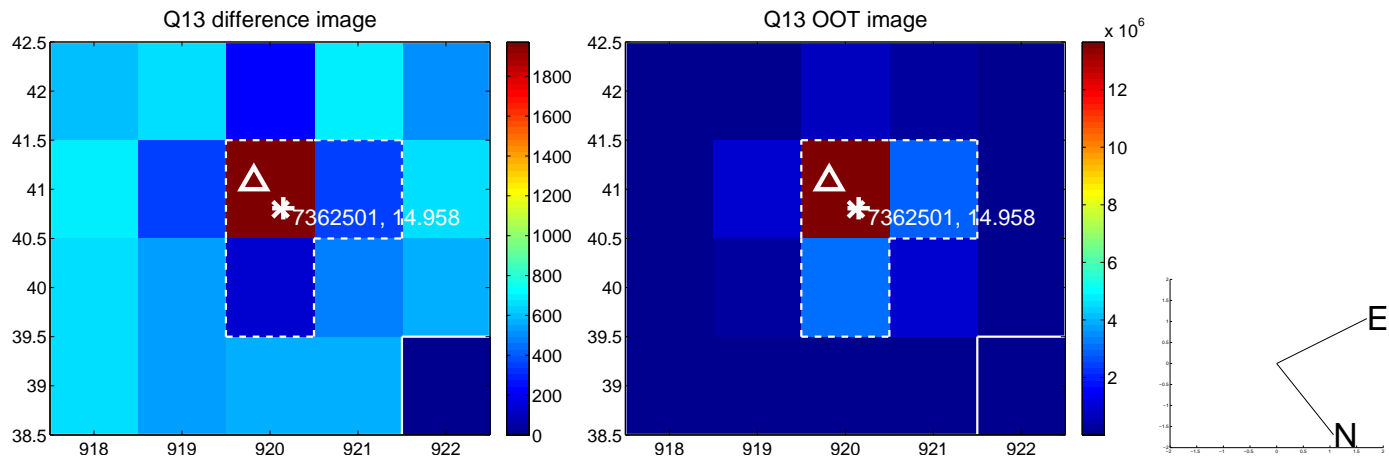
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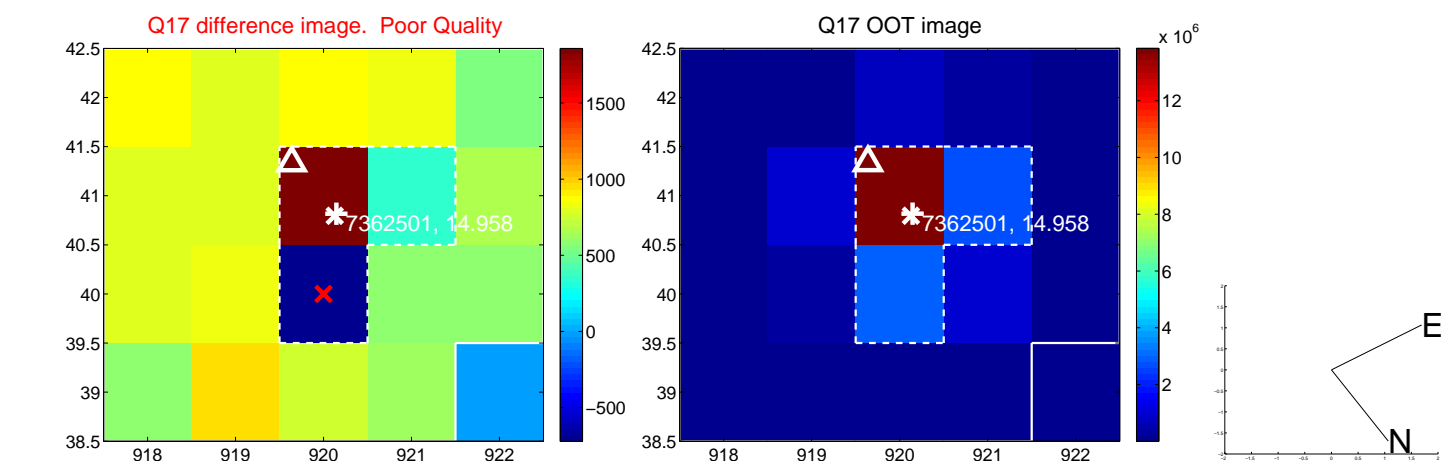
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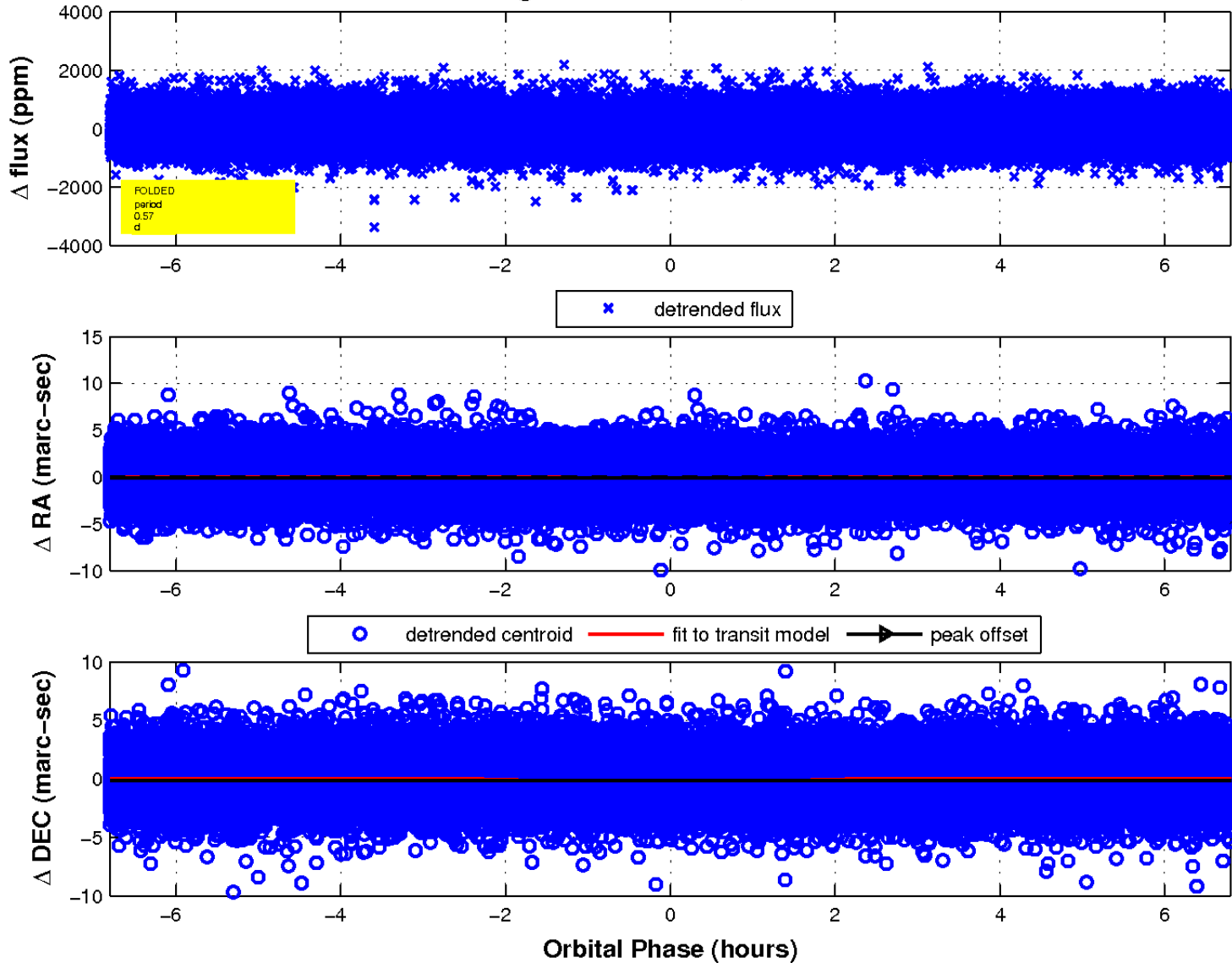
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

