

KIC 010025929

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})
010025929-01	OBS	No	1.630938	132.898894	9.8	8.457	7.9	7.7	2.21	9051	0.71	23806.31

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010025929-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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

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

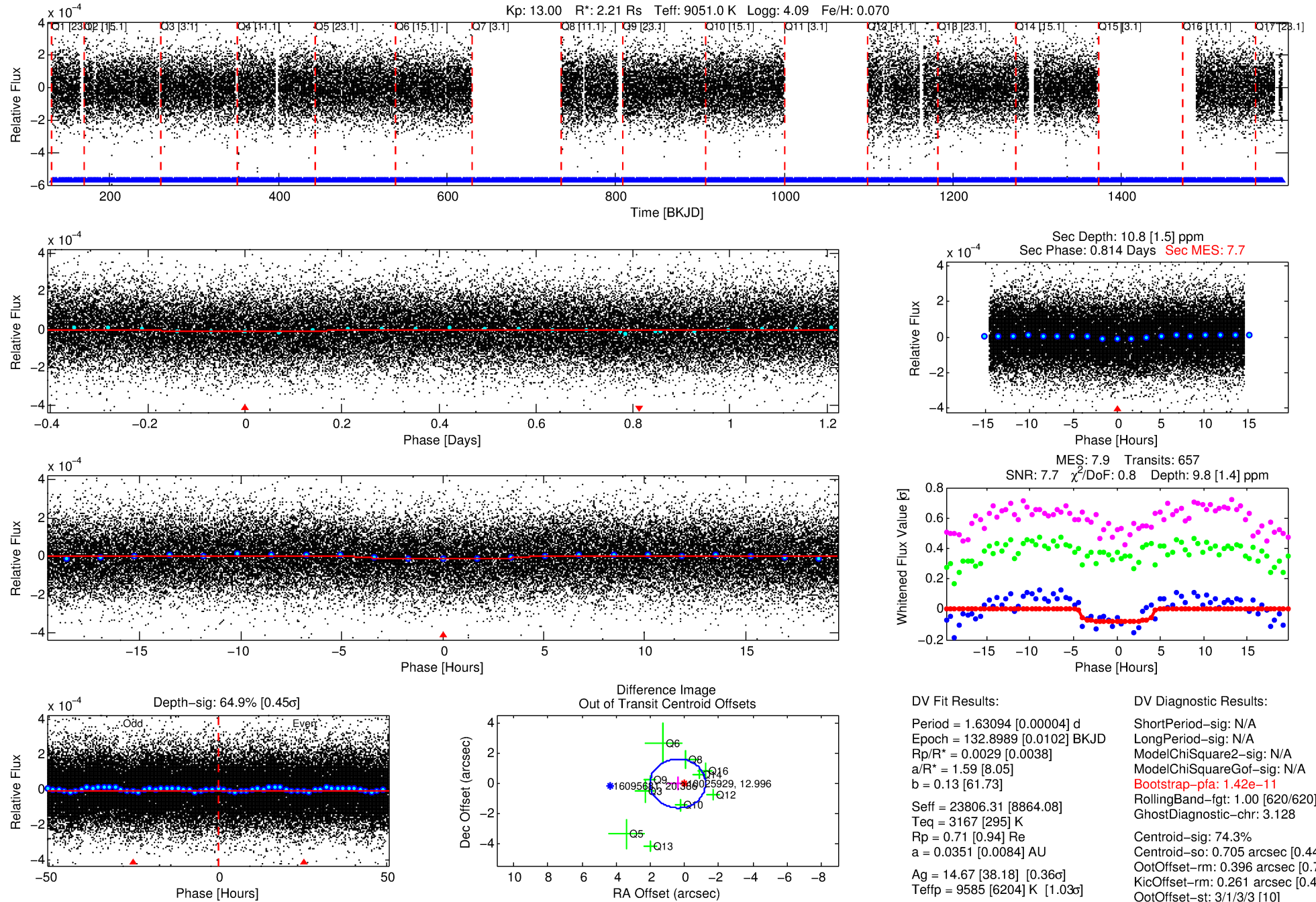
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010025929-01

No Significant Match Found

DV One-Page Summary

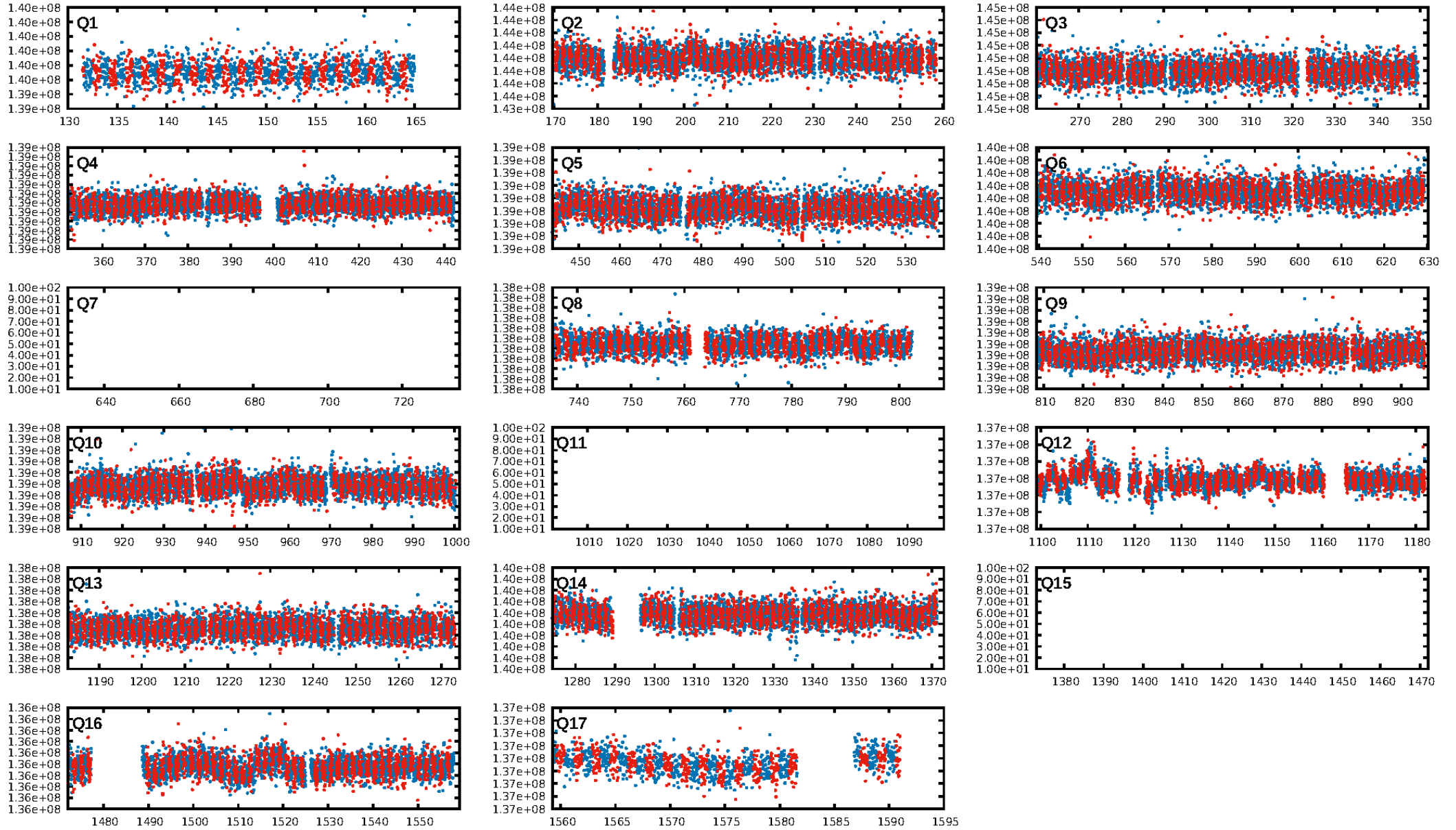
KIC: 10025929 Candidate: 1 of 1 Period: 1.631 d



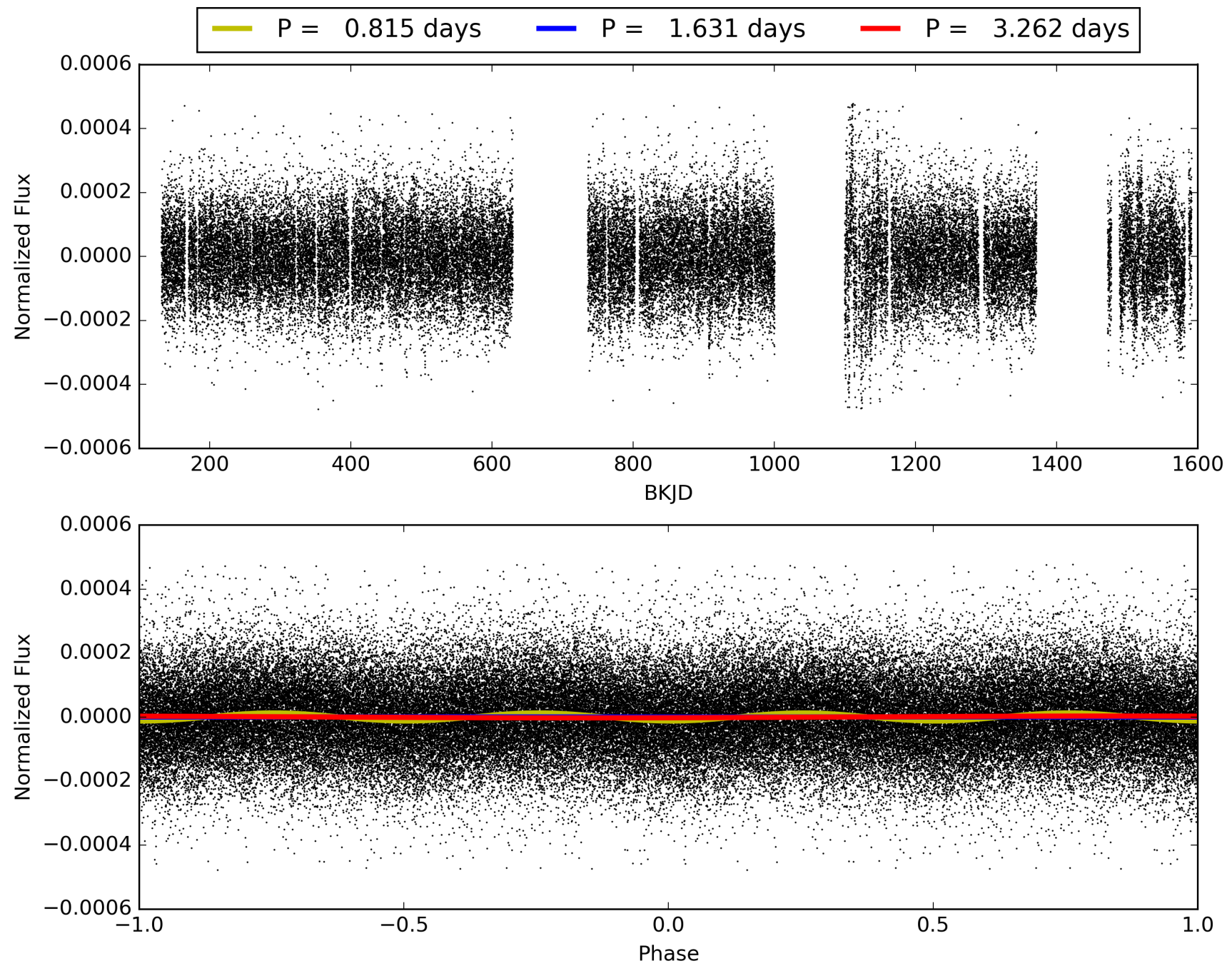
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 09:26:43 Z

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

TCE 010025929-01, PDC Light Curves

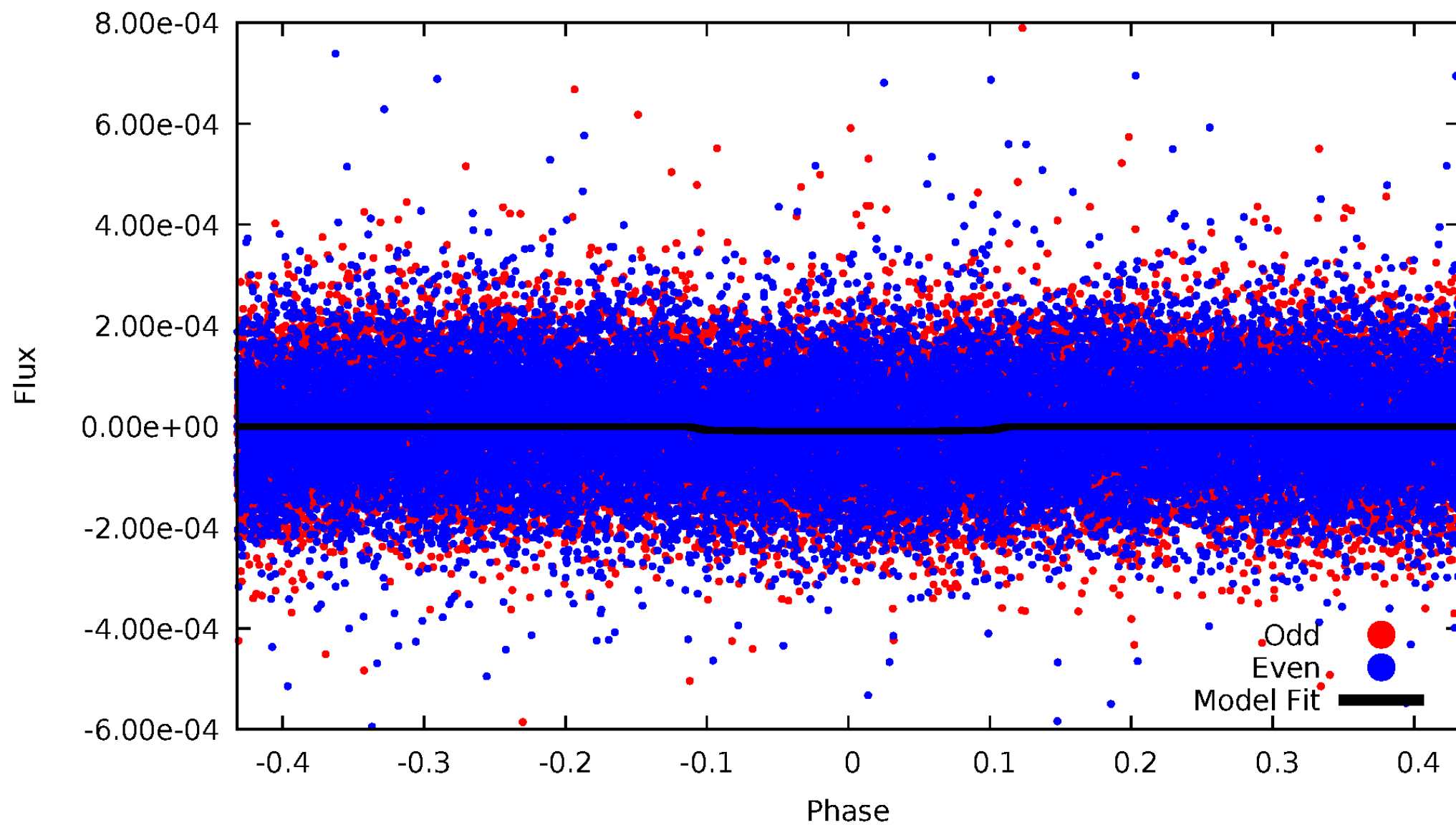


TCE 010025929-01



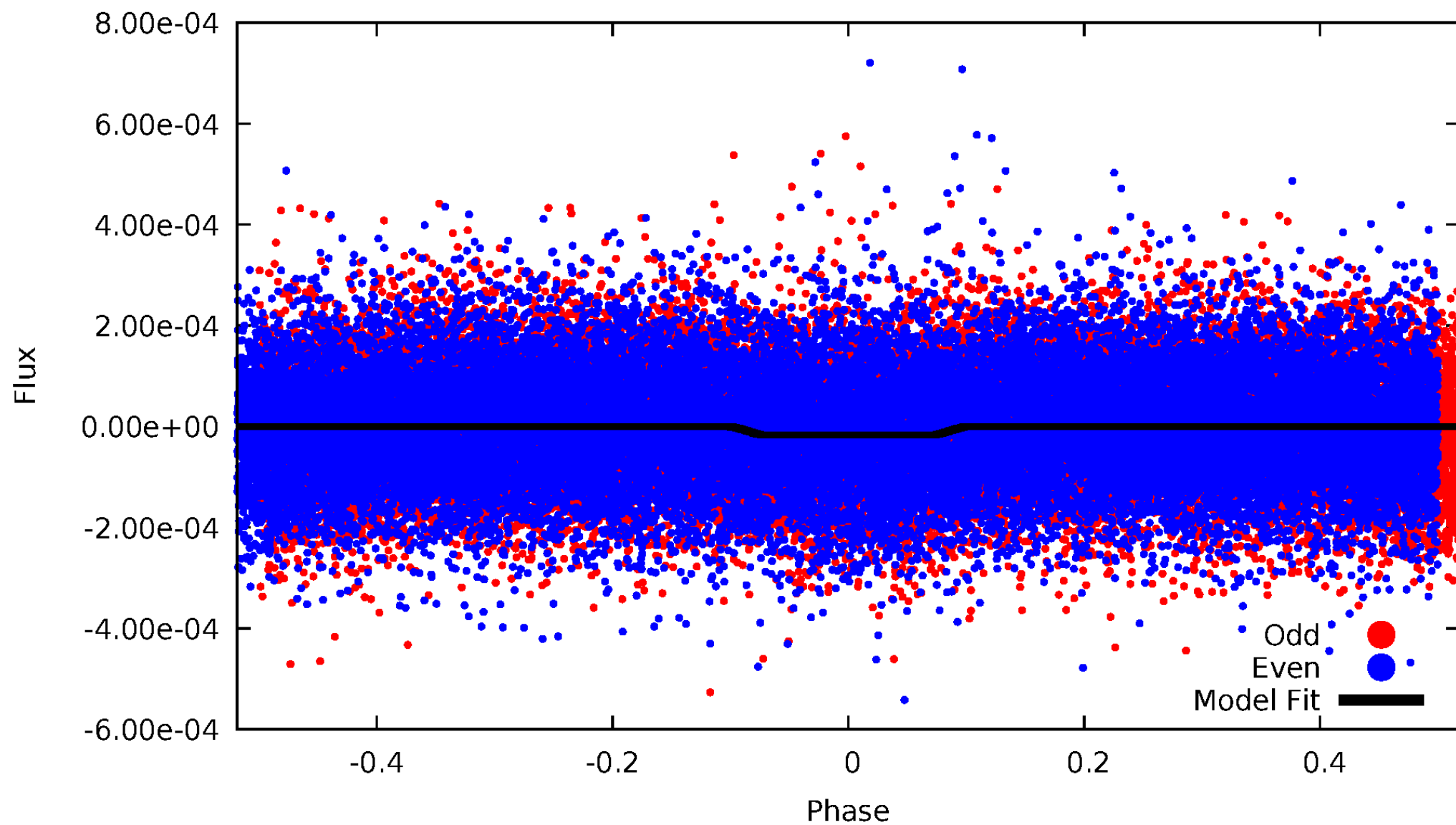
DV Odd/Even

TCE 010025929-01



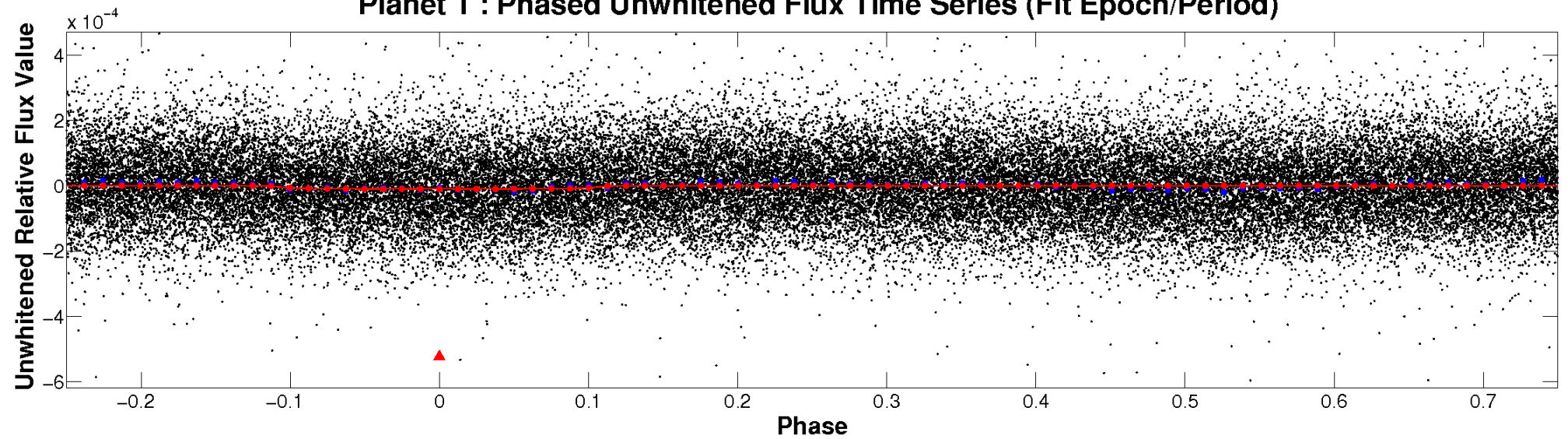
ALT Odd/Even

TCE 010025929-01

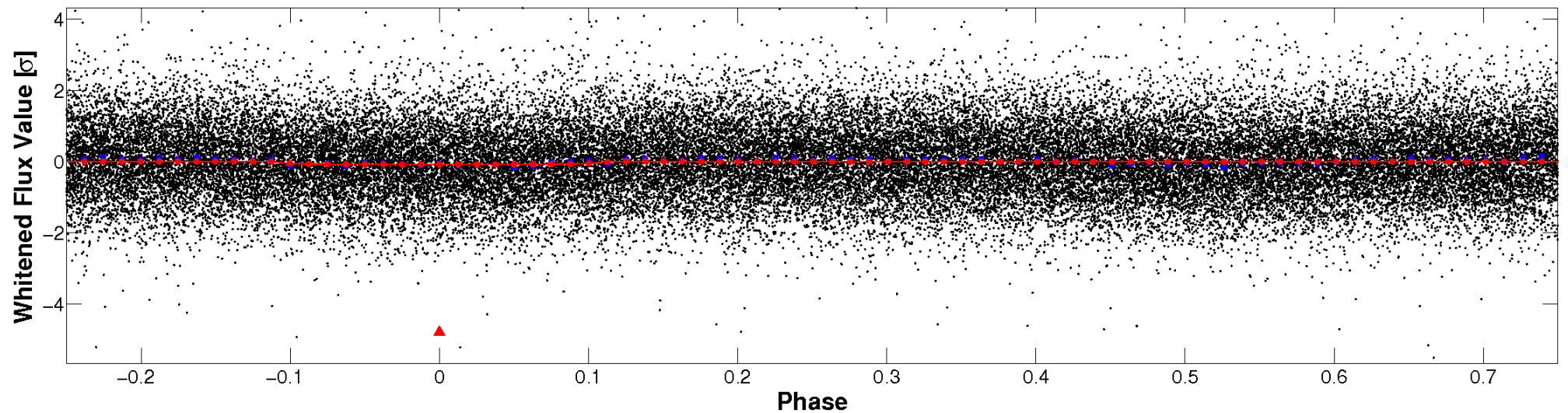


Non-Whitened Vs. Whitened Light Curve

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

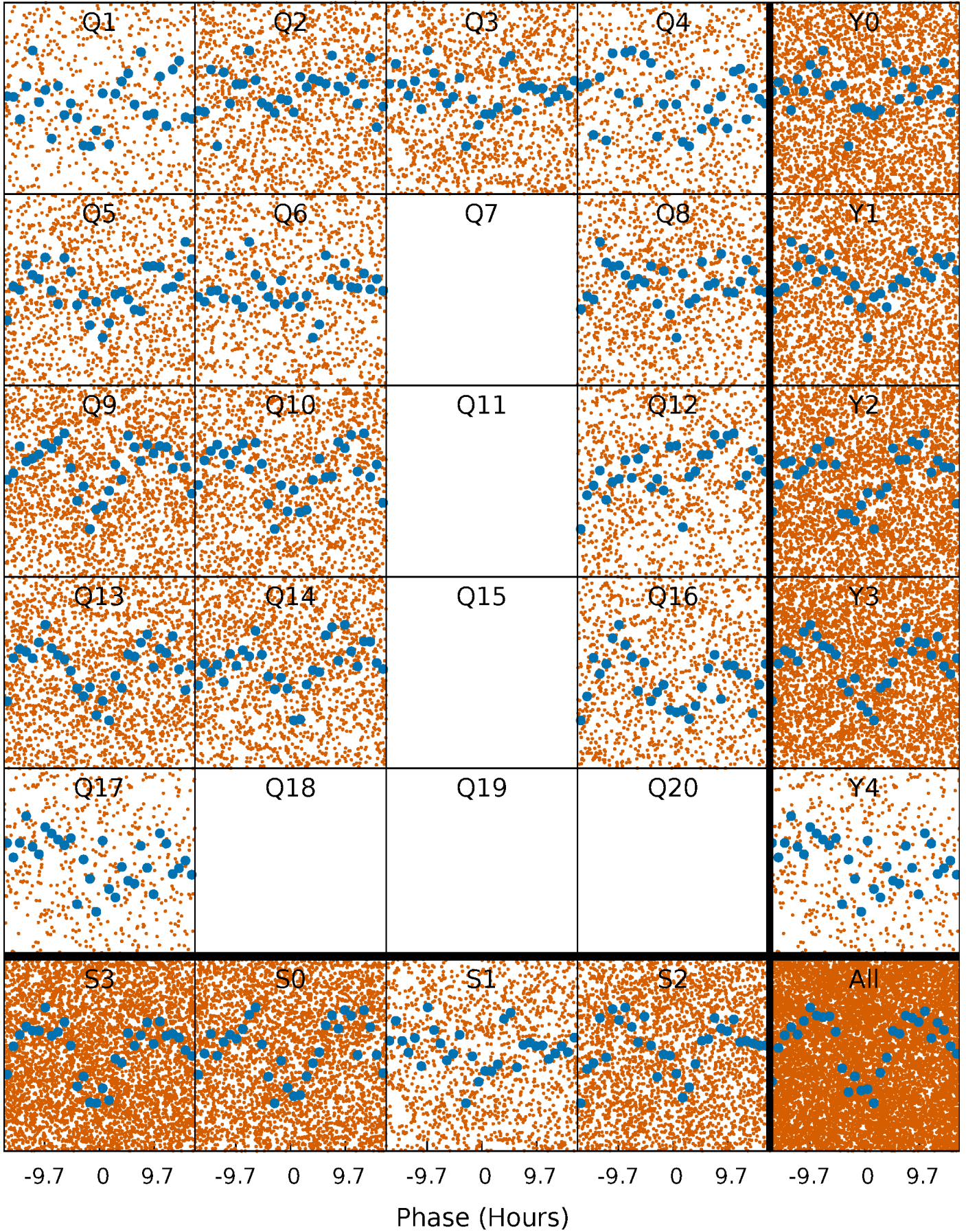


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



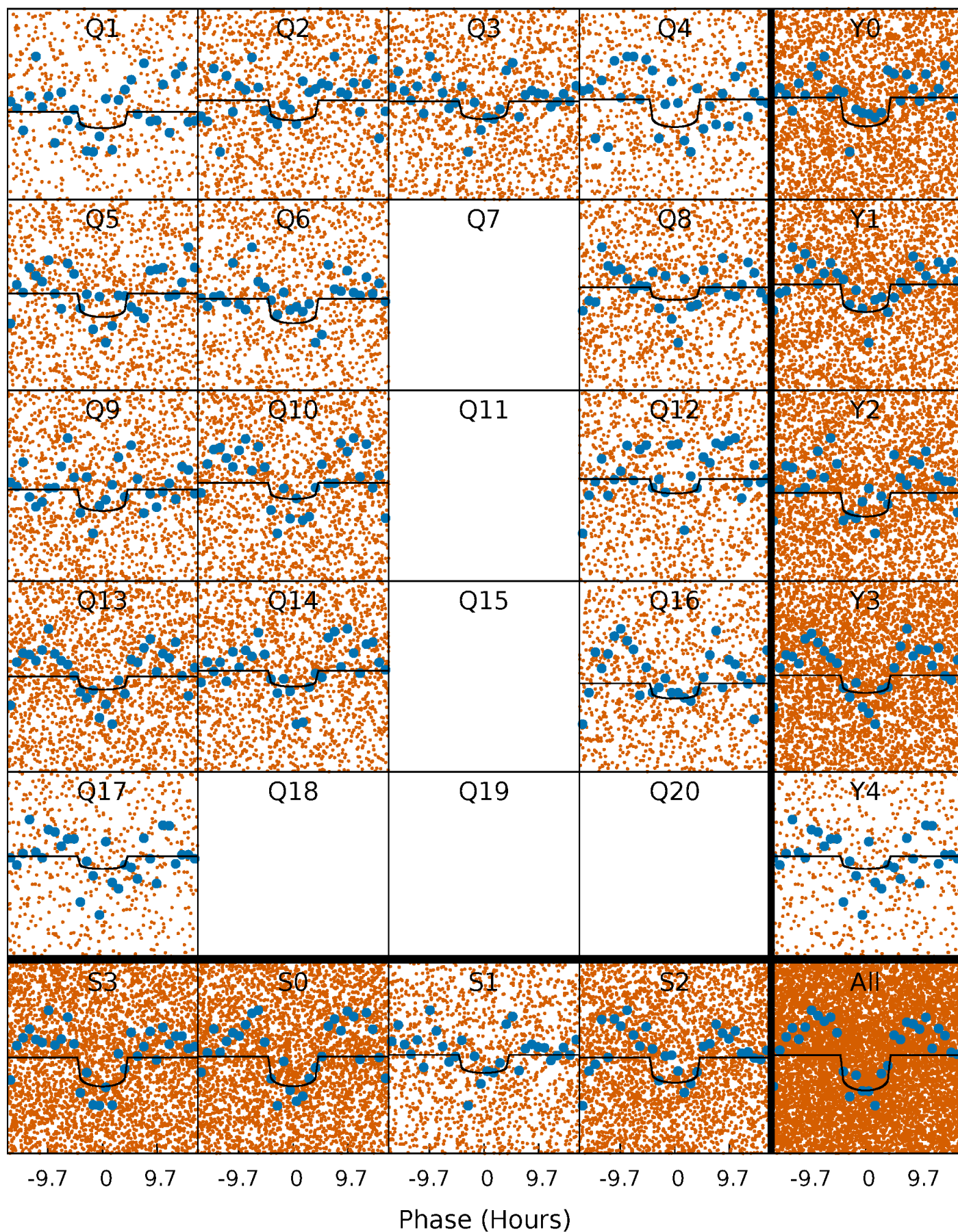
PDC Quarter-Phased Transit Curves

TCE 010025929-01 P= 1.630938 Days $T_0=132.898894$ (BKJD)



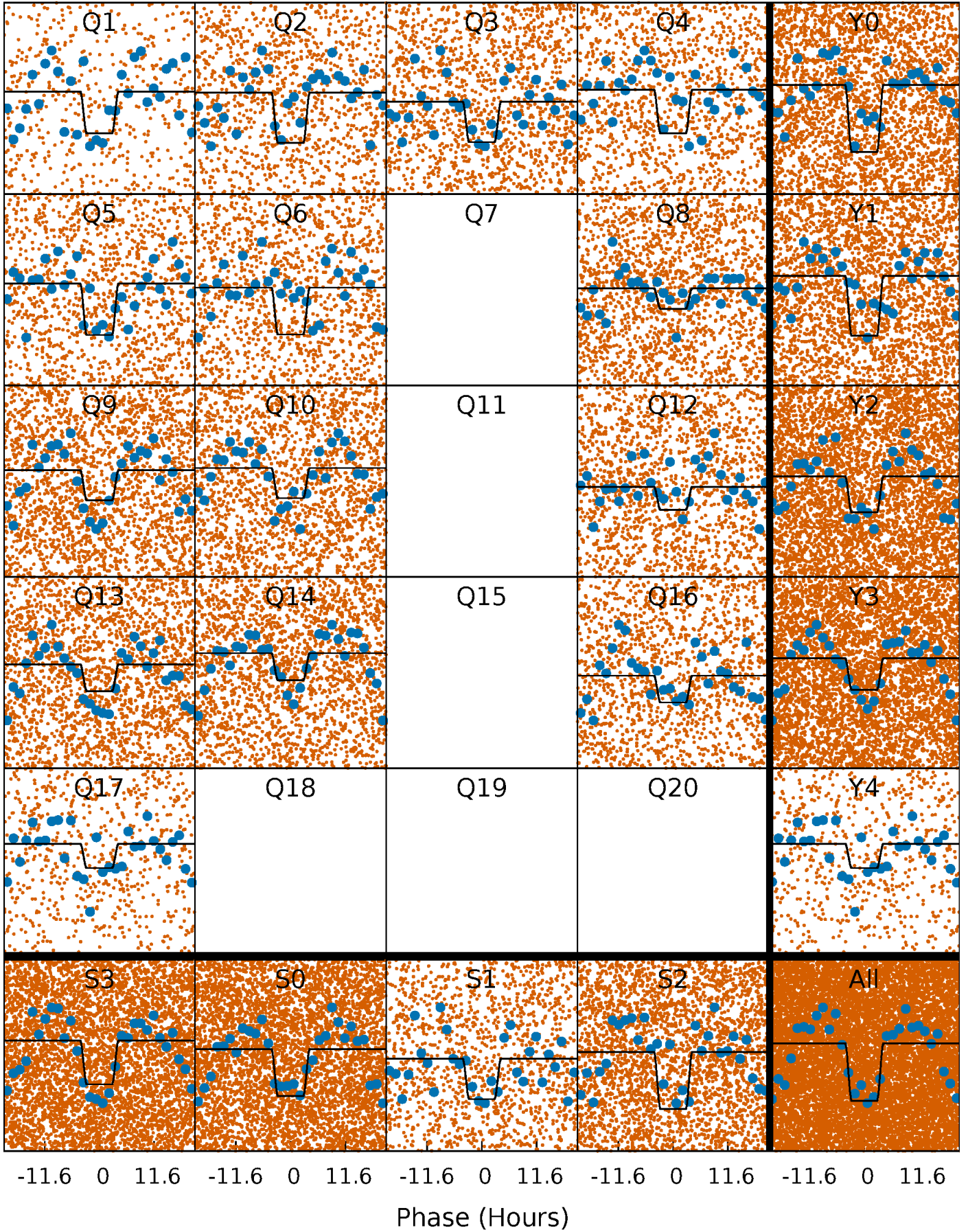
DV Quarter-Phased Transit Curves

TCE 010025929-01 P= 1.630938 Days $T_0=132.898894$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

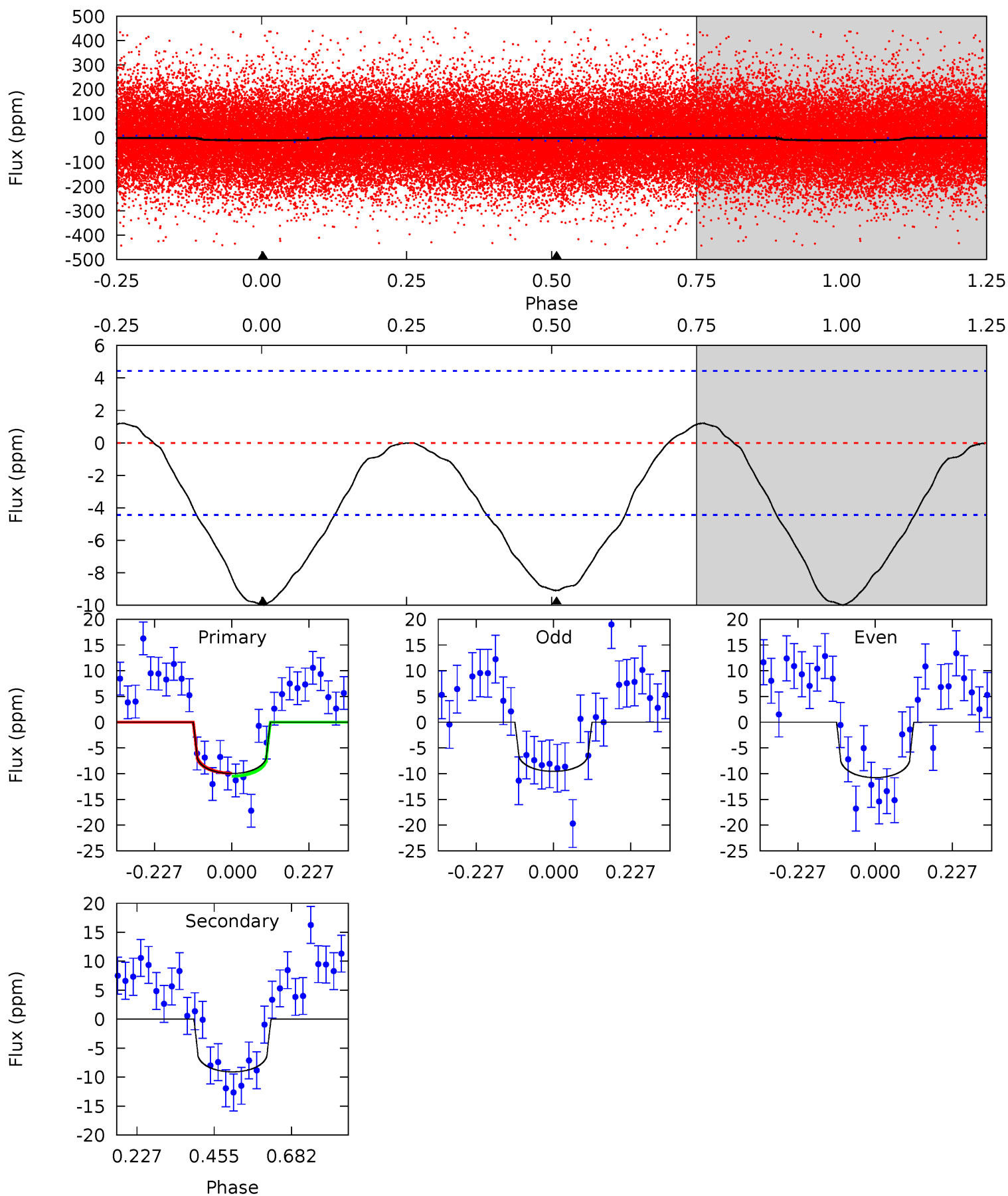
TCE 010025929-01 P= 1.631048 Days $T_0=132.839355$ (BKJD)



DV Model-Shift Uniqueness Test

010025929-01, P = 1.630938 Days, E = 131.267956 Days

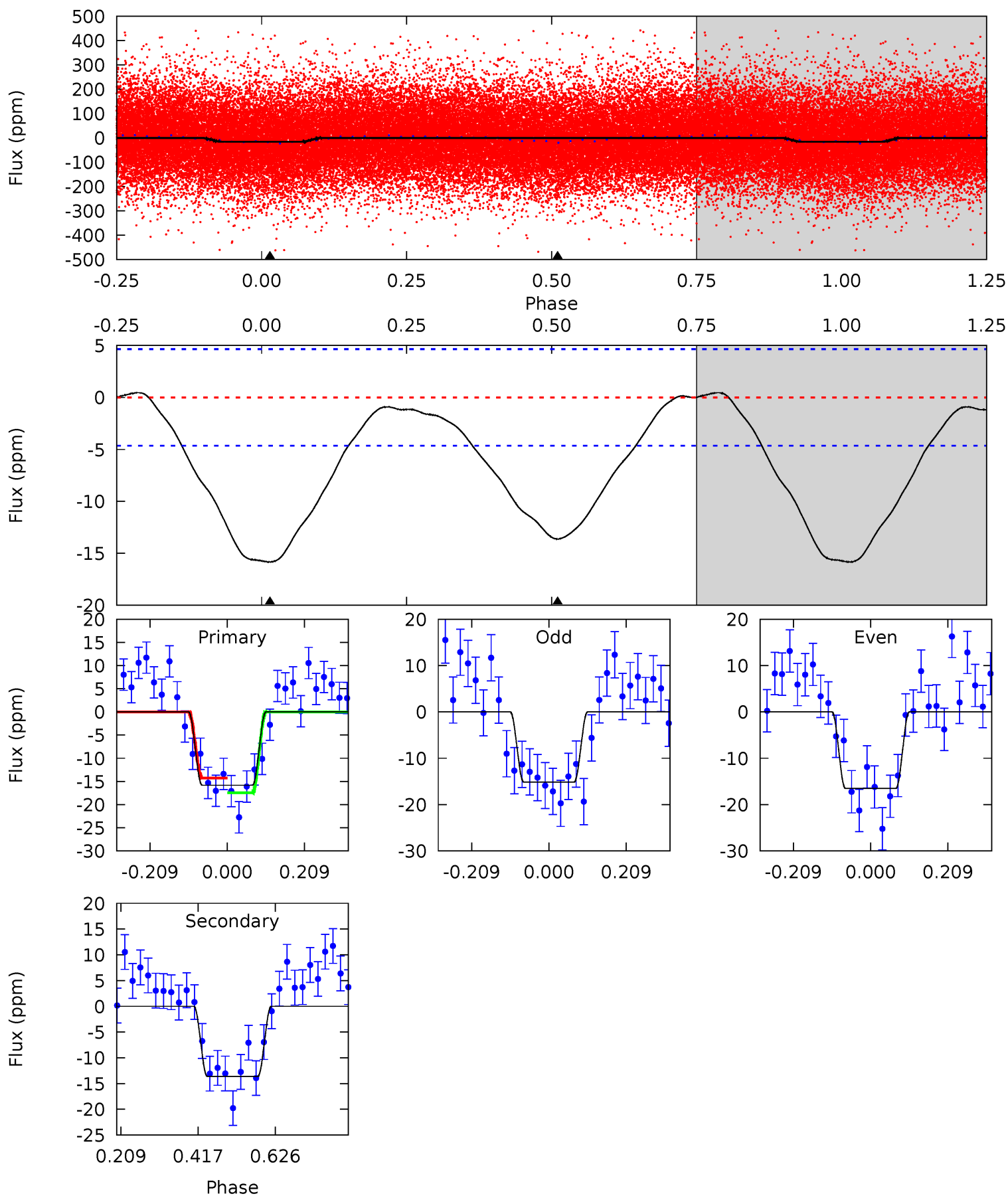
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.87	9.00	0	0	4.39	1.21	0.59	9.87	9.87	9.00	9.00	0.60	1.00	0.11	0.29



Alt Model-Shift Uniqueness Test

010025929-01, P = 1.631048 Days, E = 131.208307 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.0	12.9	0	0	4.41	1.26	0.75	15.0	15.0	12.9	12.9	0.65	0.91	0.03	1.52



Stellar Parameters For KIC 010025929

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	9051^{+251}_{-430}	$4.086^{+0.160}_{-0.160}$	$0.070^{+0.200}_{-0.650}$	$2.210^{+0.681}_{-0.619}$	$2.170^{+0.372}_{-0.605}$	$0.283^{+0.296}_{-0.126}$
	+3%/-5%	+4%/-4%	+286%/-929%	+31%/-28%	+17%/-28%	+104%/-44%
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 010025929-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-9 ± 1	$0.94^{+0.88}_{-0.65}$	4400^{+341}_{-329}	7476^{+12335}_{-2227}	$6.871^{+69.669}_{-5.021}$
Alt.	-14 ± 1	$1.19^{+0.85}_{-0.73}$	4411^{+326}_{-335}	7261^{+7294}_{-1807}	$6.211^{+33.779}_{-4.000}$

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

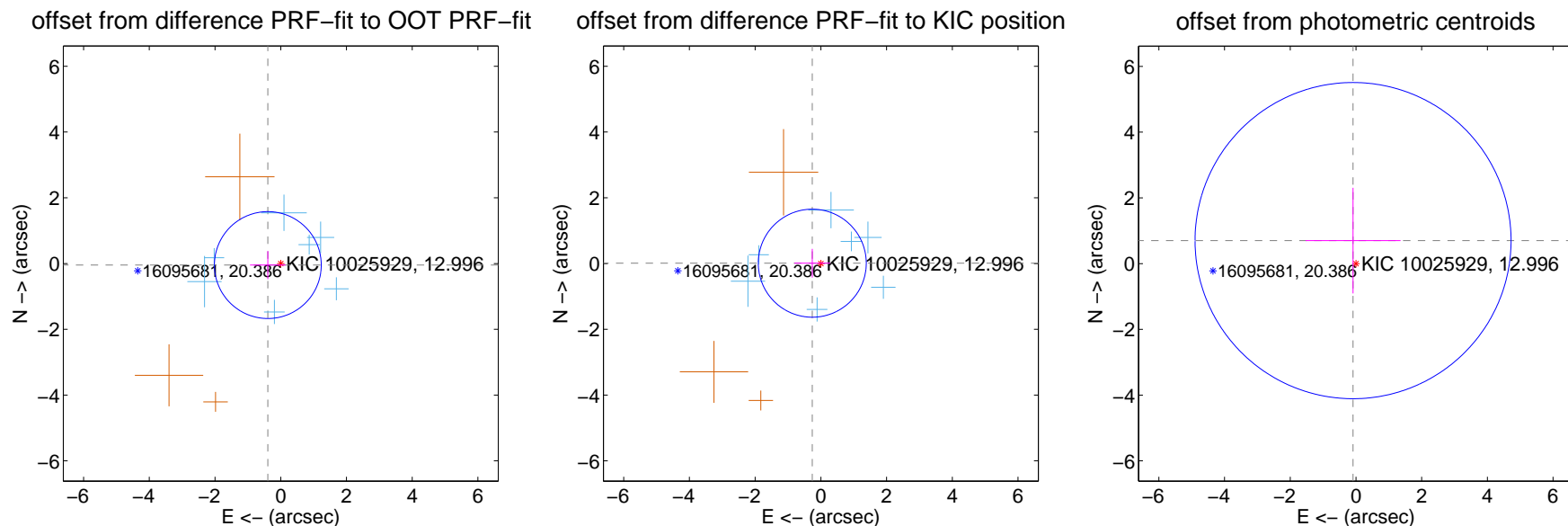
DV Centroid Data

Supplemental centroid analysis for 010025929-01. Kepler magnitude: 13.00. Transit SNR 7.66

There are 7 quarters with good PRF difference image offsets

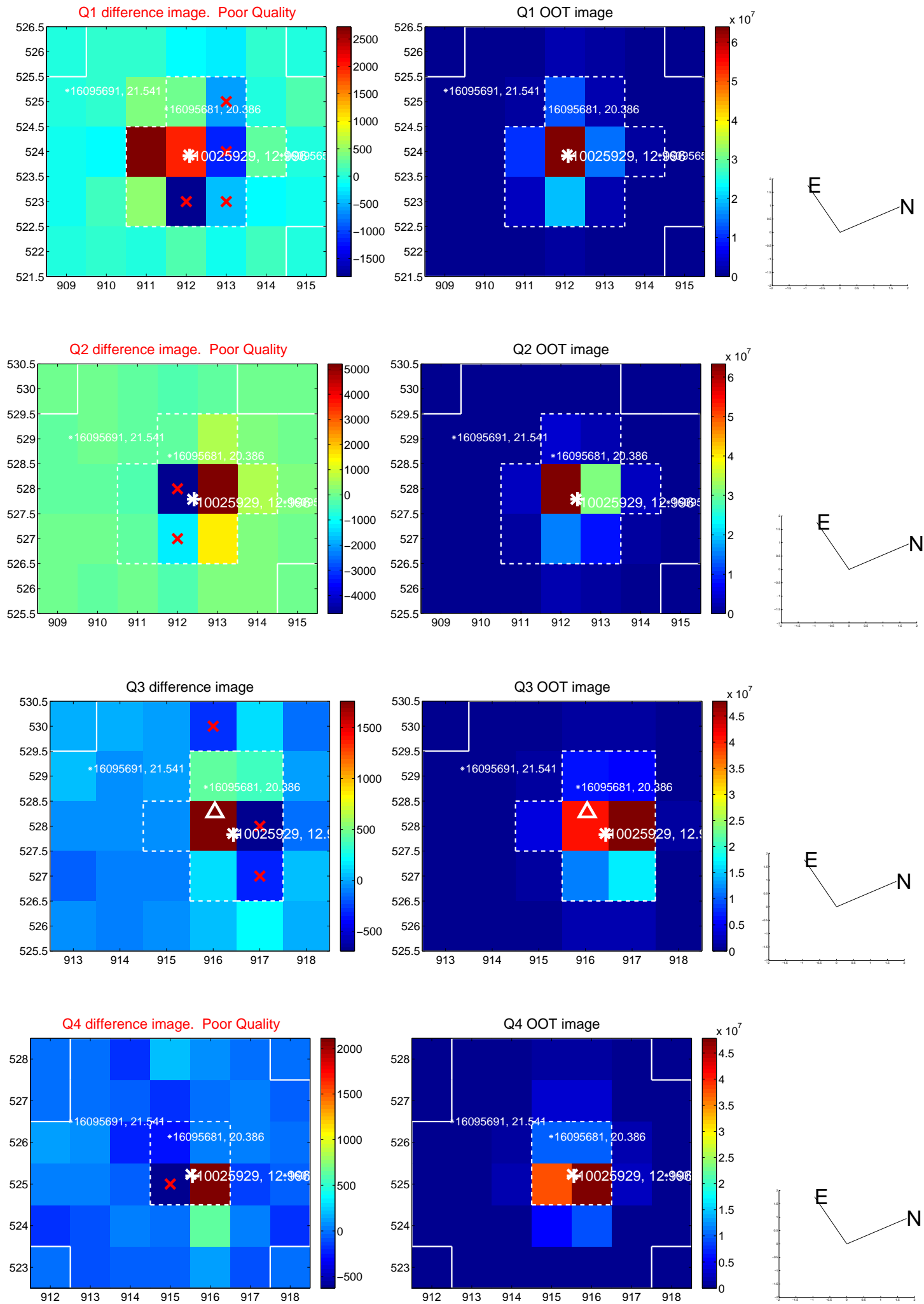
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.396 ± 0.542	0.73	0.393 ± 0.543	-0.046 ± 0.427
PRF-fit source offset from KIC position	0.261 ± 0.548	0.48	0.261 ± 0.548	0.010 ± 0.437
photometric centroid source offset	0.71 ± 1.60	0.44	0.09 ± 1.45	0.70 ± 1.61

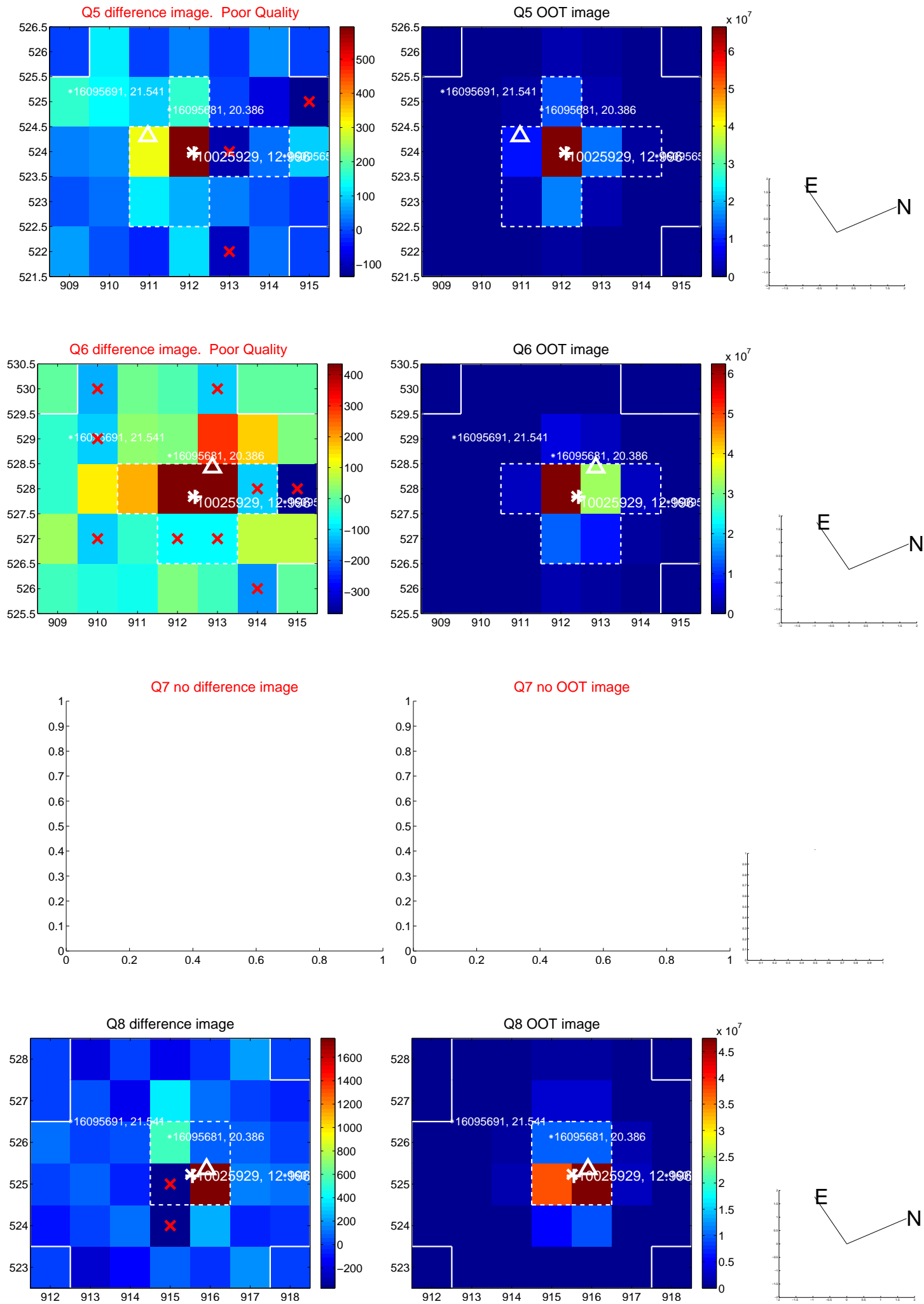


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

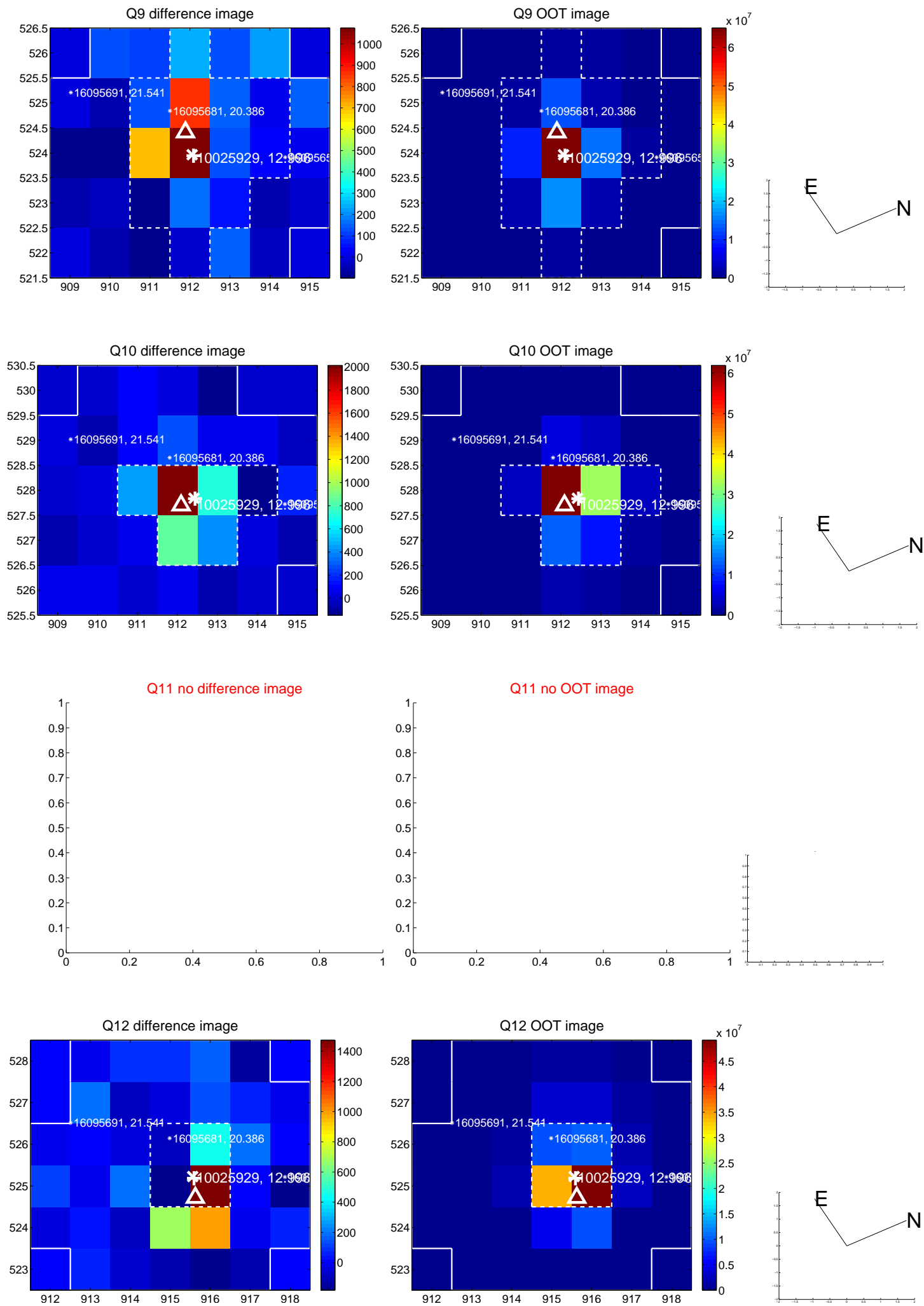
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



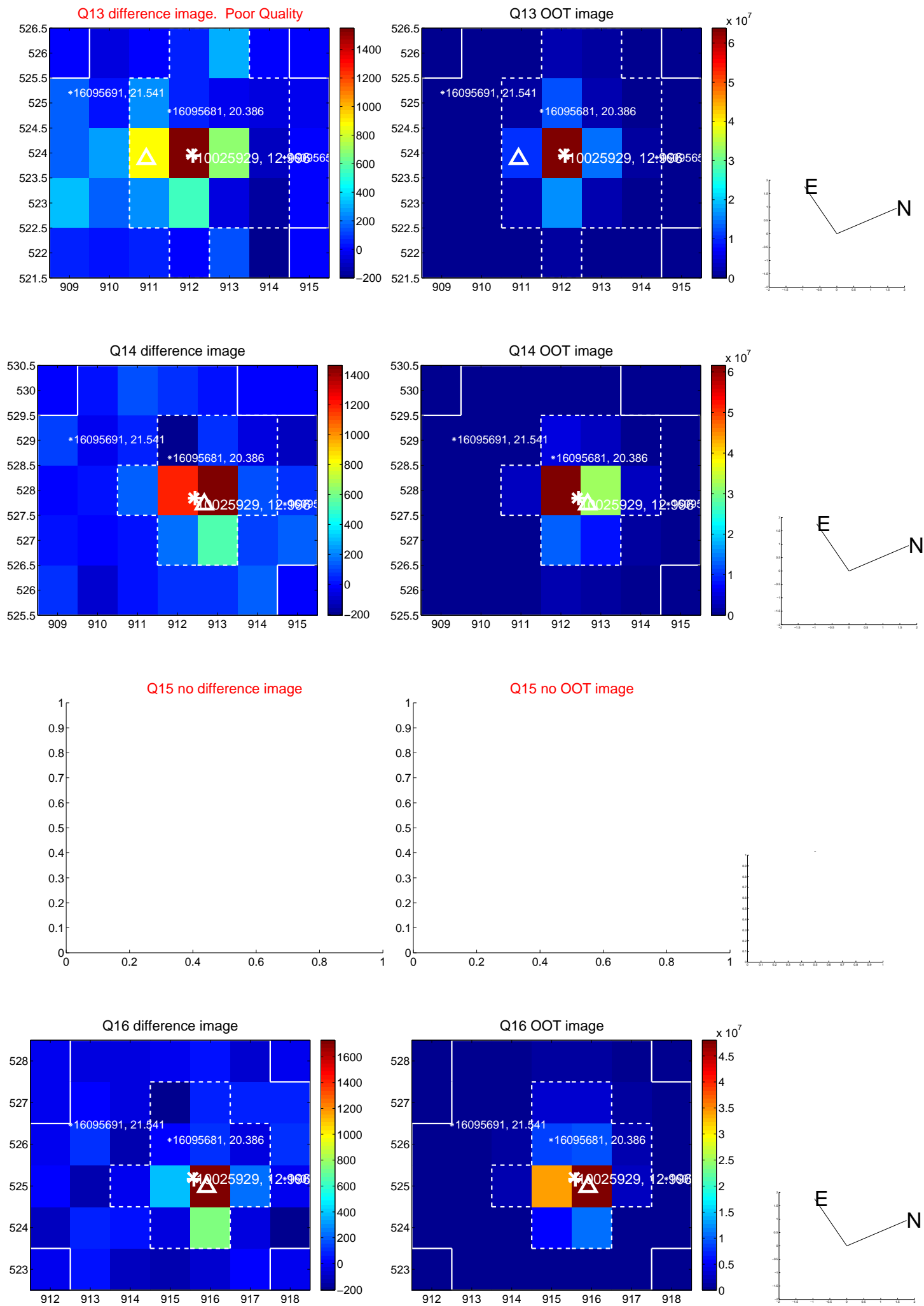
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



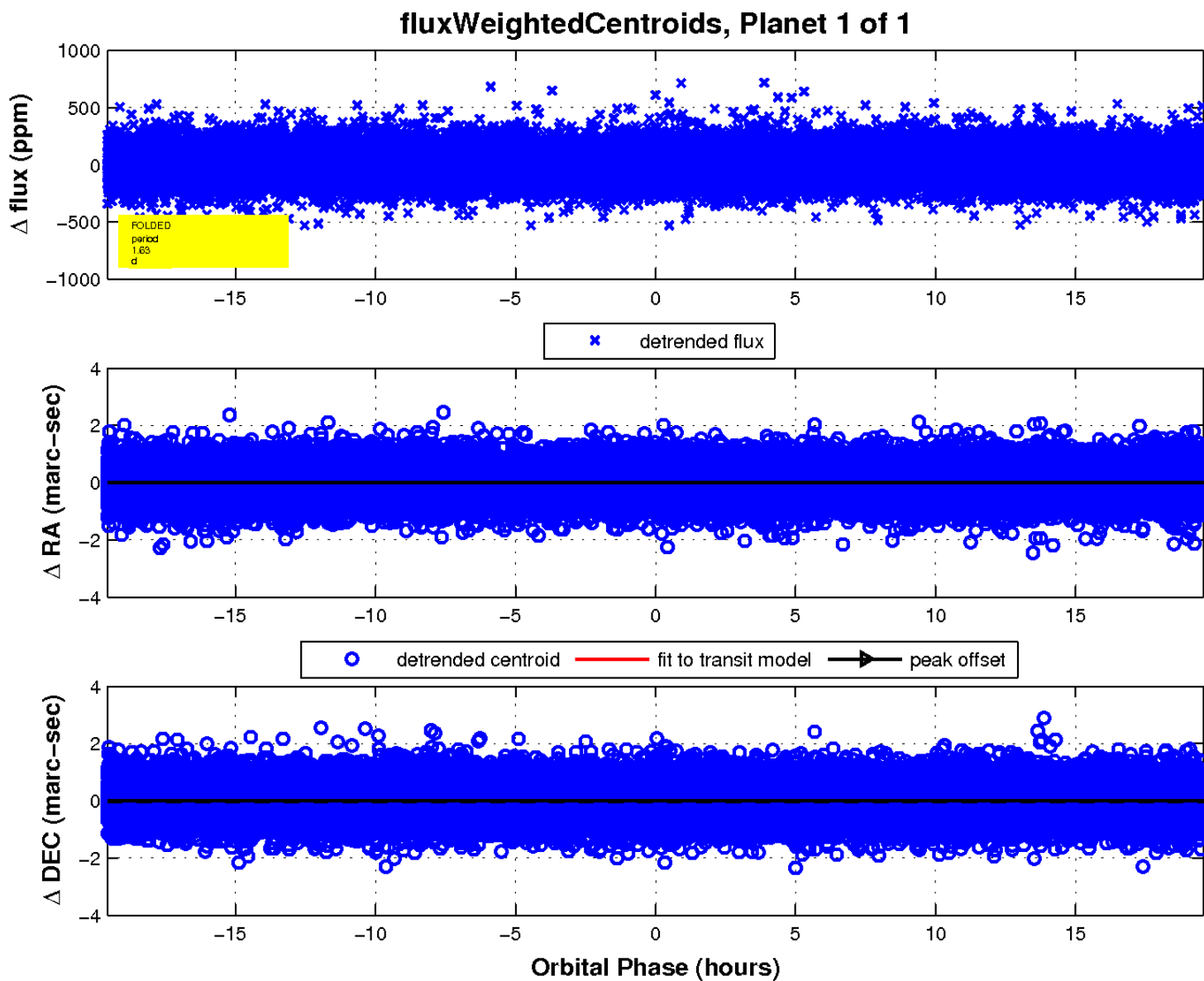
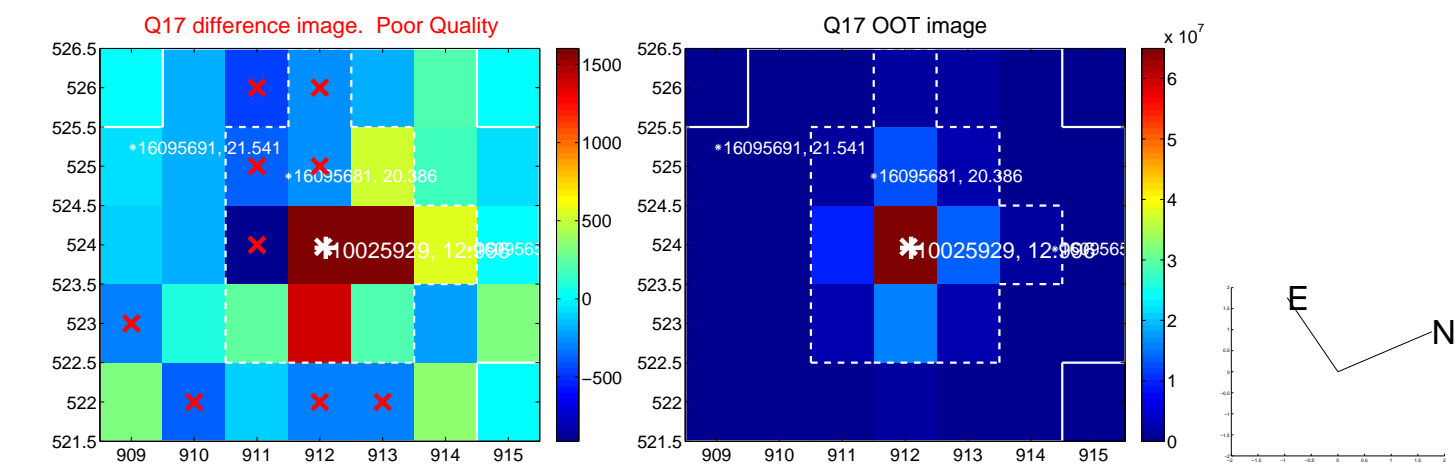
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

