

KIC 002713049

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})
002713049-01	OBS	0794.01	2.539164	131.592567	380.0	2.589	34.0	37.0	1.06	5519	2.50	746.16

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002713049-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

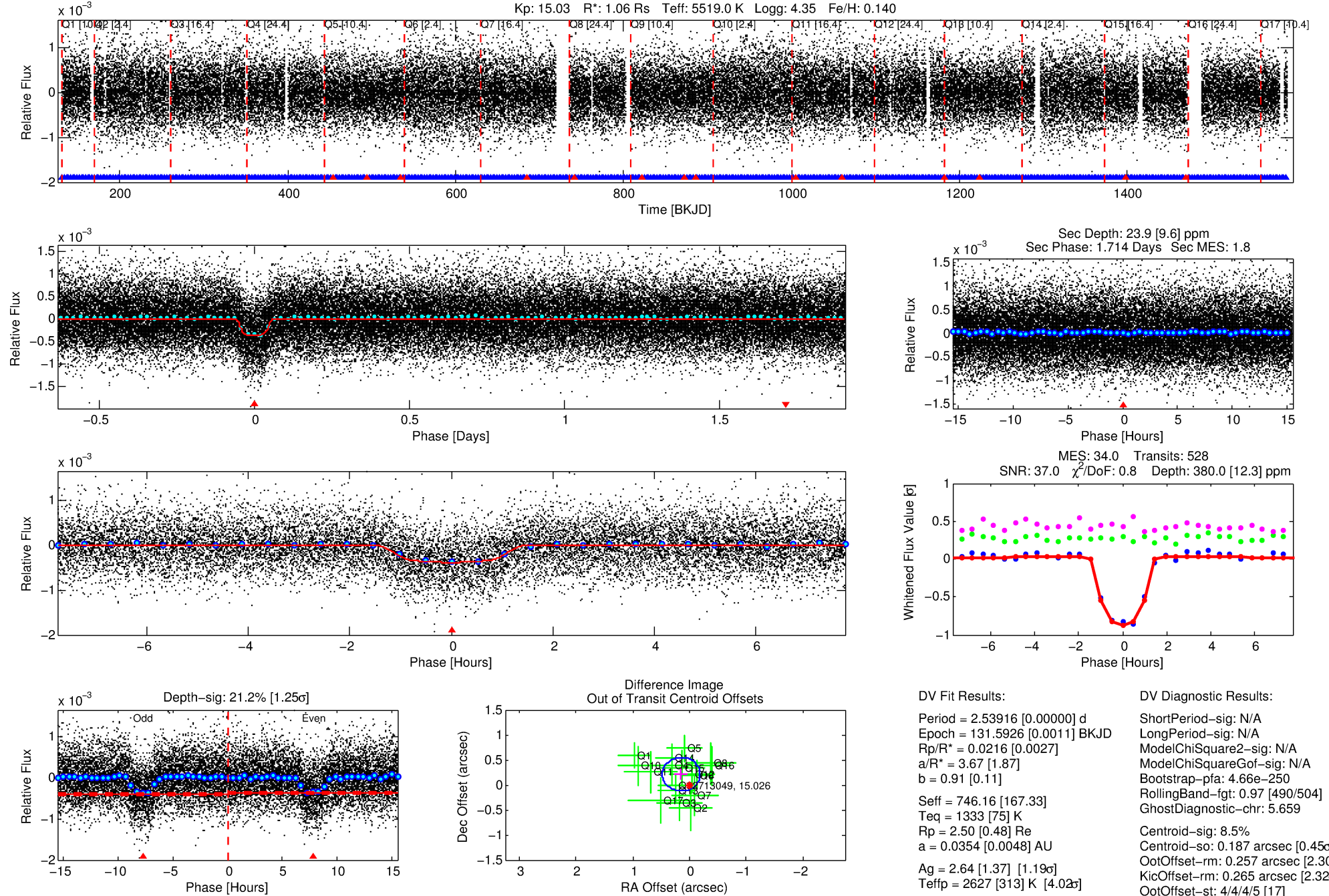
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 002713049-01

No Significant Match Found

DV One-Page Summary

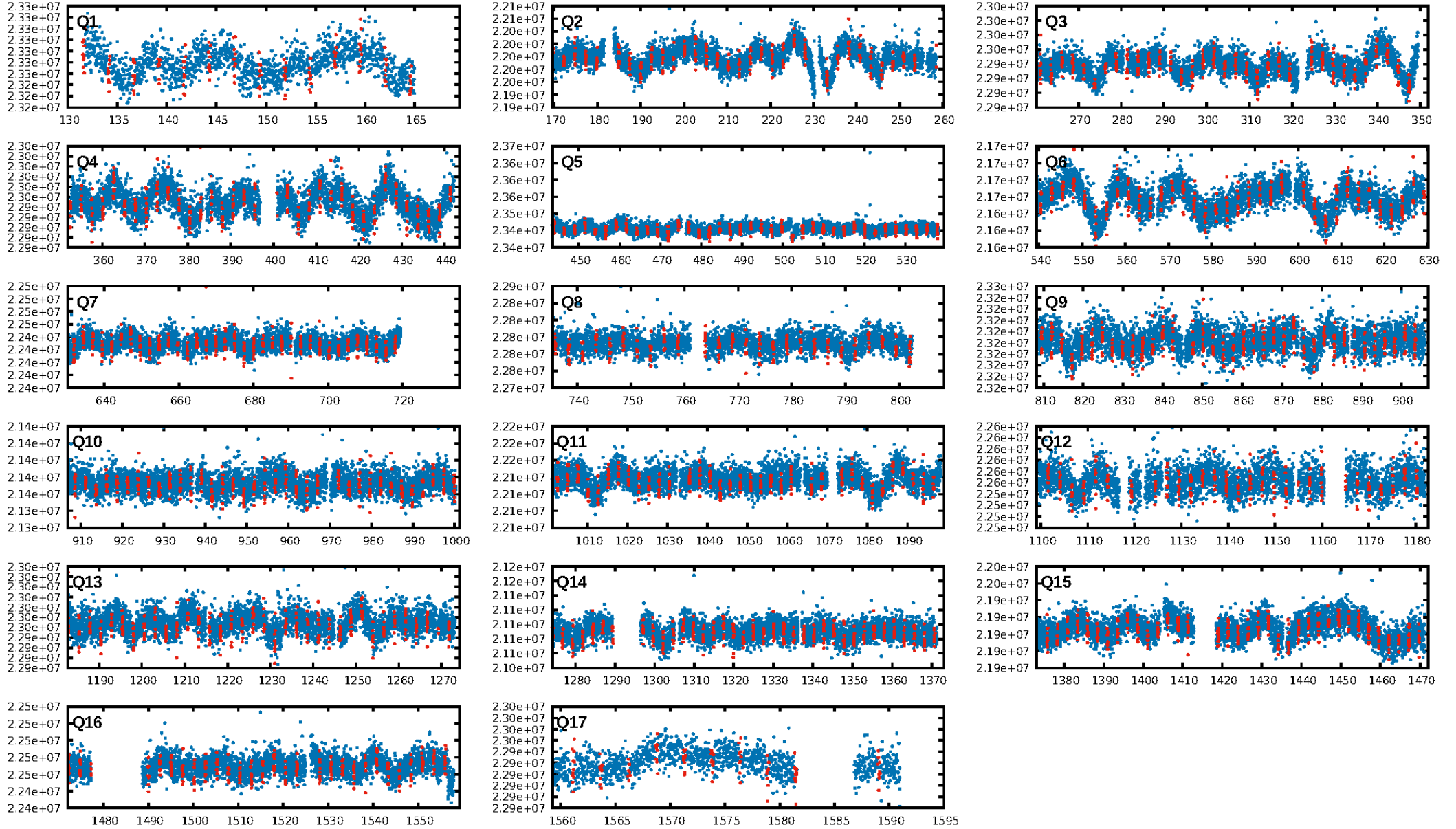
KIC: 2713049 Candidate: 1 of 1 Period: 2.539 d
KOI: K00794.01 Corr: 0.958



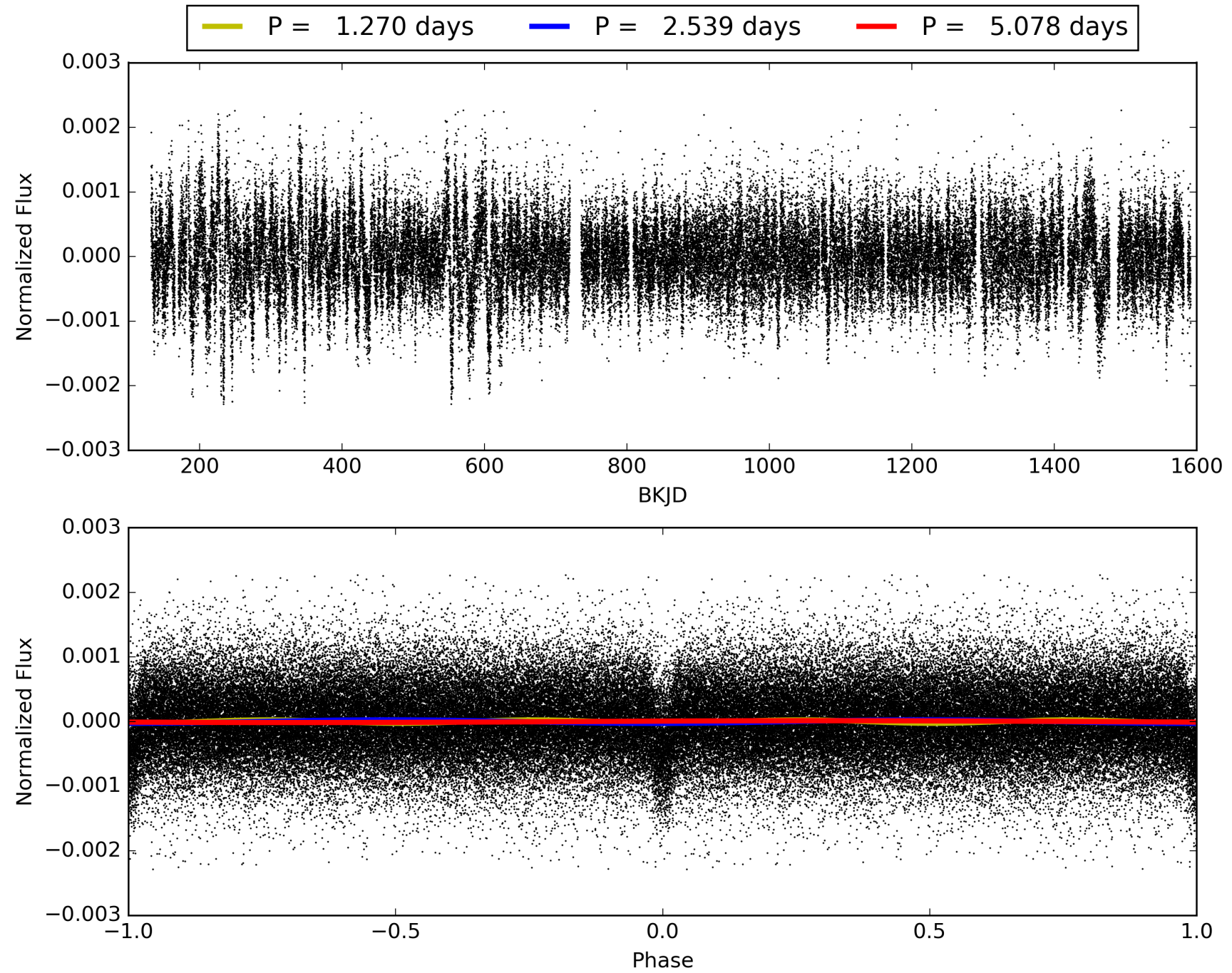
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 17:10:44 Z

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

TCE 002713049-01, PDC Light Curves

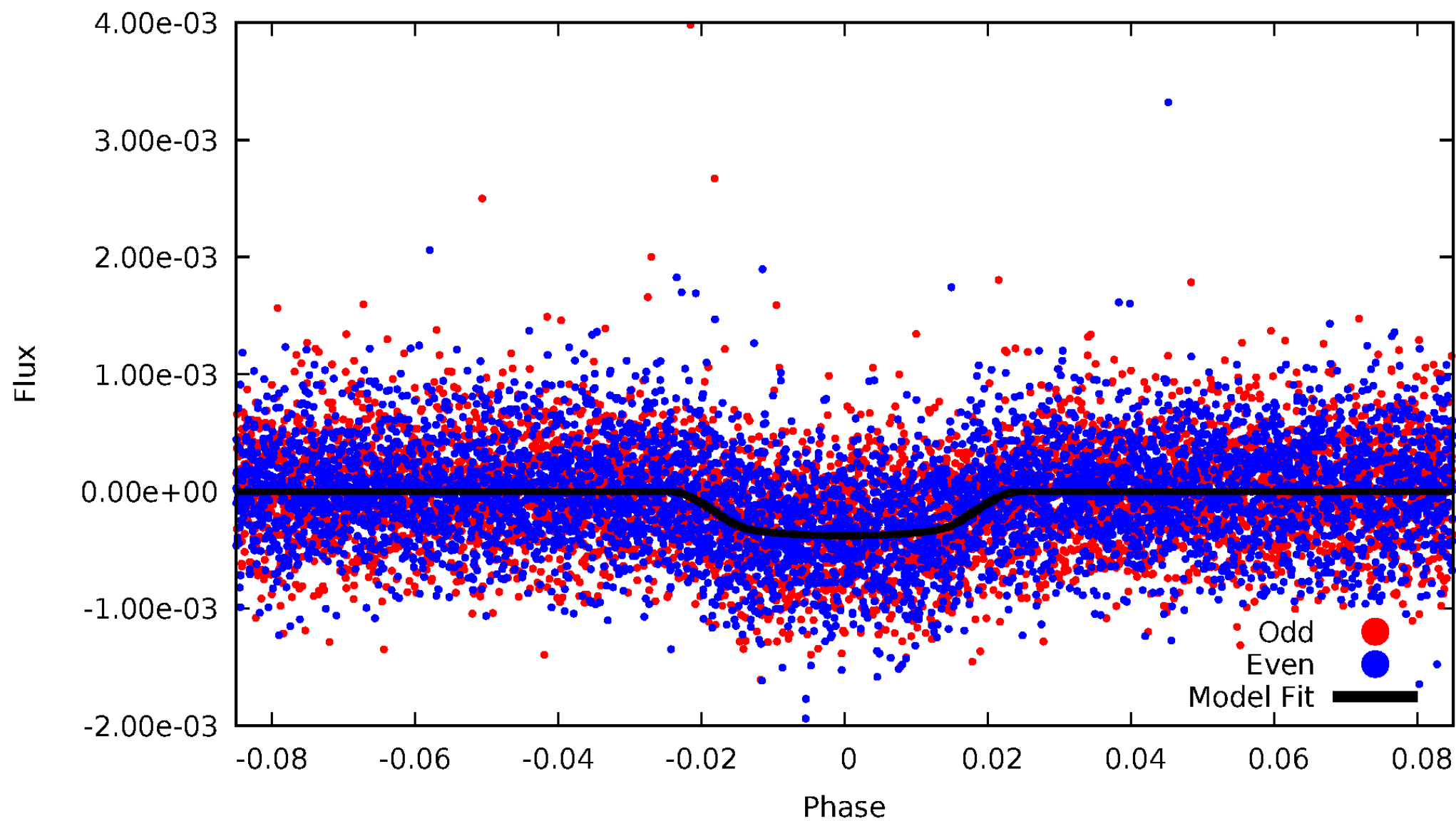


TCE 002713049-01



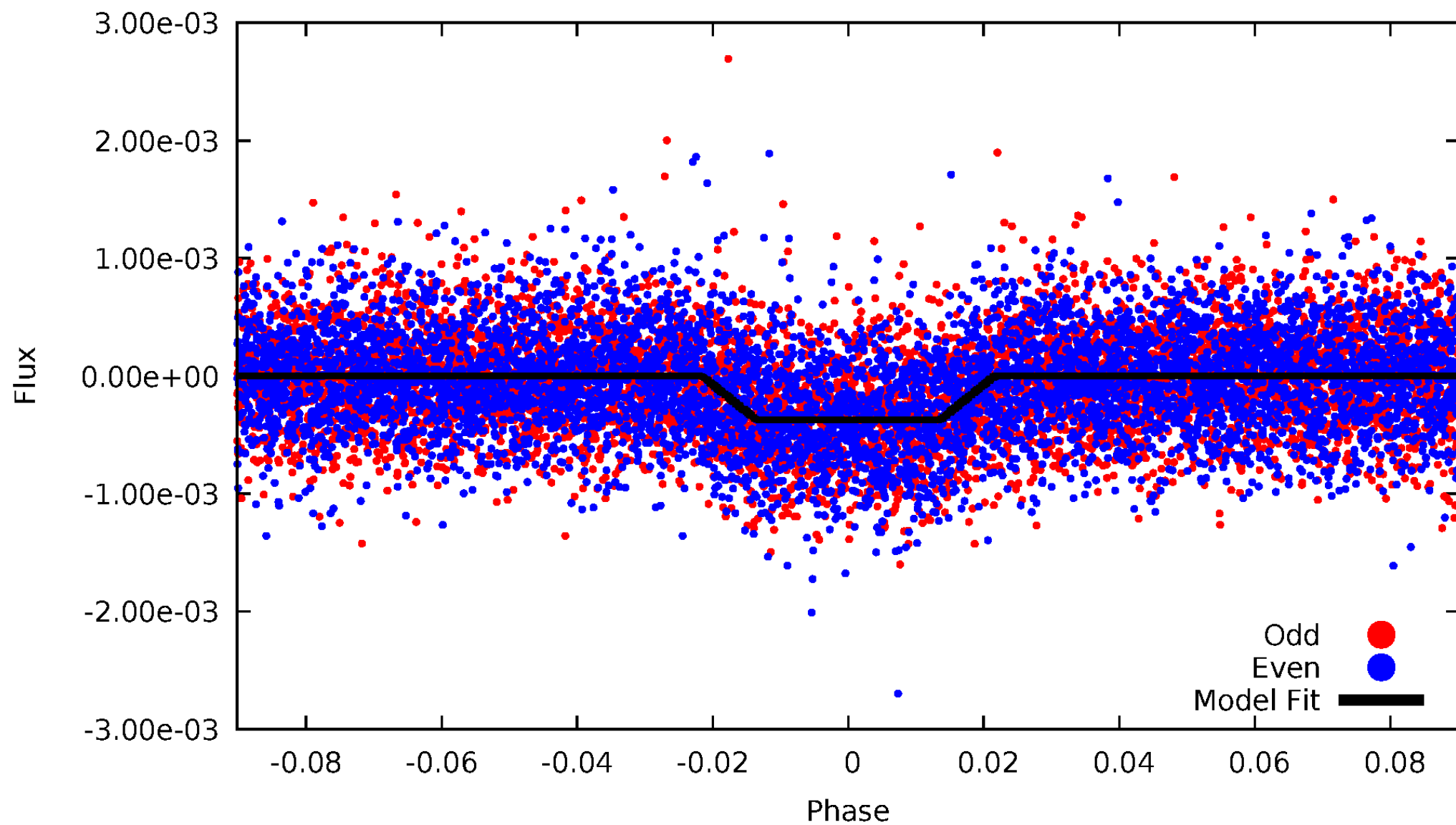
DV Odd/Even

TCE 002713049-01



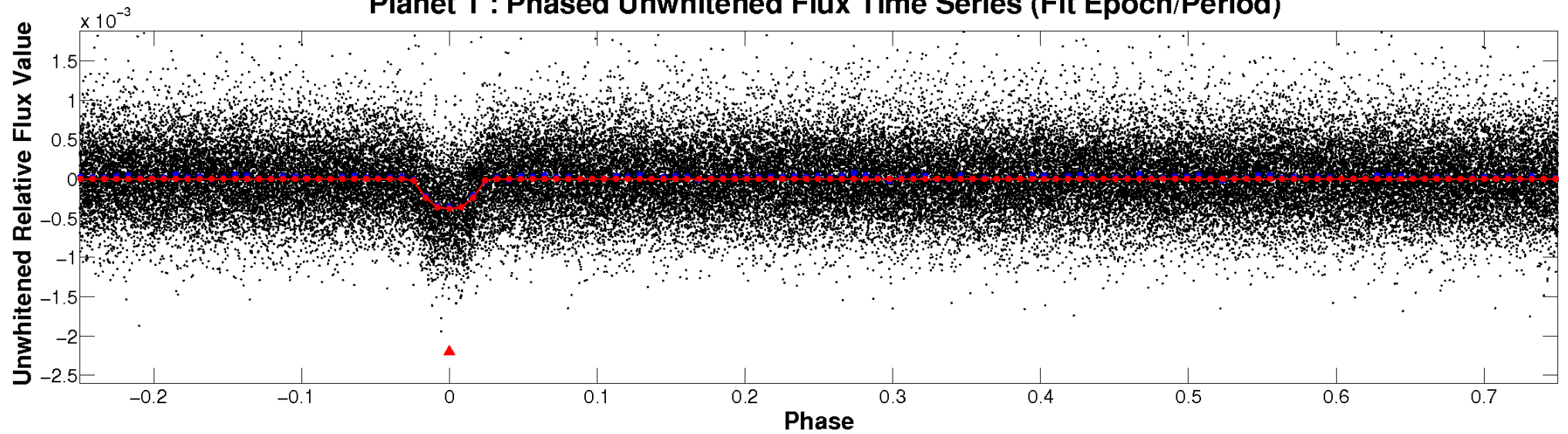
ALT Odd/Even

TCE 002713049-01

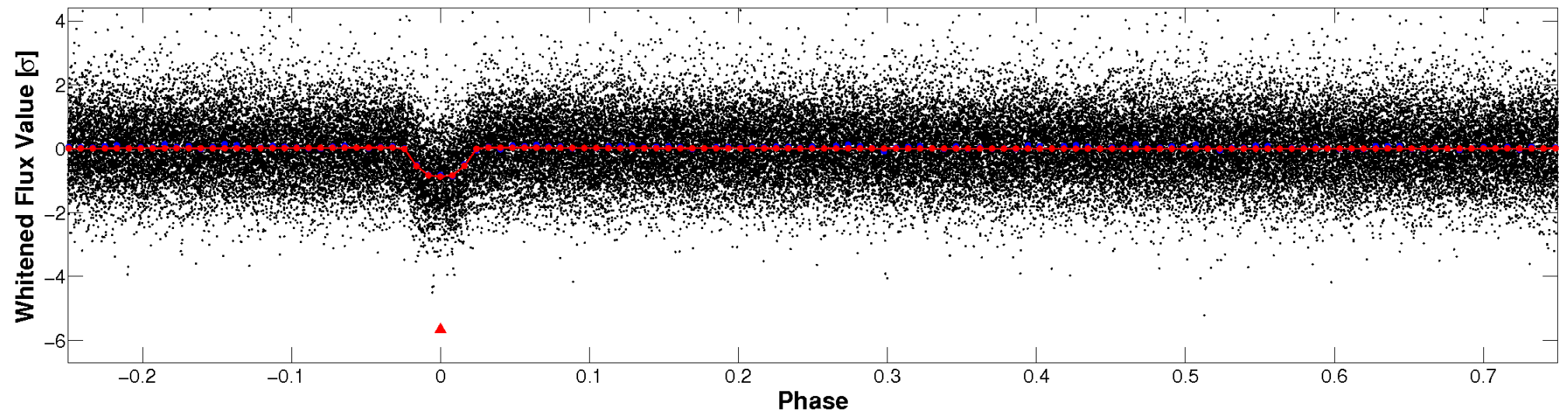


Non-Whitened Vs. Whitened Light Curve

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

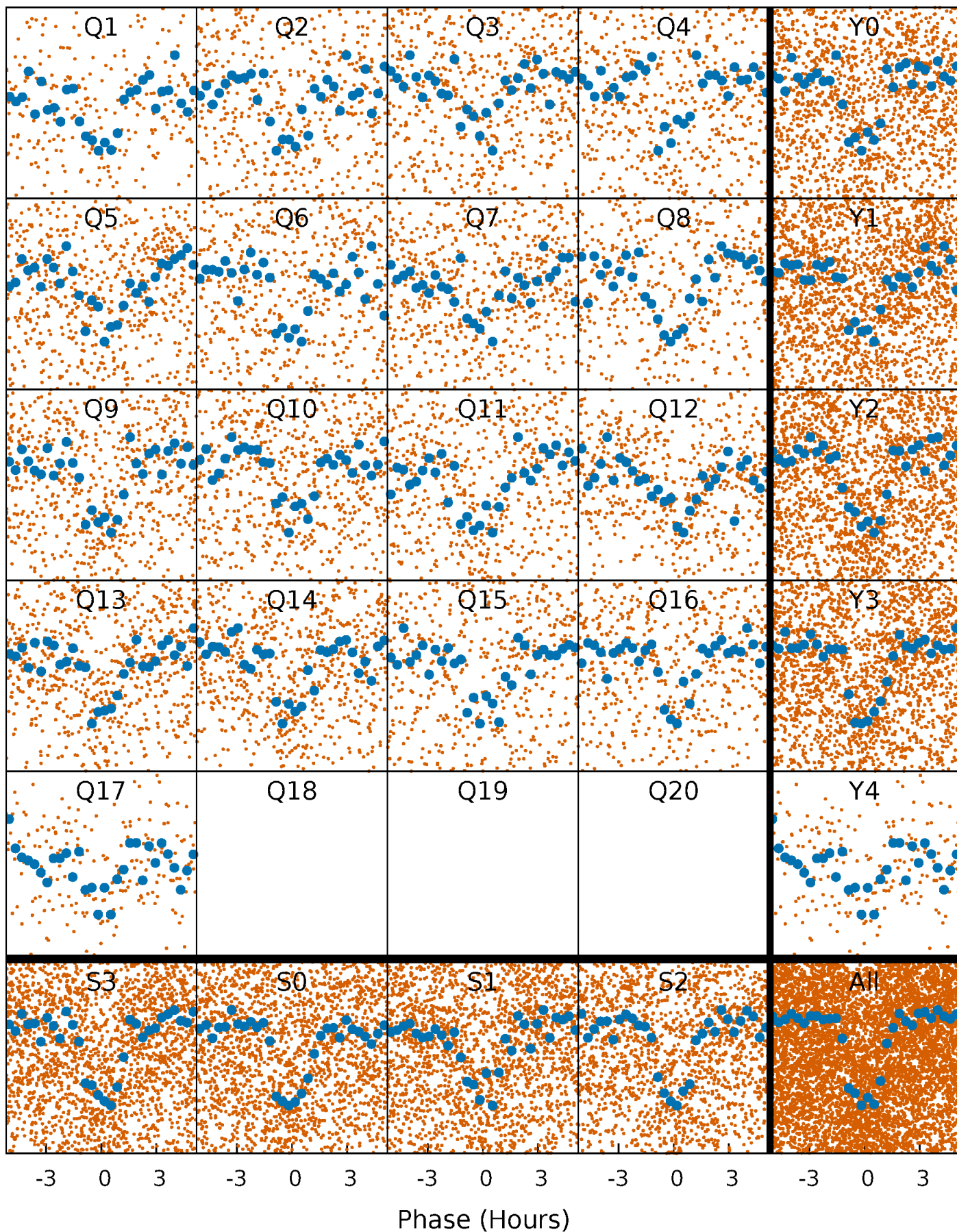


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



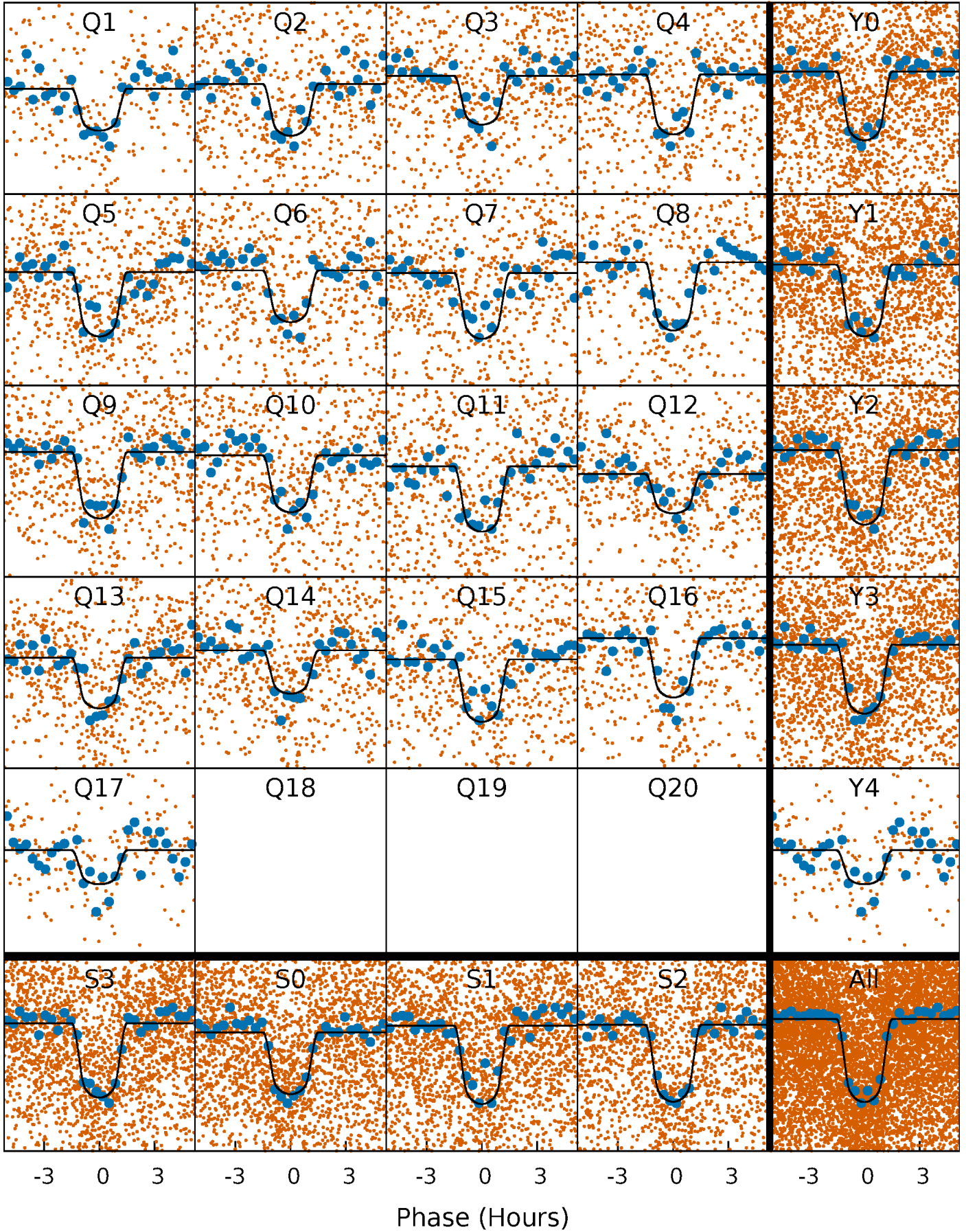
PDC Quarter-Phased Transit Curves

TCE 002713049-01 P= 2.539164 Days $T_0=131.592567$ (BKJD)



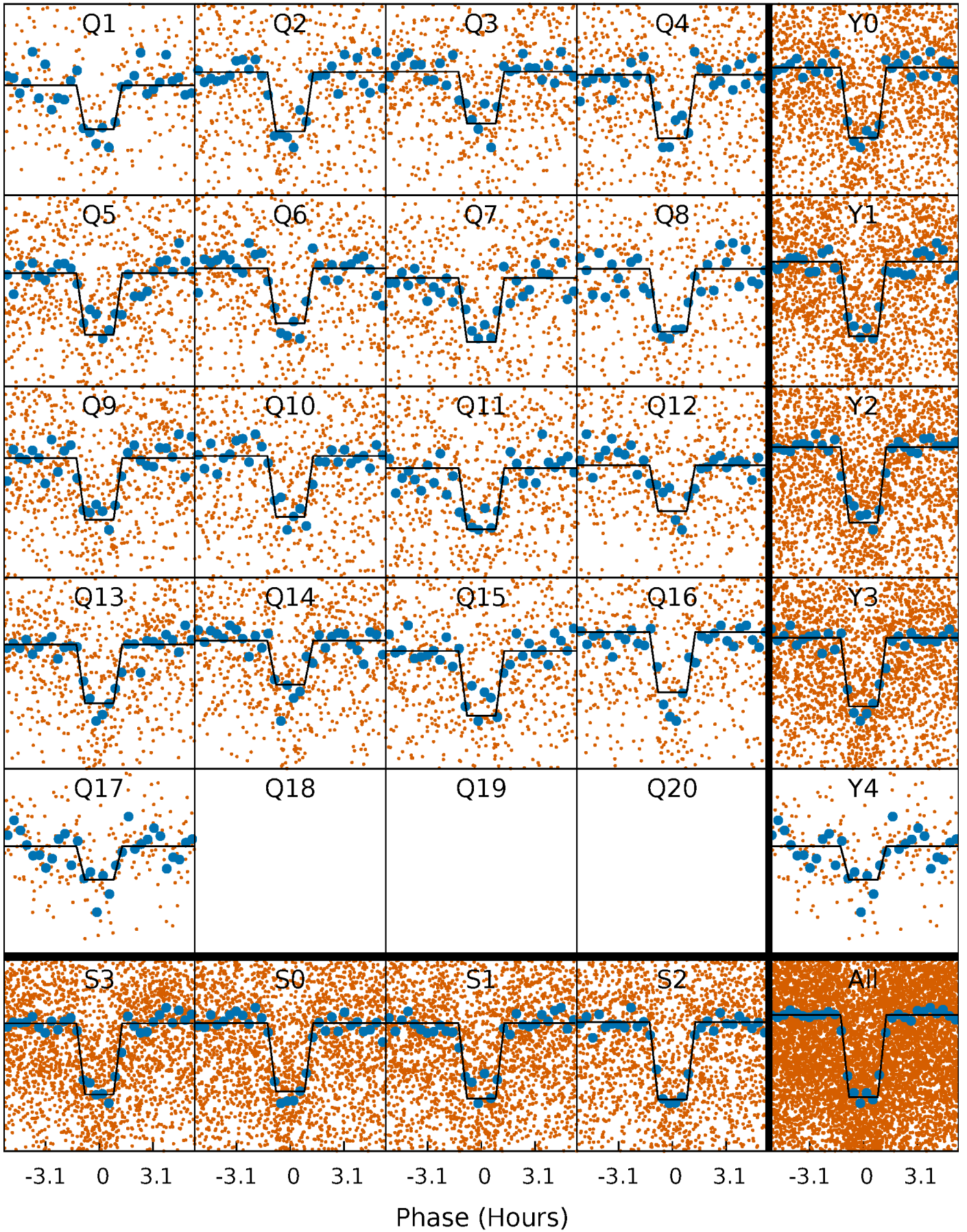
DV Quarter-Phased Transit Curves

TCE 002713049-01 P= 2.539164 Days $T_0=131.592567$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

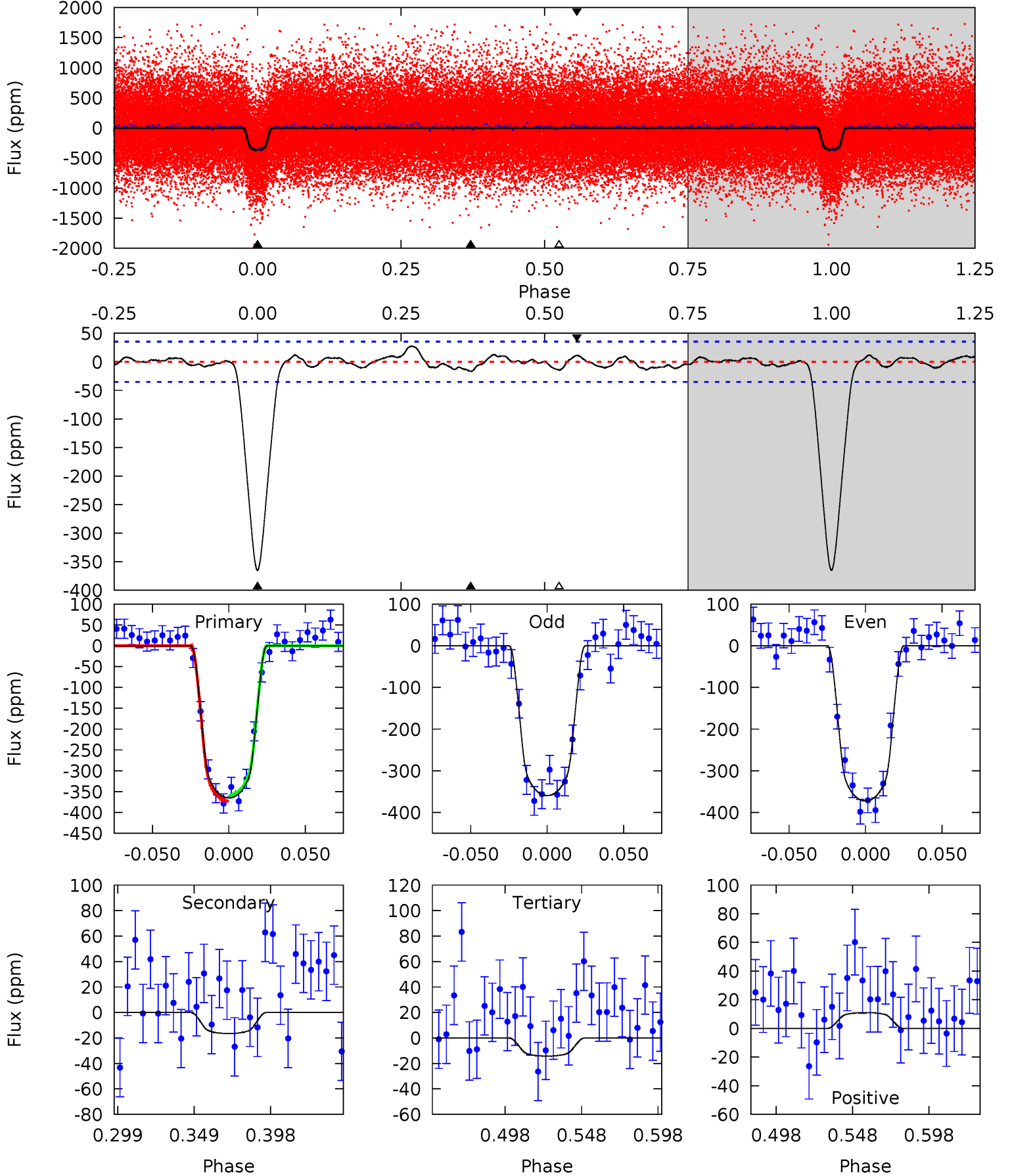
TCE 002713049-01 P= 2.539169 Days $T_0=131.591046$ (BKJD)



DV Model-Shift Uniqueness Test

002713049-01, P = 2.539164 Days, E = 129.053403 Days

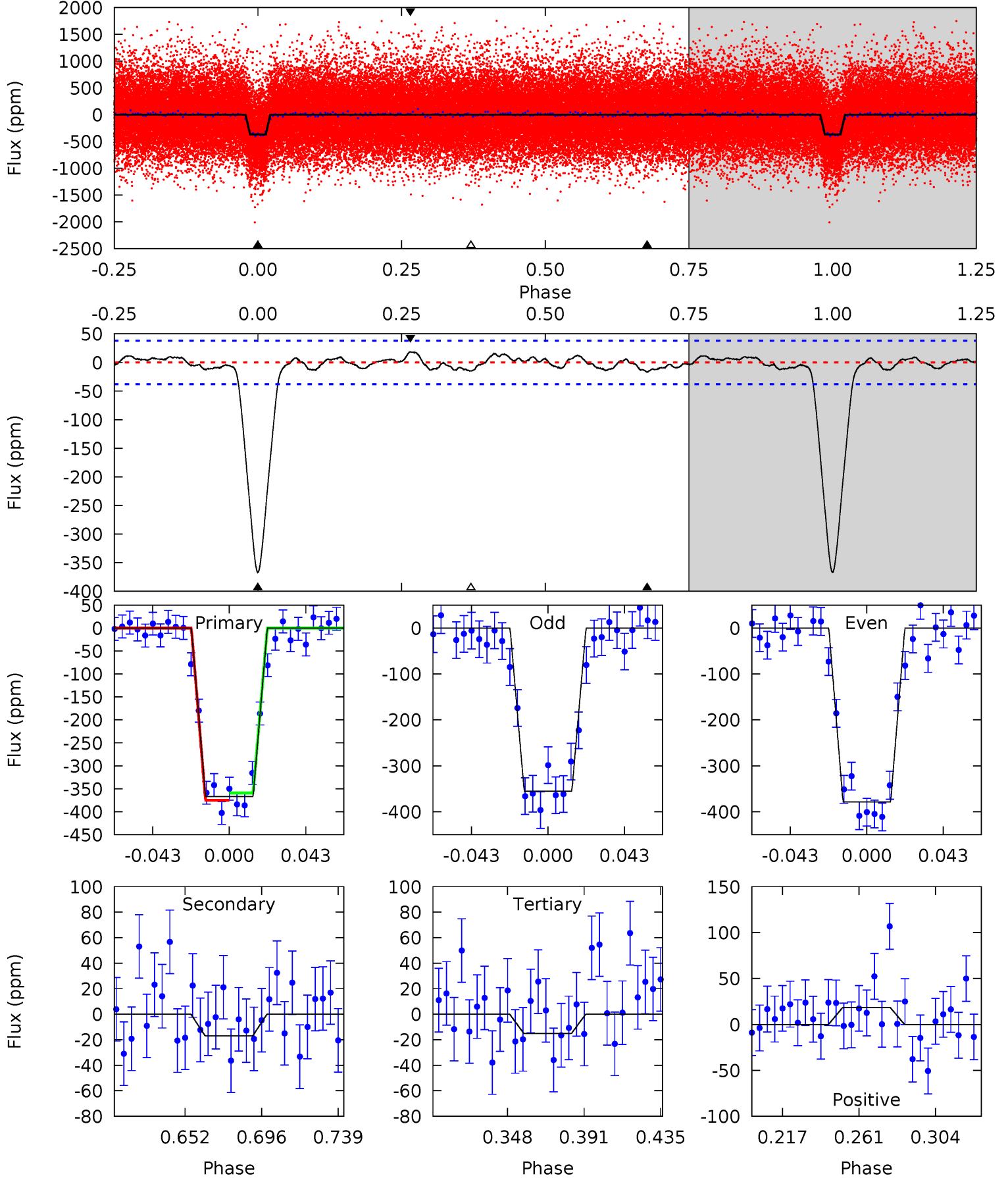
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
48.8	2.21	1.90	1.48	4.71	1.96	1.06	46.9	47.3	0.31	0.73	0.87	1.00	0.07	0.94



Alt Model-Shift Uniqueness Test

002713049-01, P = 2.539169 Days, E = 129.051877 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
45.9	2.13	1.89	2.31	4.74	2.02	1.00	44.0	43.6	0.24	-0.18	1.45	1.01	0.05	0.99



Stellar Parameters For KIC 002713049

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5519^{+82}_{-74}	$4.350^{+0.126}_{-0.103}$	$0.140^{+0.150}_{-0.150}$	$1.062^{+0.154}_{-0.140}$	$0.921^{+0.067}_{-0.038}$	$1.082^{+0.597}_{-0.325}$
	+1%/-1%	+3%/-2%	+107%/-107%	+15%/-13%	+7%/-4%	+55%/-30%
Source	SPE90	SPE90	SPE90	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 002713049-01 / KOI 0794.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-17 ± 7	$2.51^{+0.38}_{-0.37}$	1866^{+72}_{-77}	2960^{+235}_{-341}	$1.763^{+1.158}_{-0.880}$
Alt.	-17 ± 8	$2.22^{+0.37}_{-0.33}$	1857^{+80}_{-74}	3095^{+267}_{-344}	$2.400^{+1.581}_{-1.235}$

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

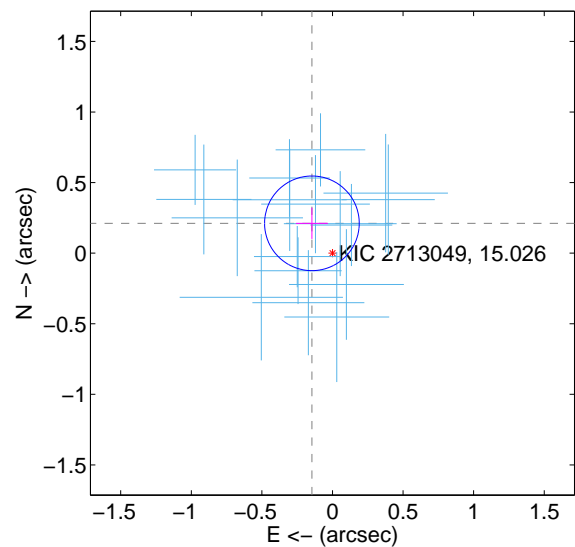
Supplemental centroid analysis for 002713049-01. Kepler magnitude: 15.03. Transit SNR 37.02

There are 17 quarters with good PRF difference image offsets

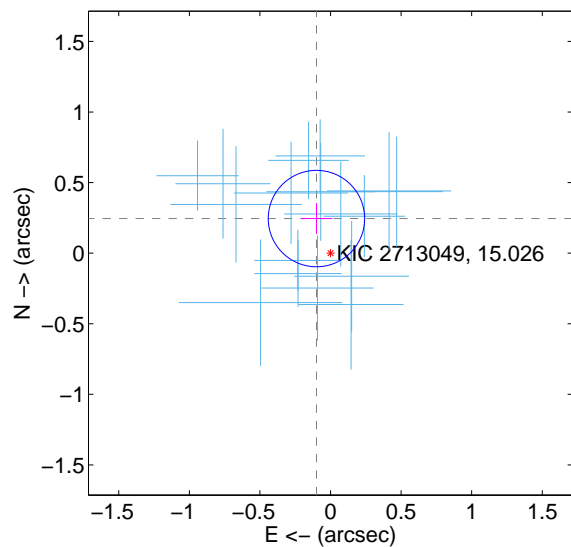
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.257 ± 0.112	2.30	0.146 ± 0.114	0.211 ± 0.111
PRF-fit source offset from KIC position	0.265 ± 0.114	2.32	0.100 ± 0.111	0.245 ± 0.109
photometric centroid source offset	0.19 ± 0.41	0.45	-0.18 ± 0.41	-0.06 ± 0.43

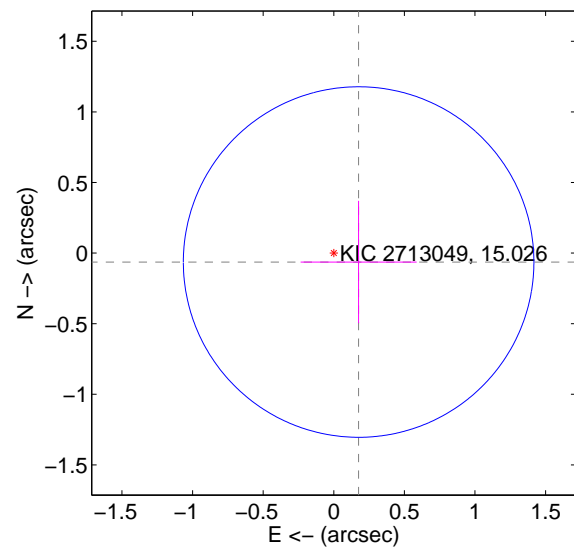
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

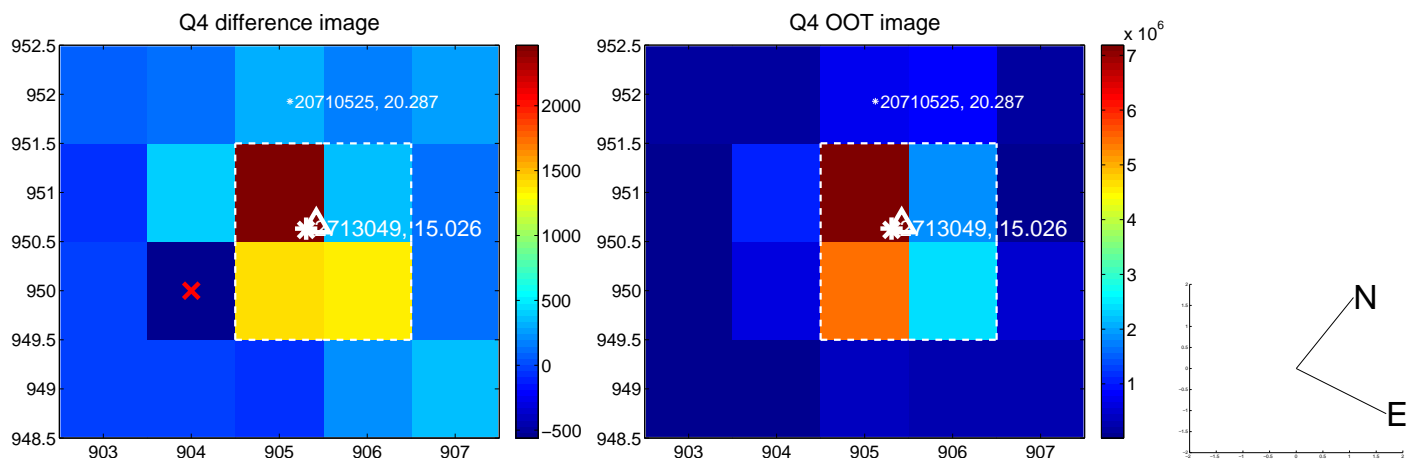
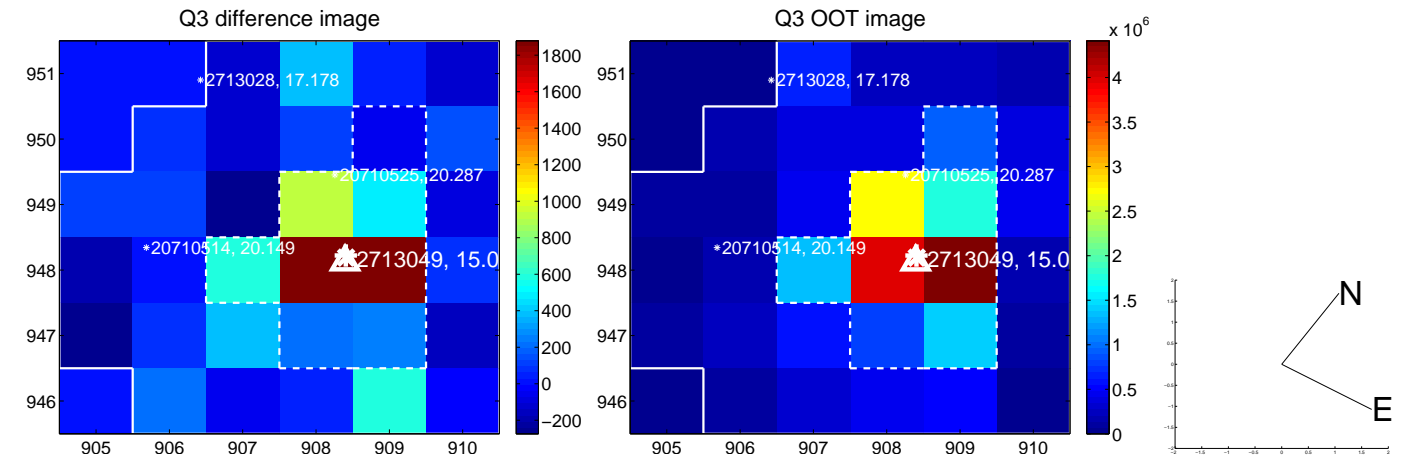
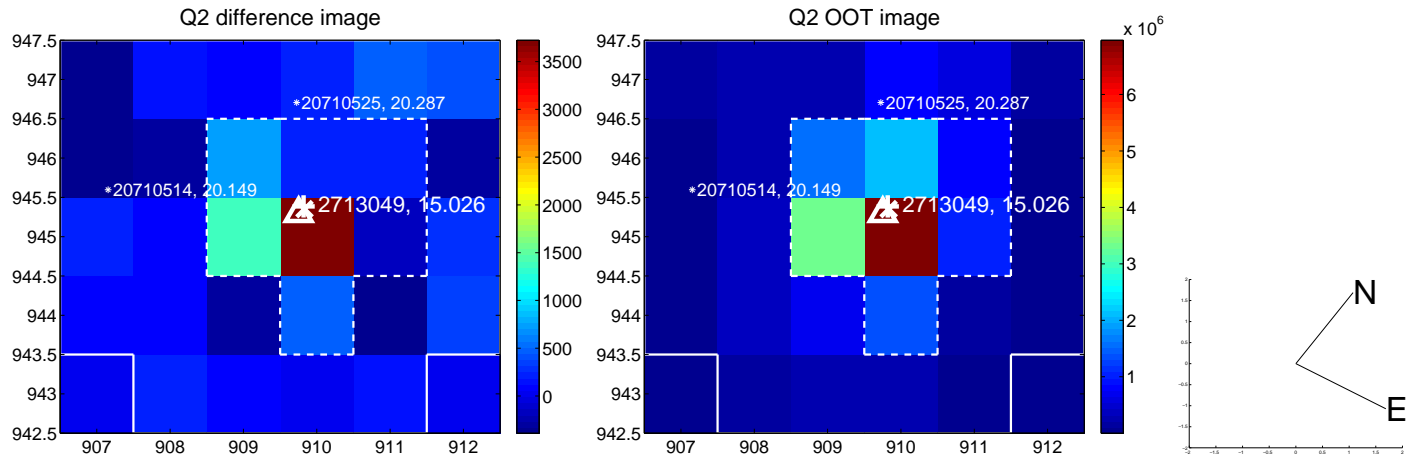
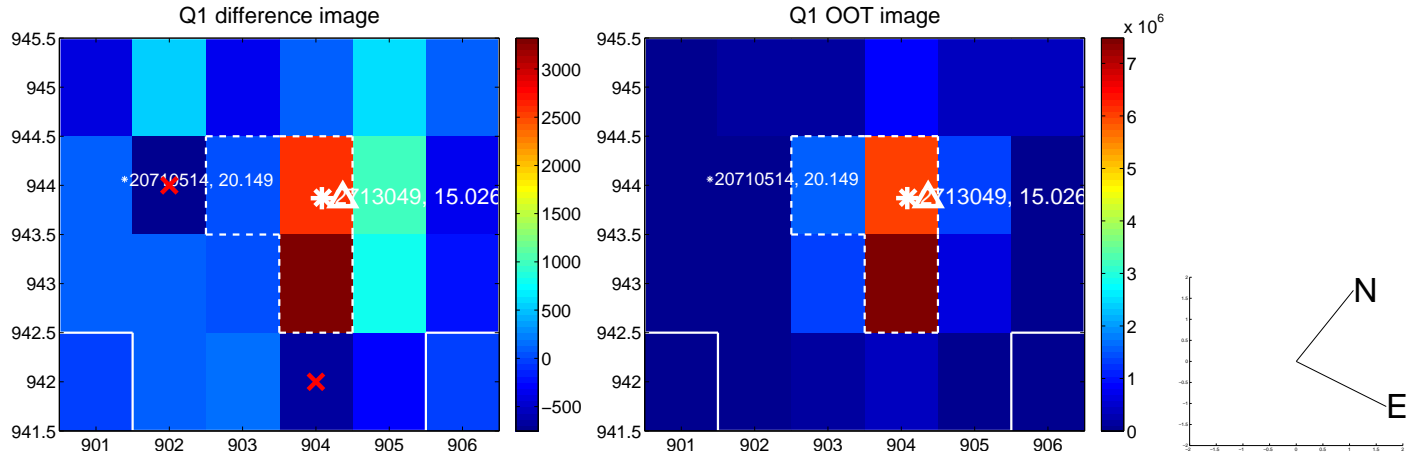


offset from photometric centroids

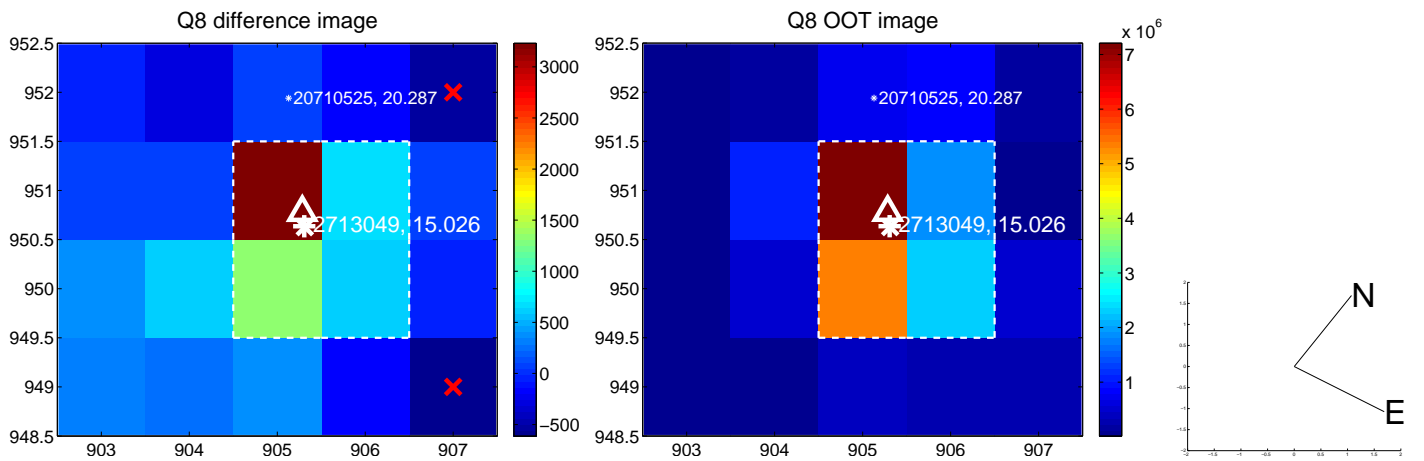
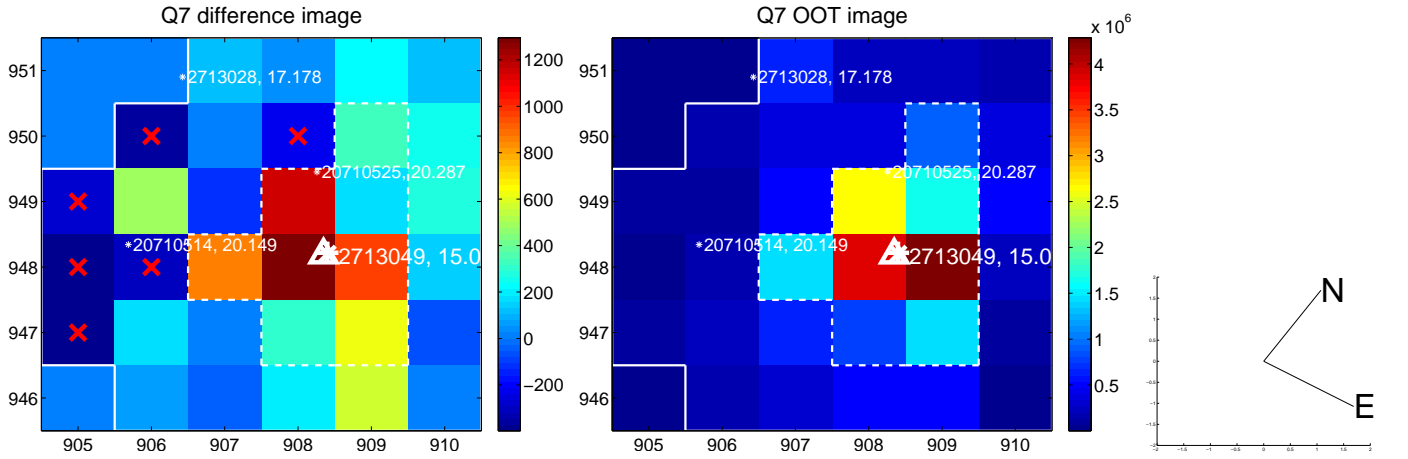
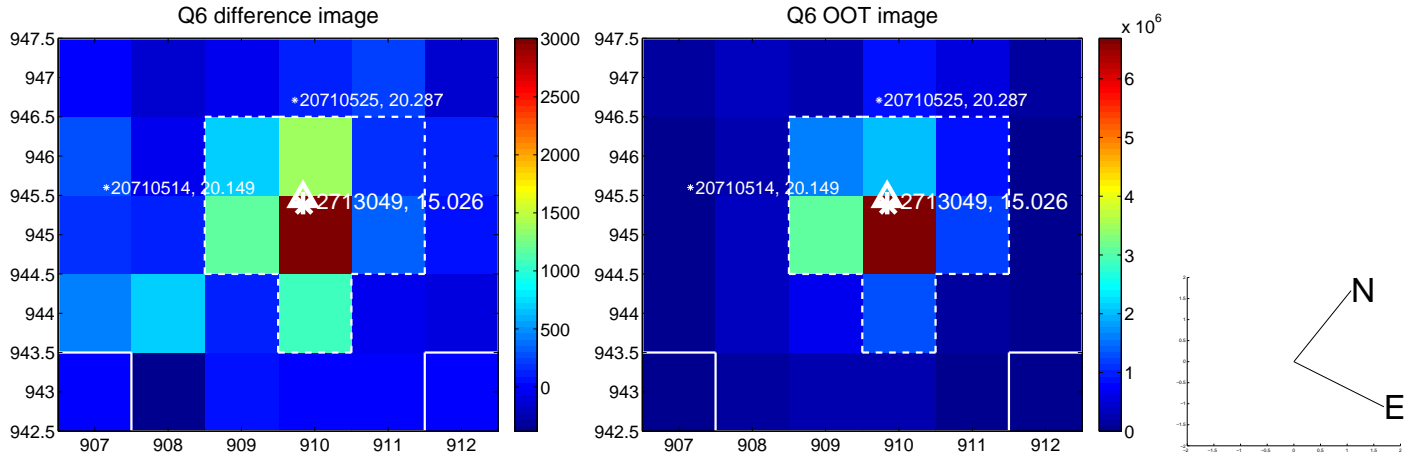
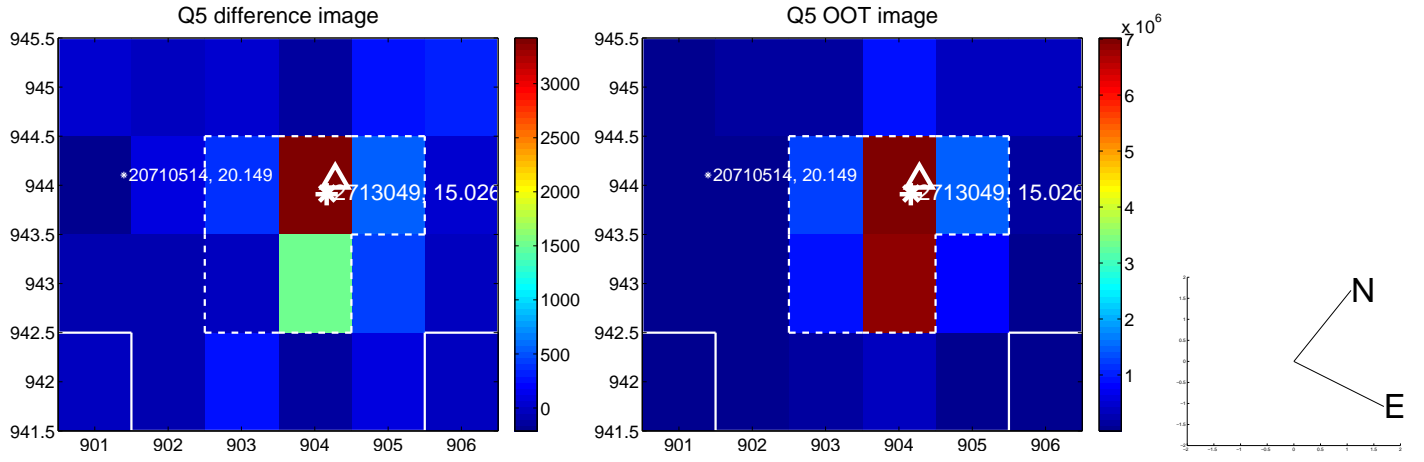


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

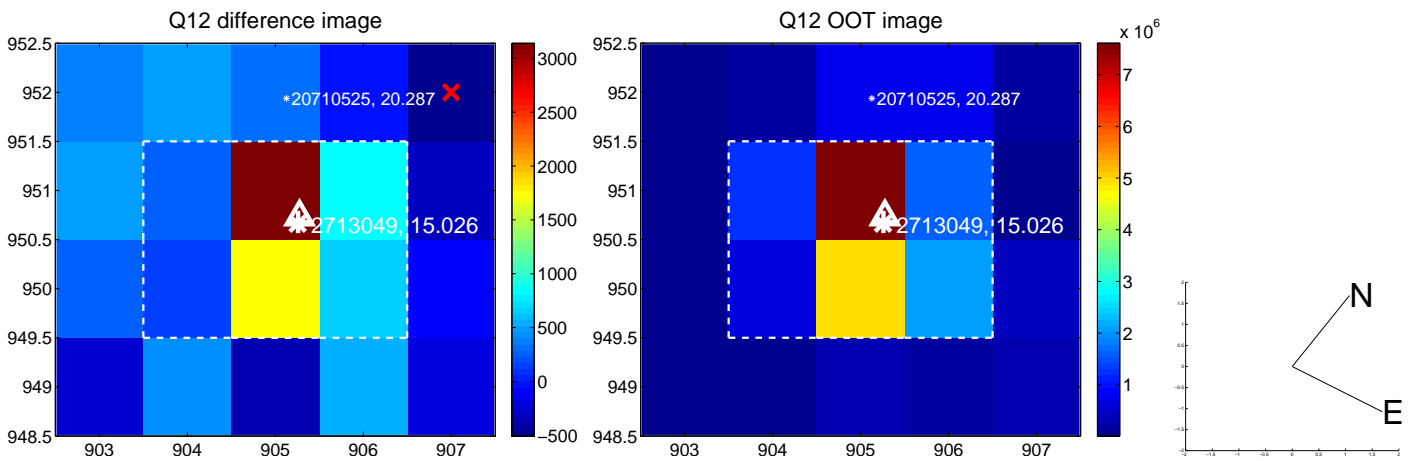
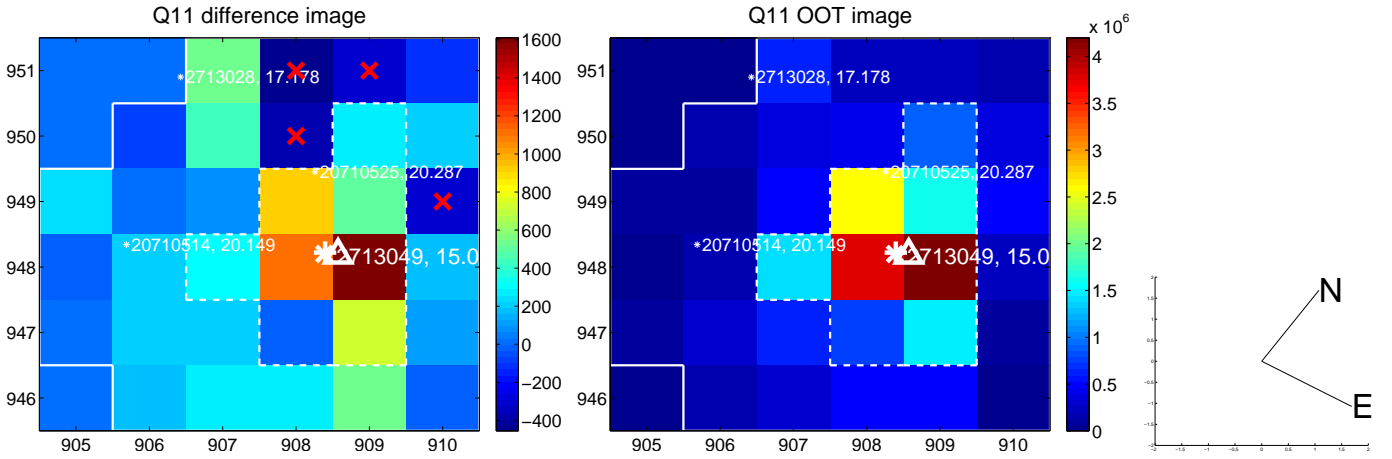
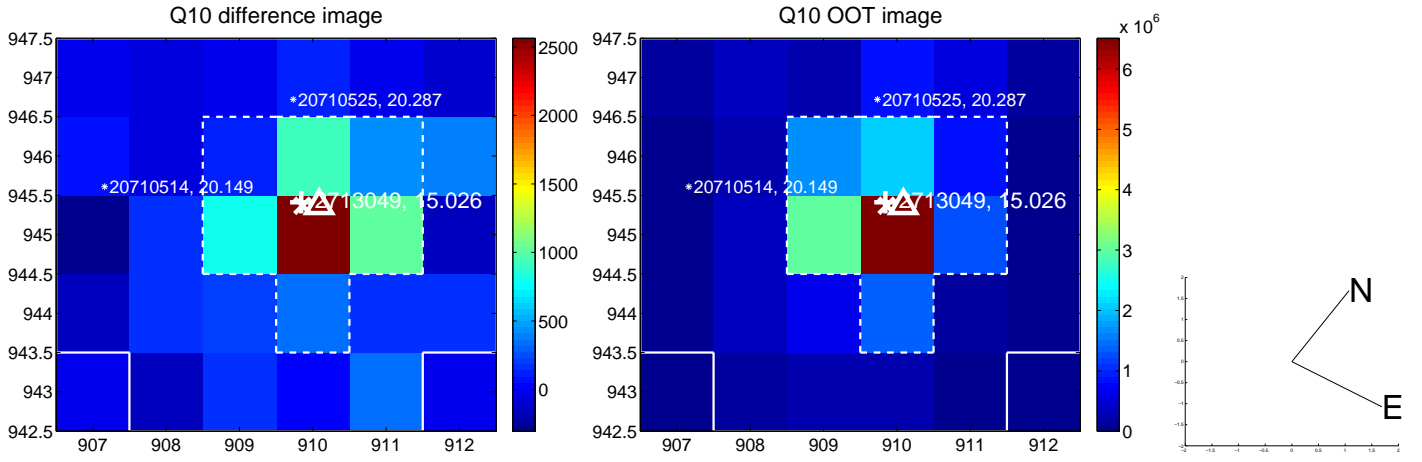
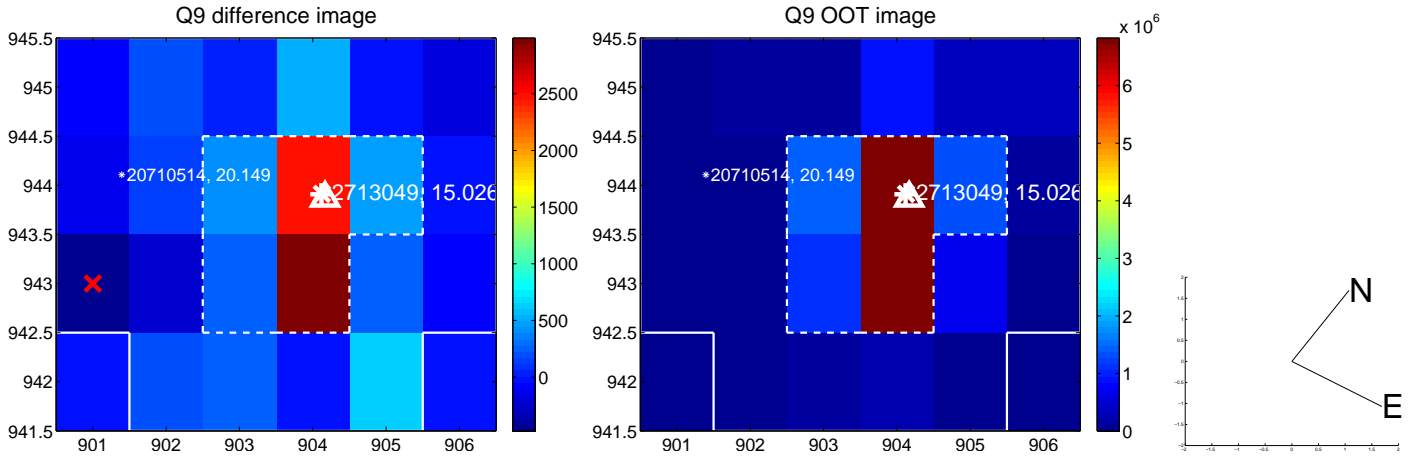
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



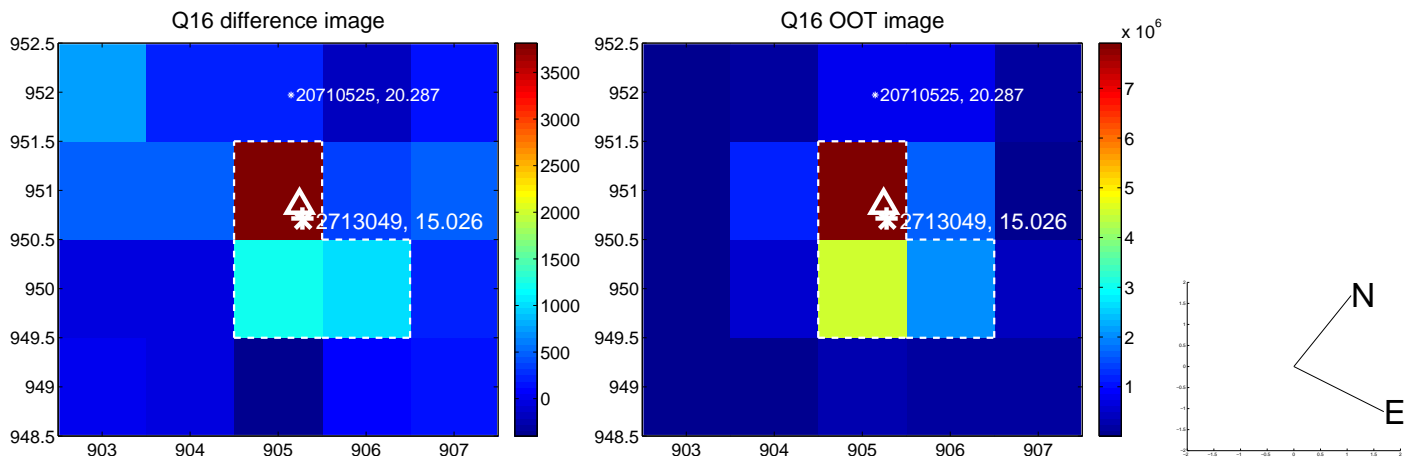
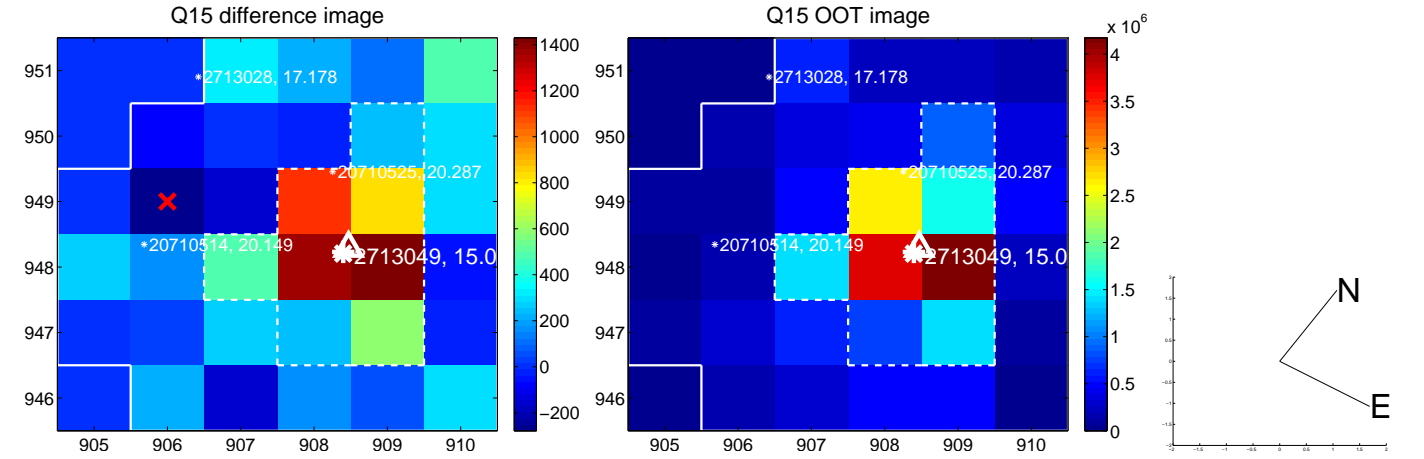
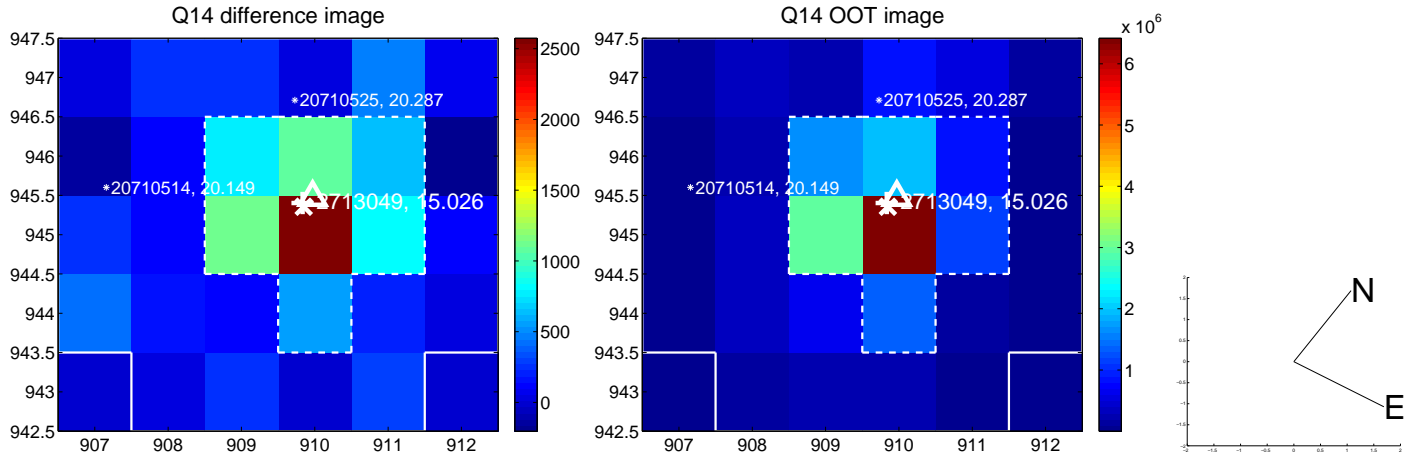
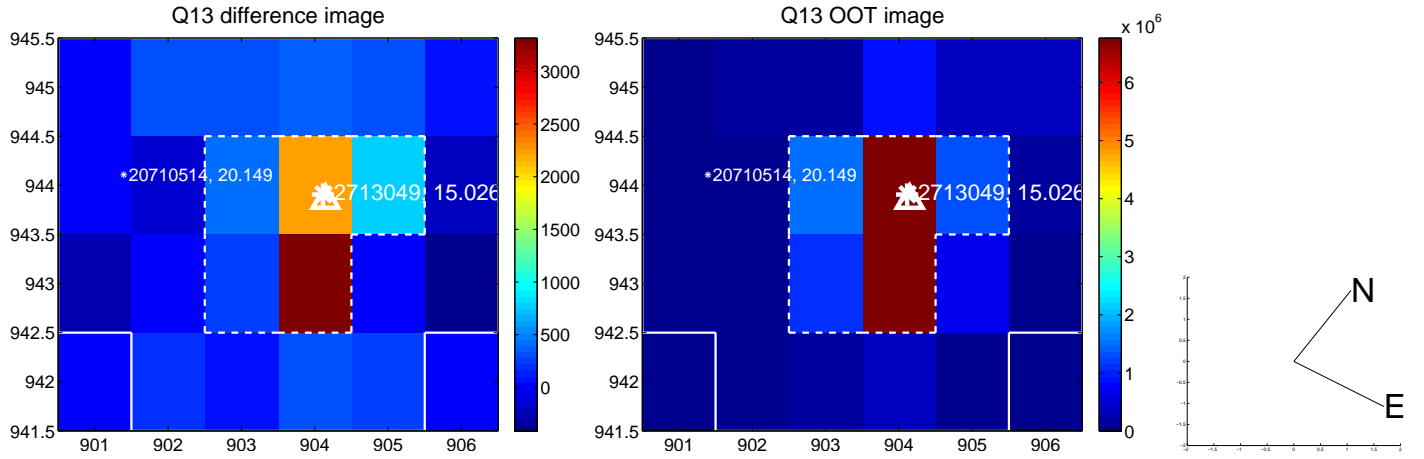
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



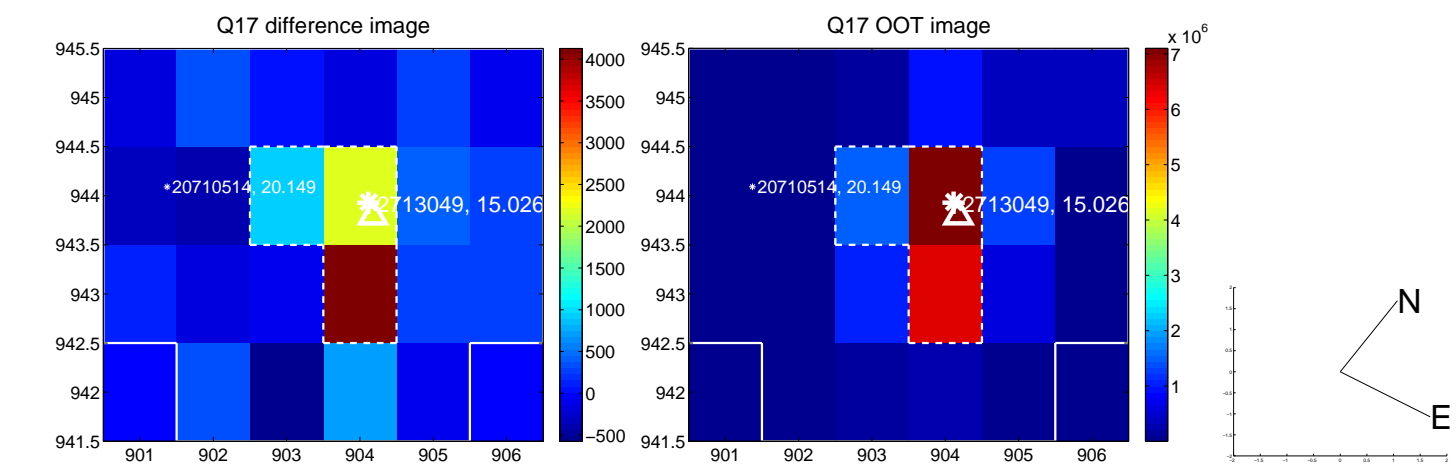
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



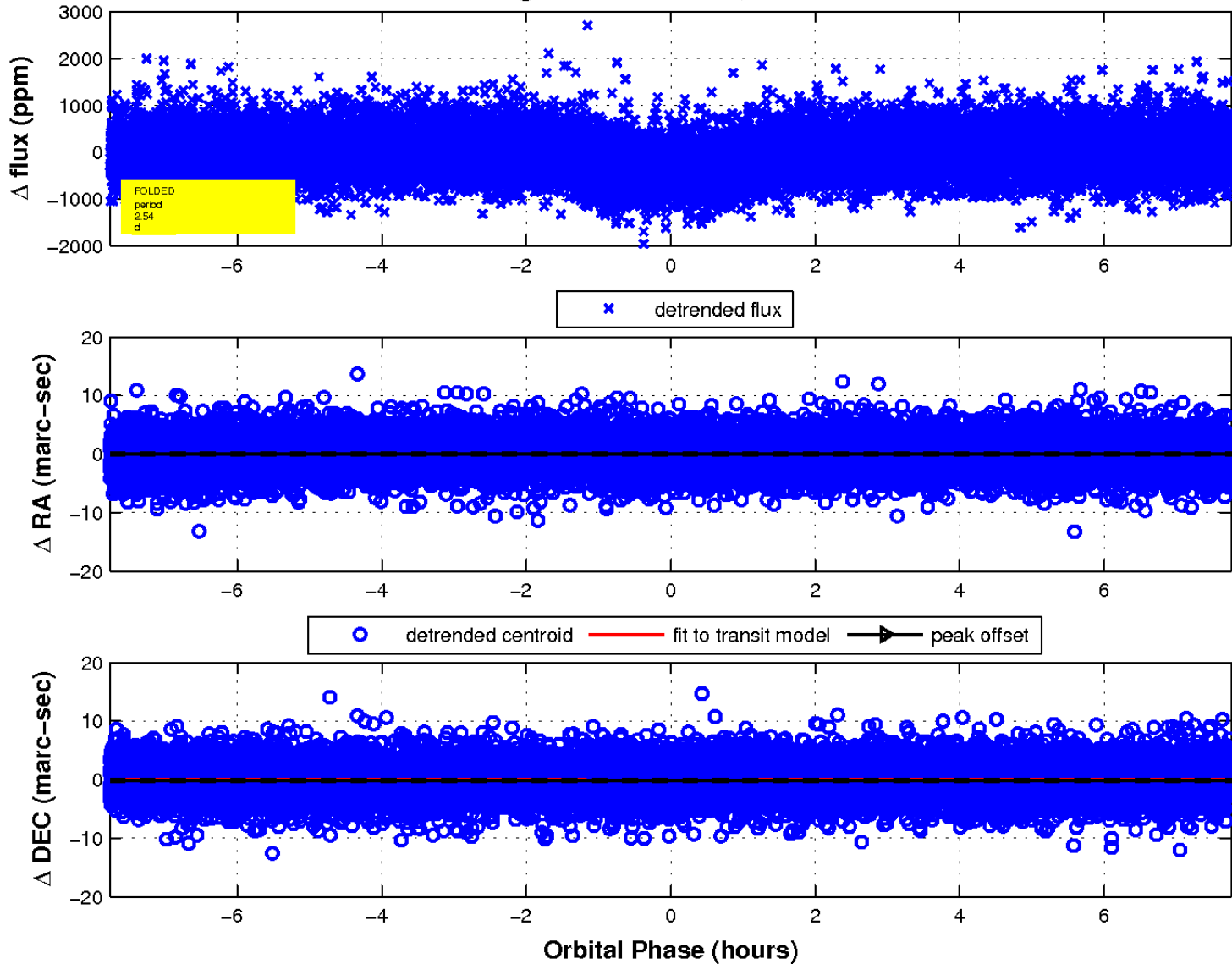
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

