

KIC 010923282

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})
010923282-01	OBS	No	10.926110	132.902046	30.4	30.537	8.8	8.8	0.86	6063	0.53	100.85

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010923282-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV

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

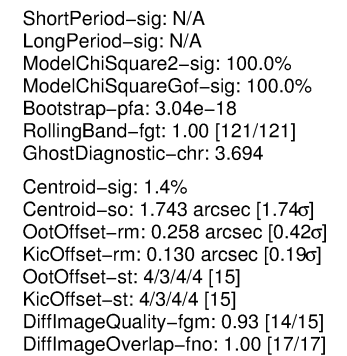
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

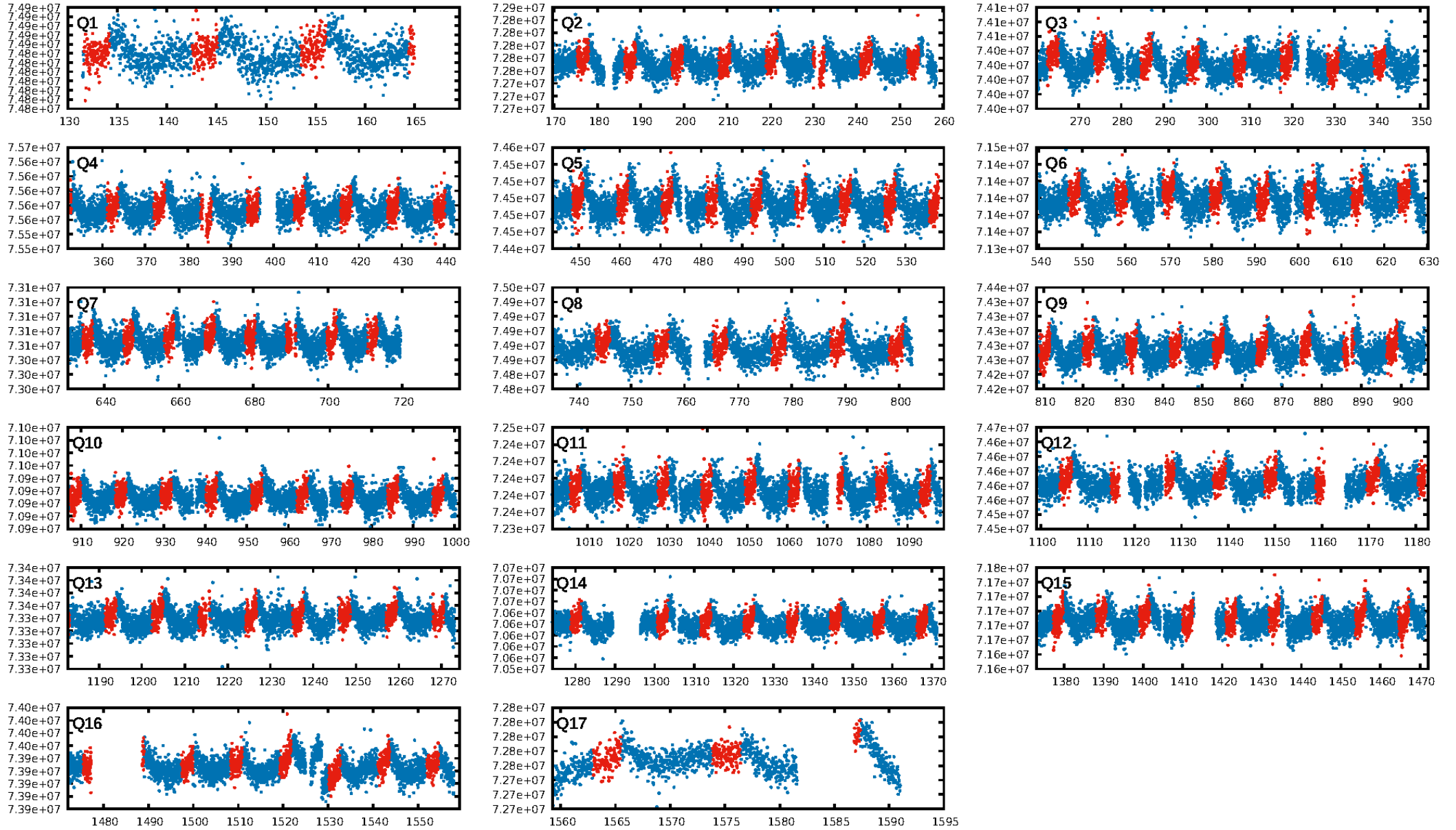
Ephemeris Match Information For 010923282-01

No Significant Match Found

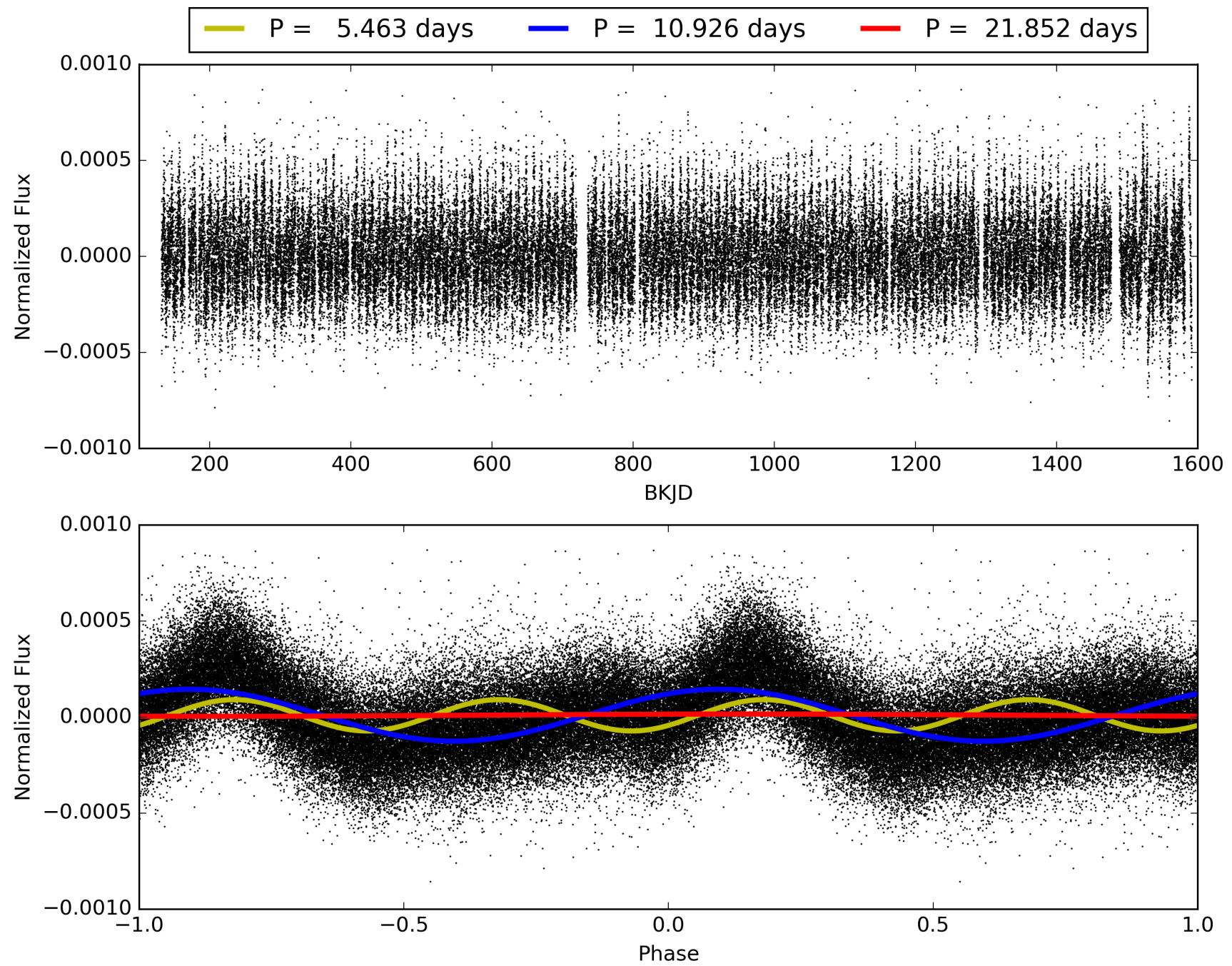
KIC: 10923282 Candidate: 1 of 1 Period: 10.926 d



TCE 010923282-01, PDC Light Curves

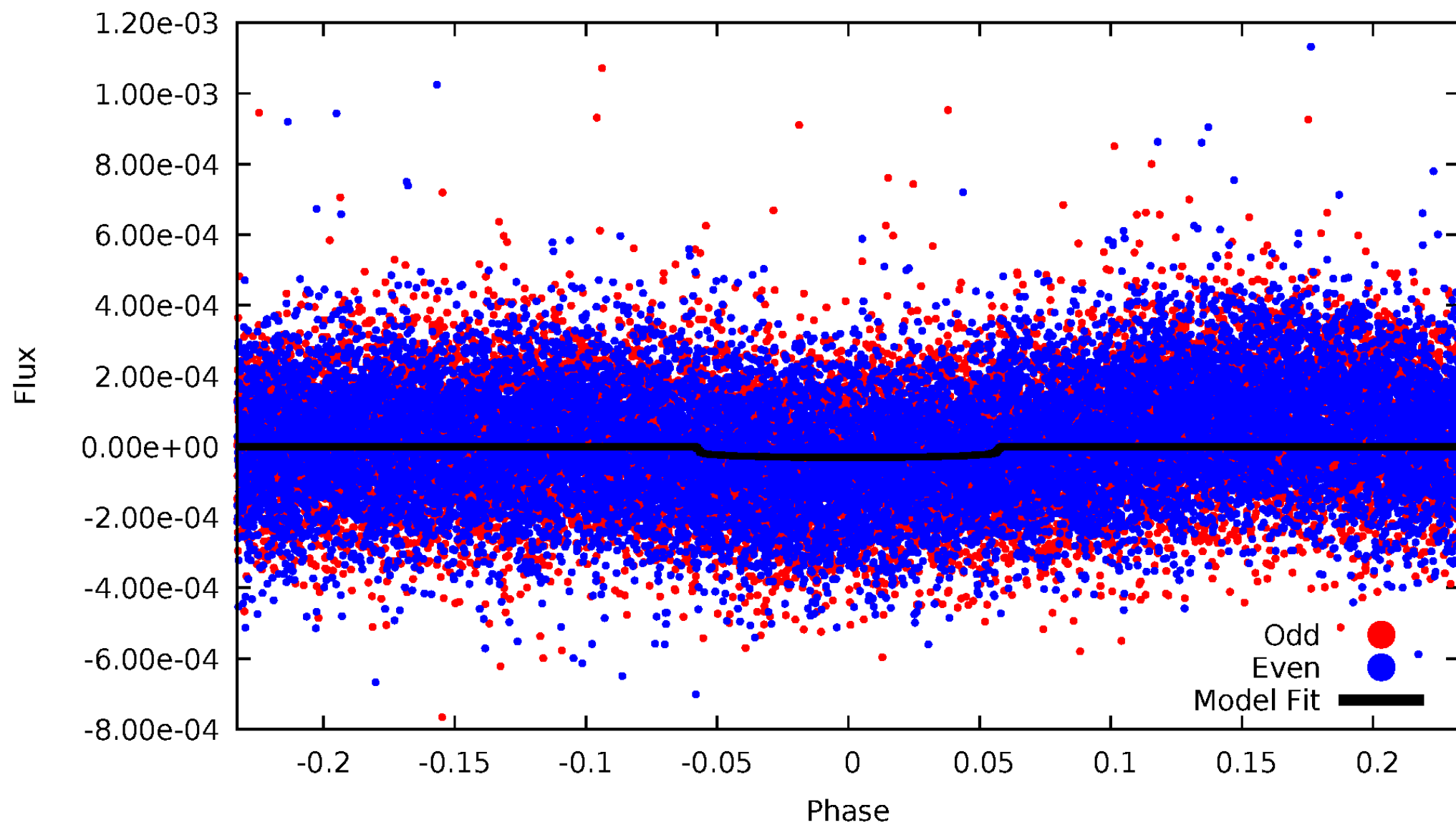


TCE 010923282-01



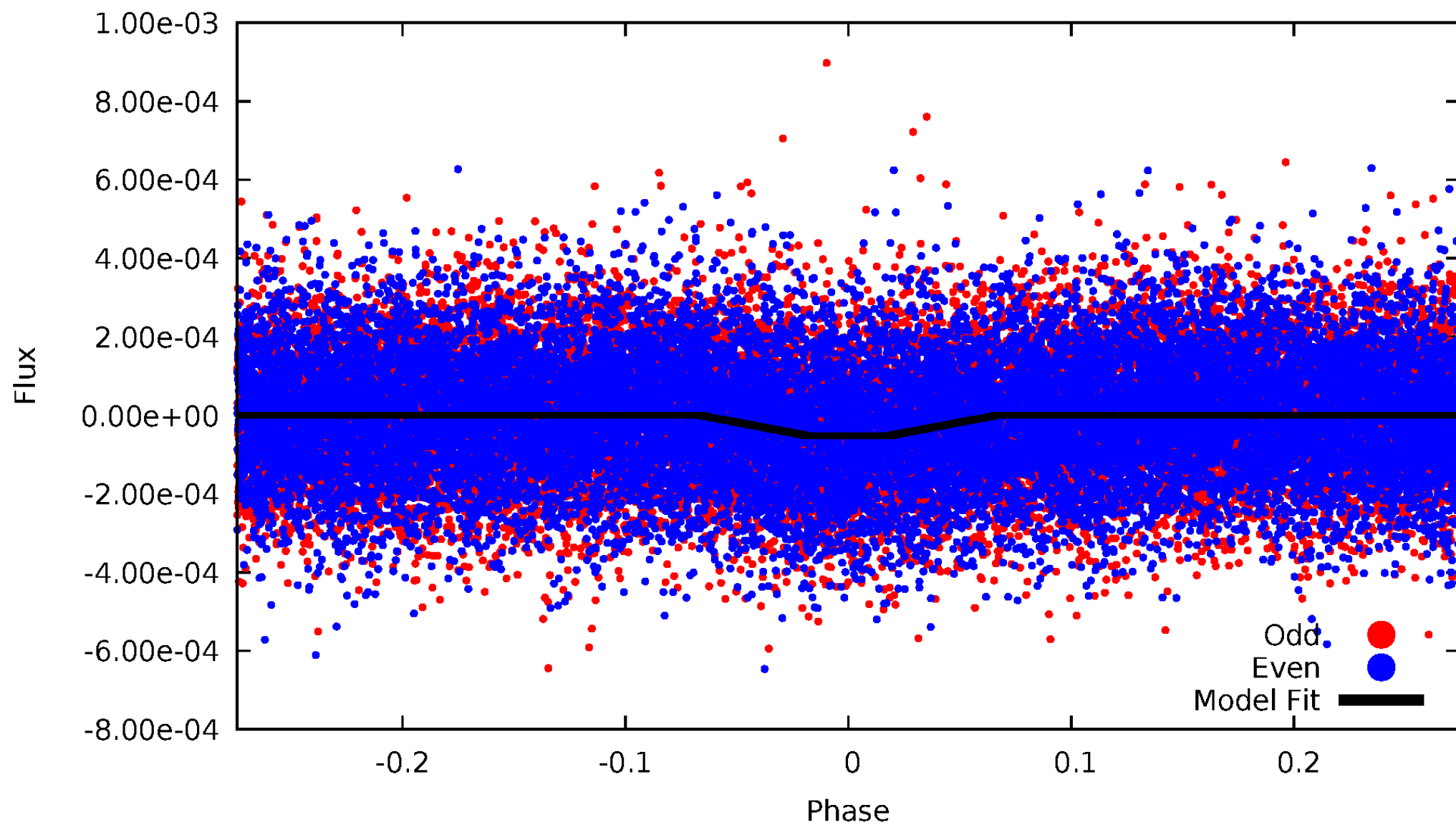
DV Odd/Even

TCE 010923282-01

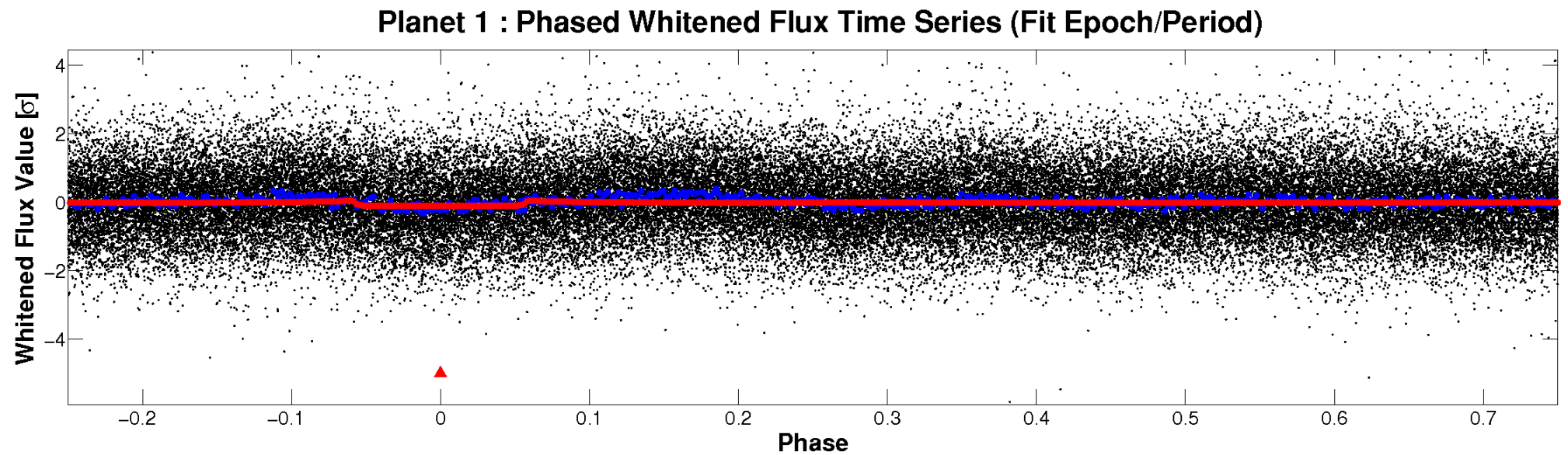
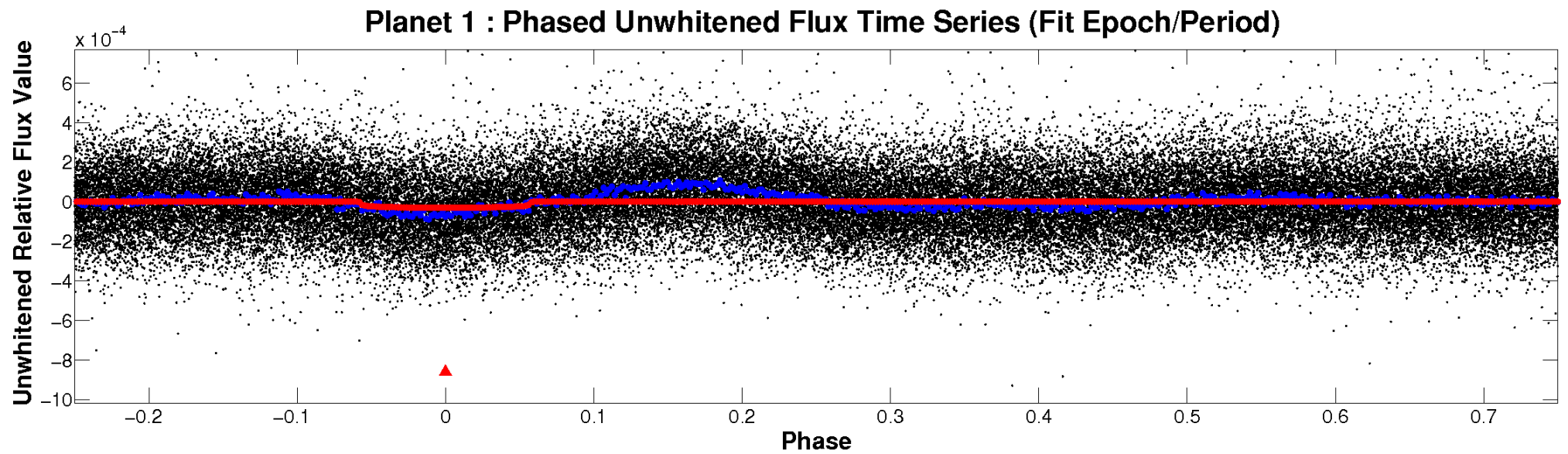


ALT Odd/Even

TCE 010923282-01

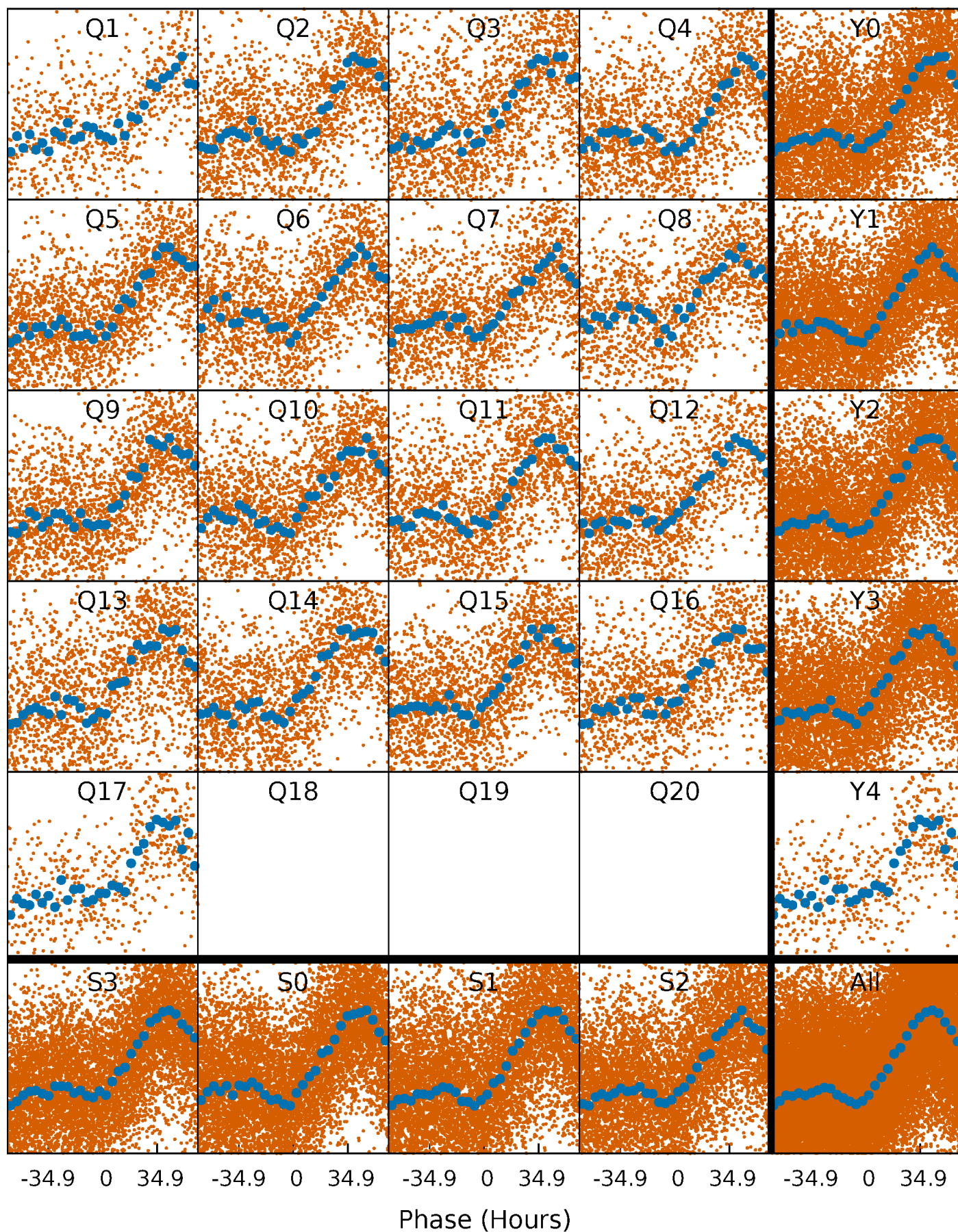


Non-Whitened Vs. Whitened Light Curve



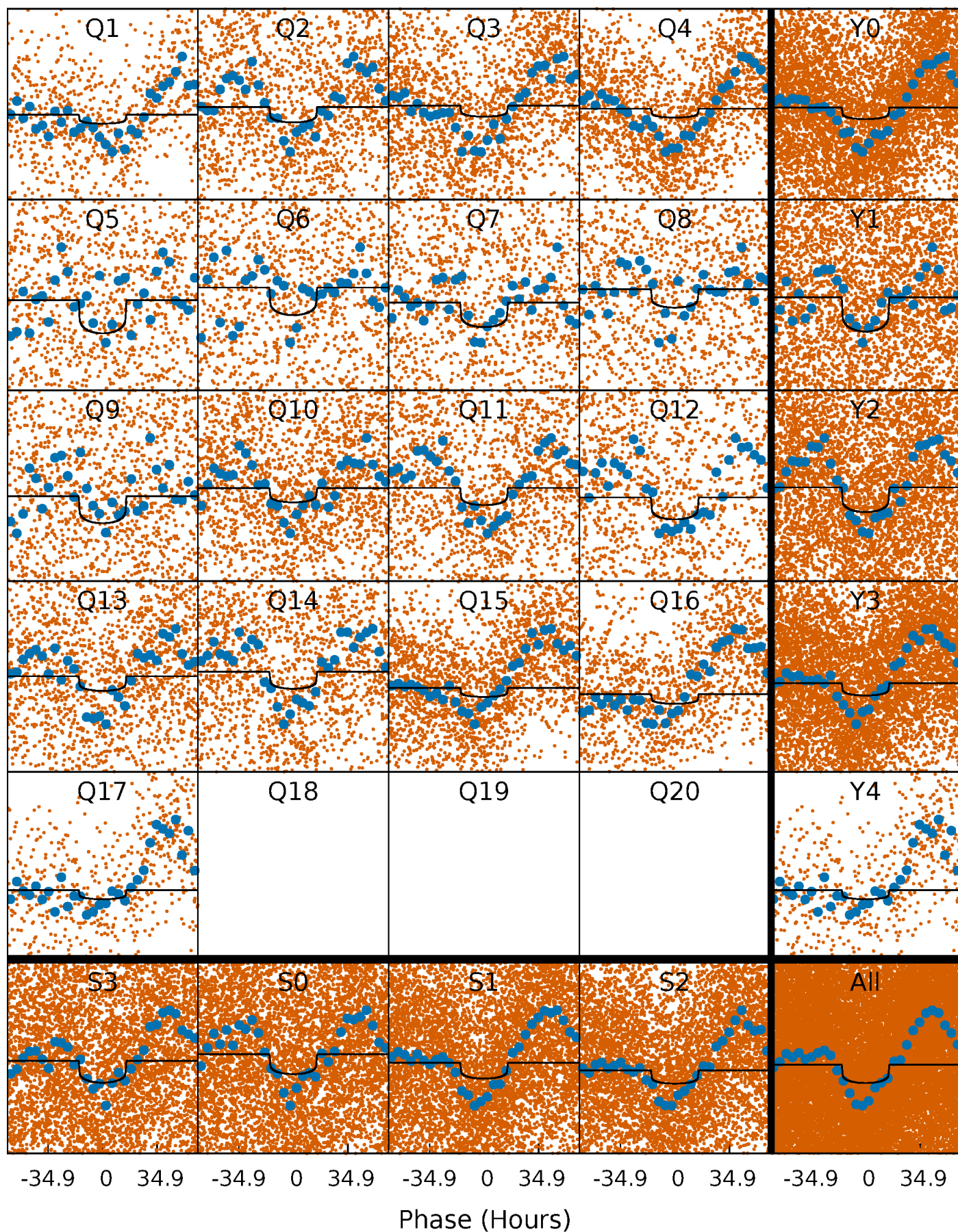
PDC Quarter-Phased Transit Curves

TCE 010923282-01 P= 10.926110 Days $T_0=132.902046$ (BKJD)



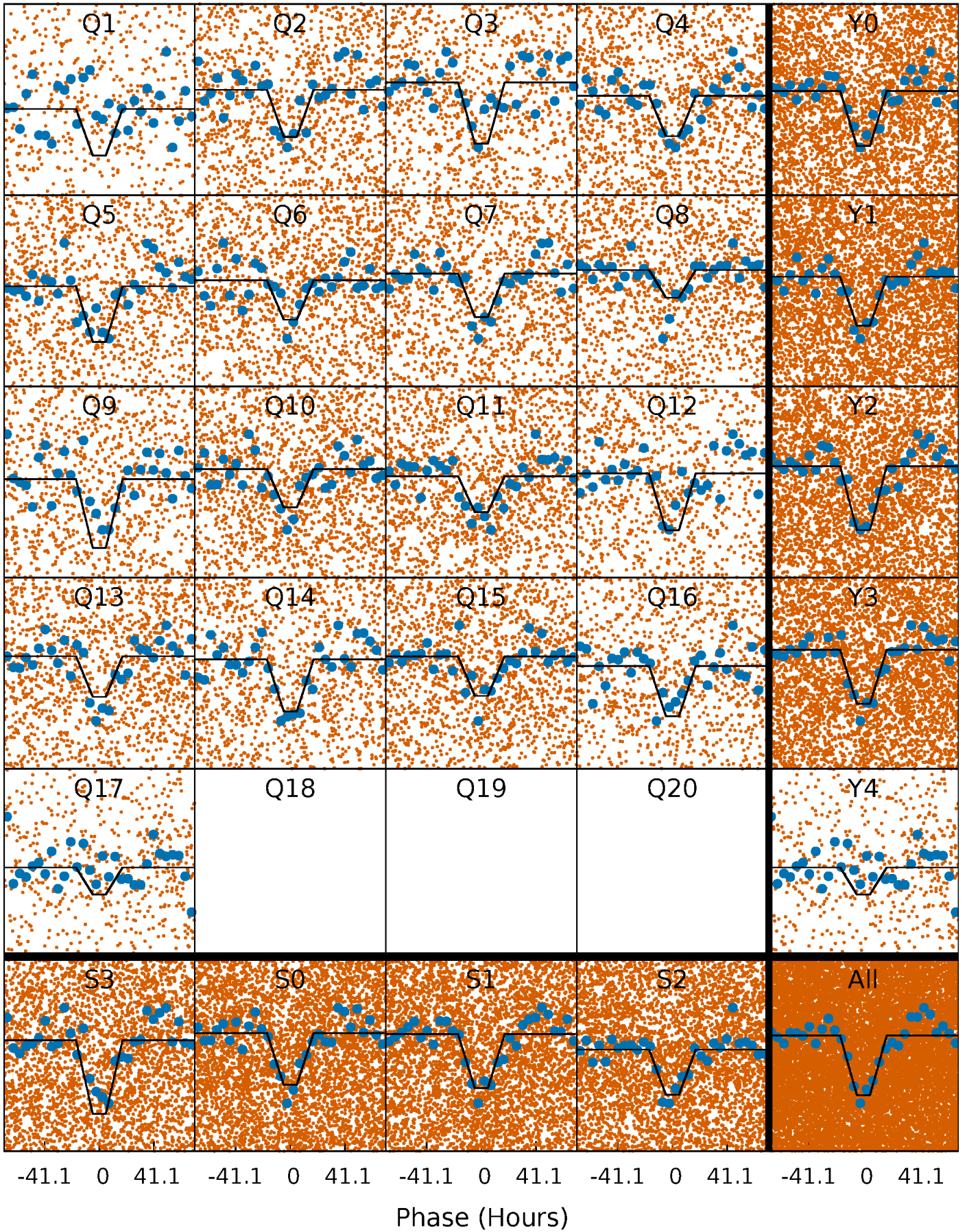
DV Quarter-Phased Transit Curves

TCE 010923282-01 P= 10.926110 Days $T_0=132.902046$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

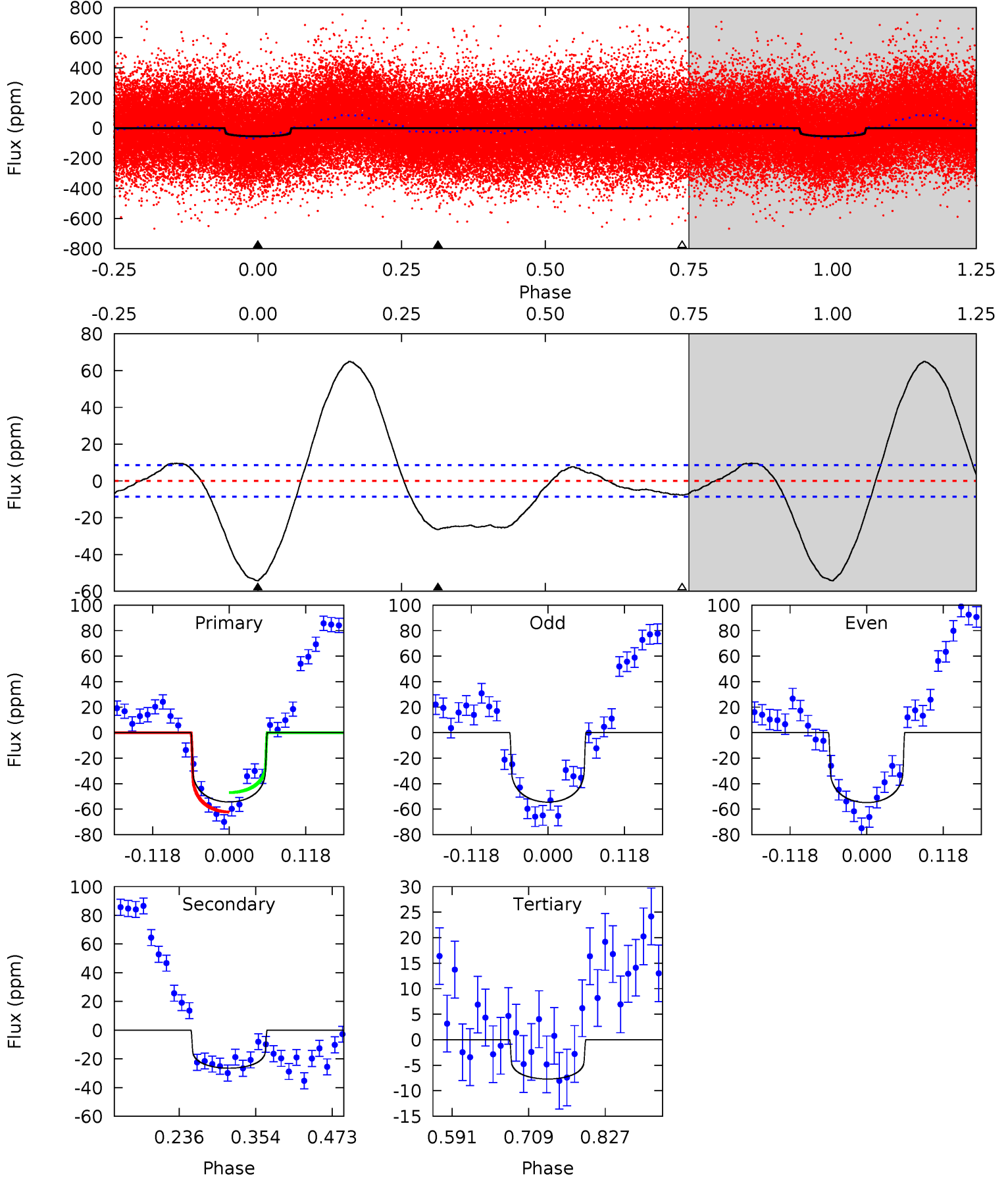
TCE 010923282-01 P= 10.923968 Days $T_0=132.938614$ (BKJD)



DV Model-Shift Uniqueness Test

010923282-01, P = 10.926110 Days, E = 121.975936 Days

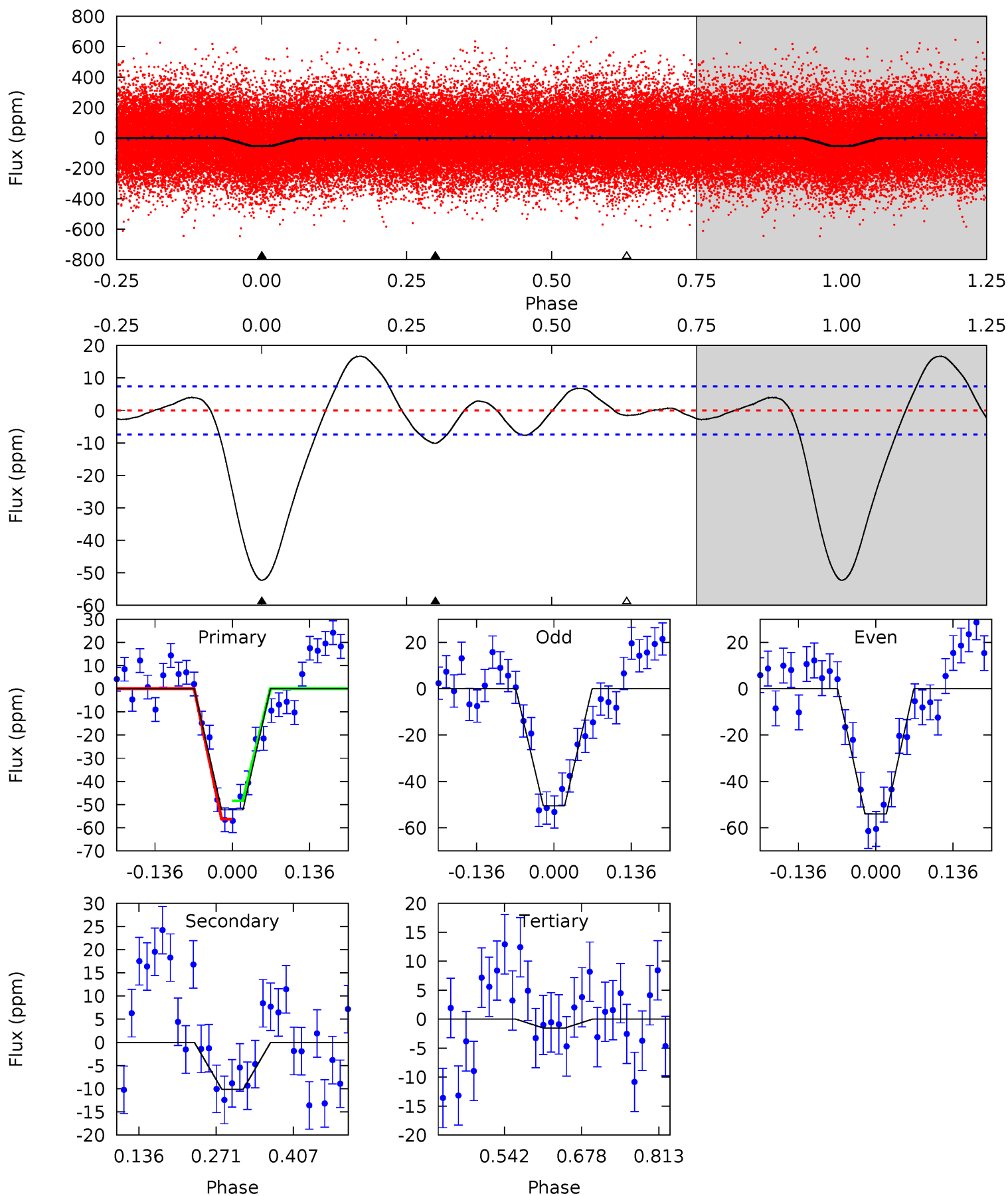
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.7	14.0	4.06	0	4.53	1.56	12.1	24.6	28.7	9.91	14.0	0.10	1.10	0.54	4.01



Alt Model-Shift Uniqueness Test

010923282-01, P = 10.923968 Days, E = 122.014646 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.9	6.18	0.93	0	4.50	1.49	2.94	31.0	31.9	5.24	6.18	1.08	0.89	0.24	2.42



Stellar Parameters For KIC 010923282

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6063^{+163}_{-181}	$4.540^{+0.038}_{-0.212}$	$-0.440^{+0.300}_{-0.300}$	$0.861^{+0.250}_{-0.083}$	$0.937^{+0.108}_{-0.108}$	$2.070^{+0.427}_{-1.101}$
	+3%/-3%	+1%/-5%	+68%/-68%	+29%/-10%	+12%/-12%	+21%/-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 010923282-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-26 ± 2	$0.56^{+0.09}_{-0.09}$	1155^{+79}_{-51}	5795^{+465}_{-374}	412^{+182}_{-117}
Alt.	-10 ± 2	$0.71^{+0.13}_{-0.10}$	1158^{+87}_{-53}	4267^{+253}_{-222}	94^{+37}_{-27}

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

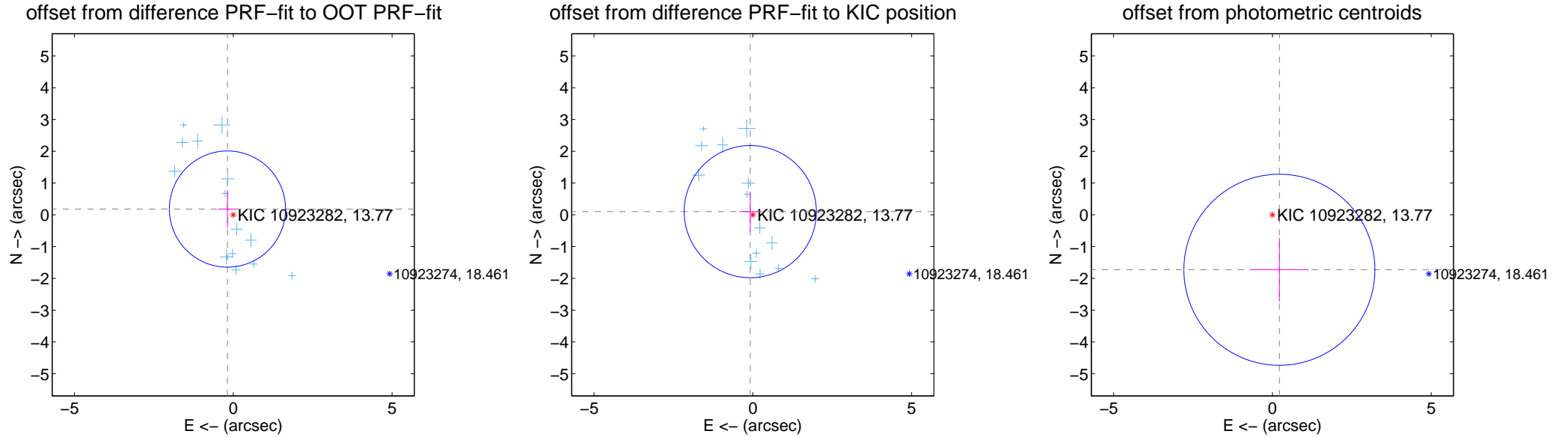
DV Centroid Data

Supplemental centroid analysis for 010923282-01. Kepler magnitude: 13.77. Transit SNR 8.85

There are 14 quarters with good PRF difference image offsets

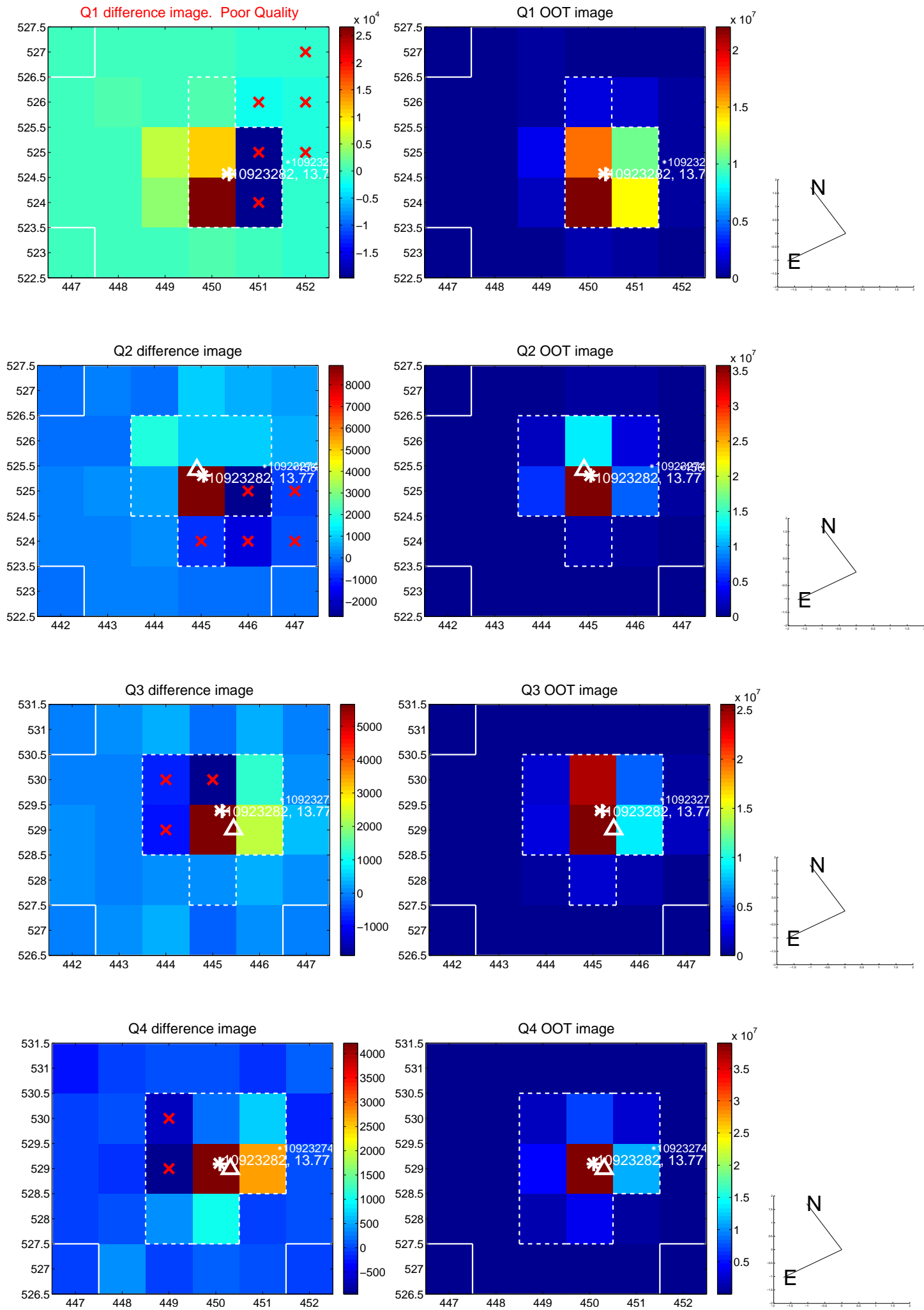
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.258 ± 0.610	0.42	0.183 ± 0.296	0.182 ± 0.597
PRF-fit source offset from KIC position	0.130 ± 0.693	0.19	0.081 ± 0.352	0.101 ± 0.635
photometric centroid source offset	1.74 ± 1.00	1.74	-0.22 ± 0.93	-1.73 ± 1.00

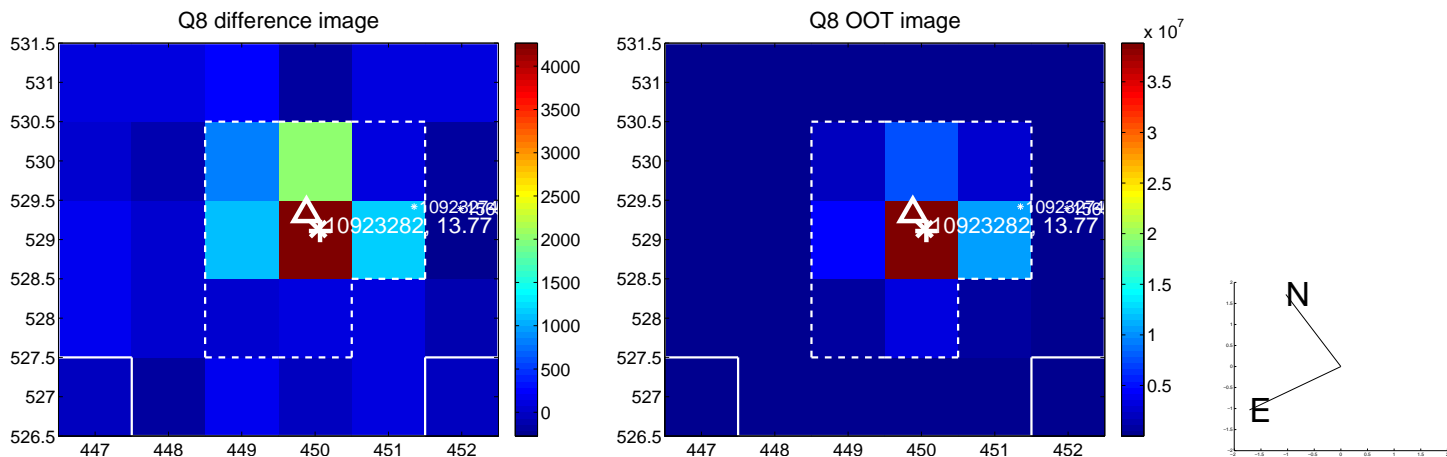
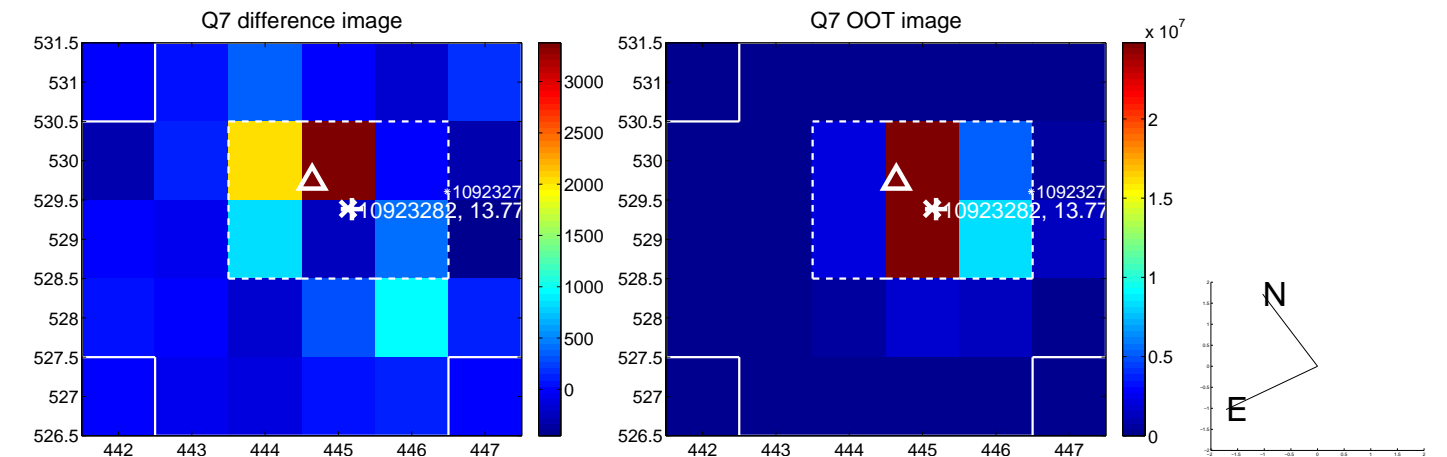
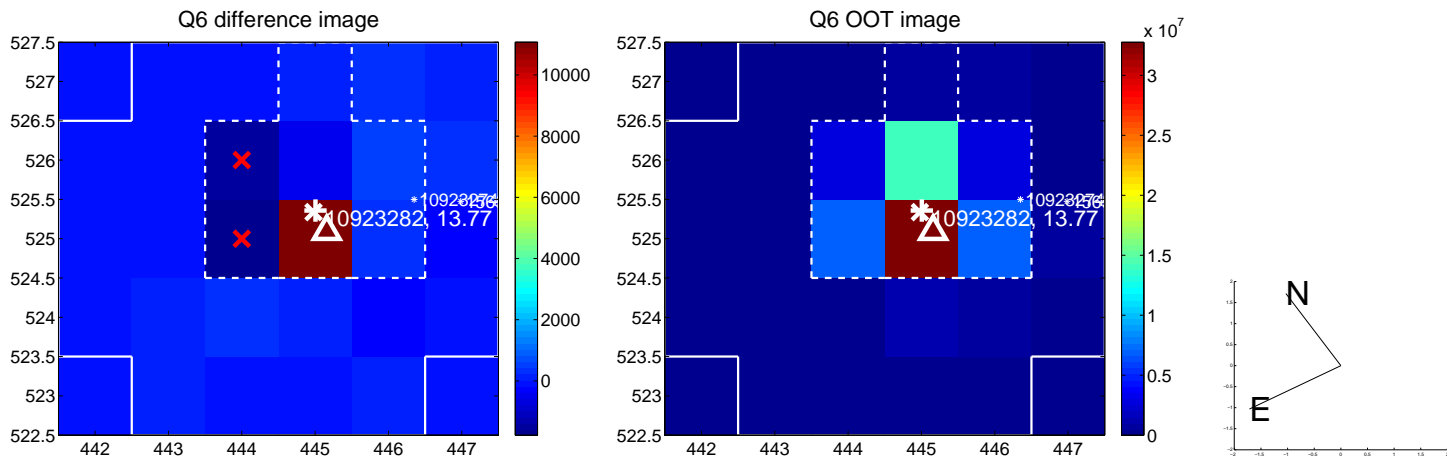
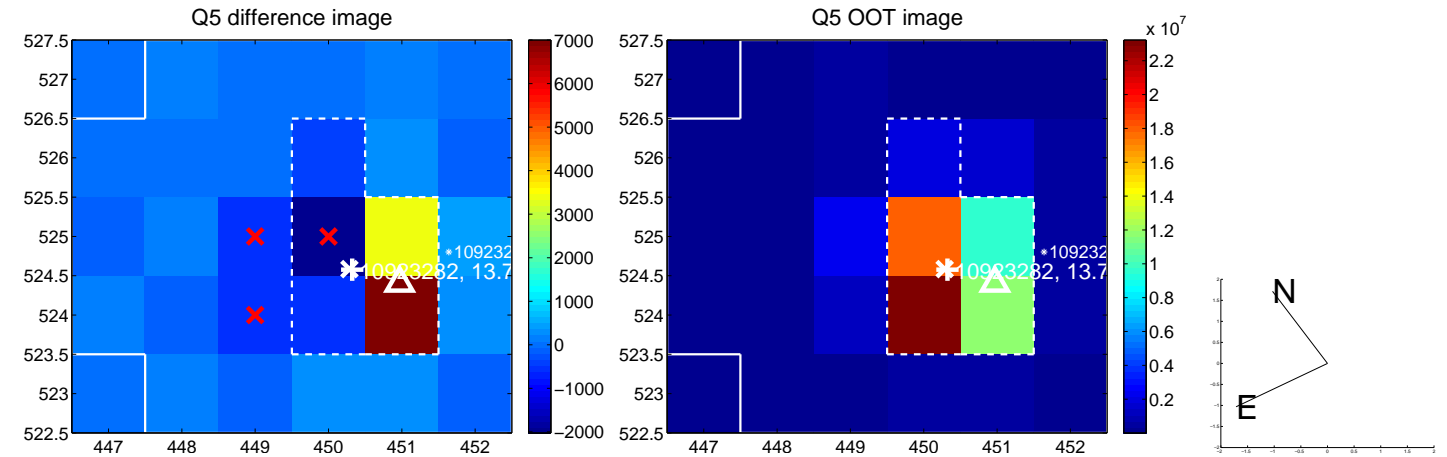


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

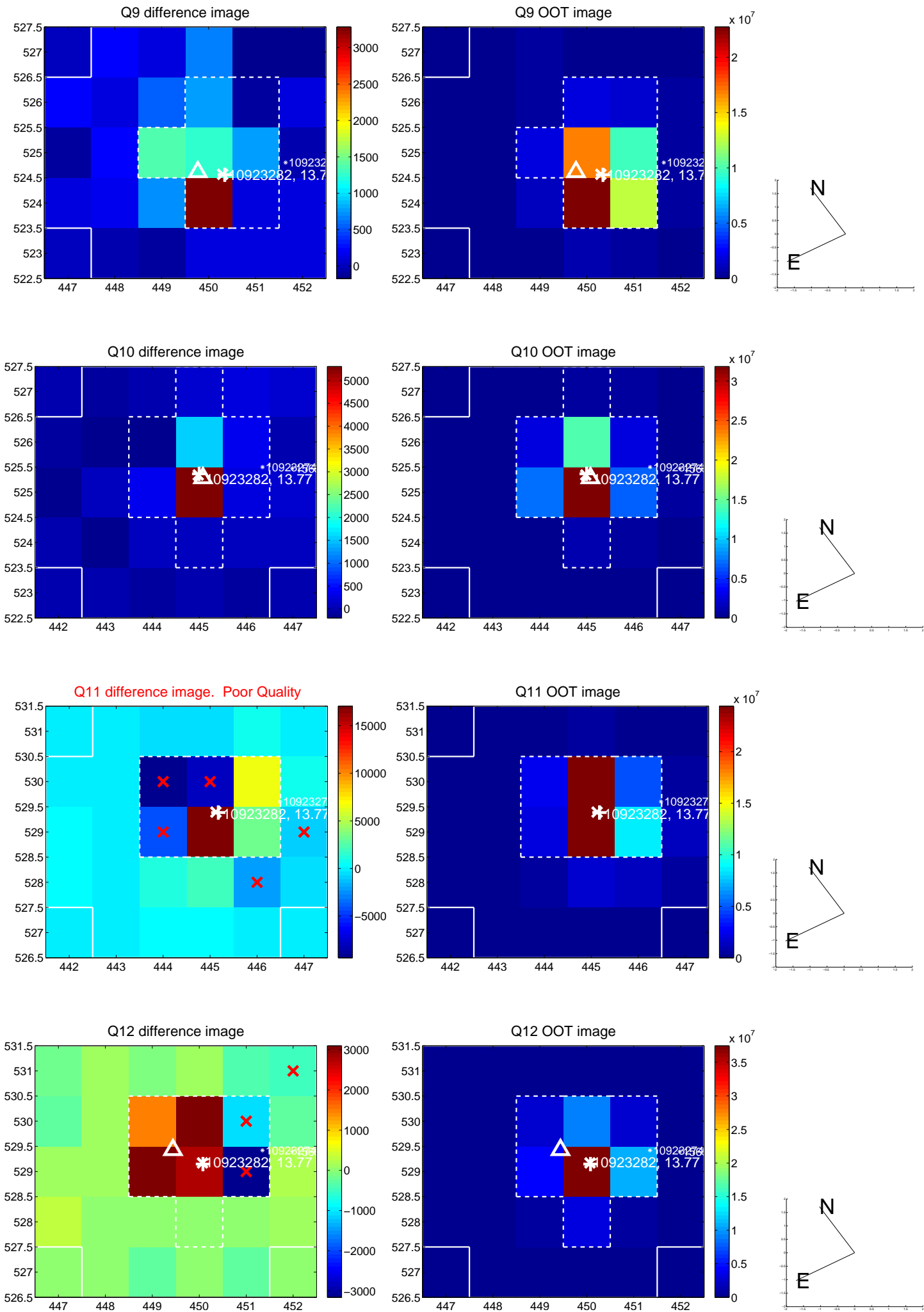
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



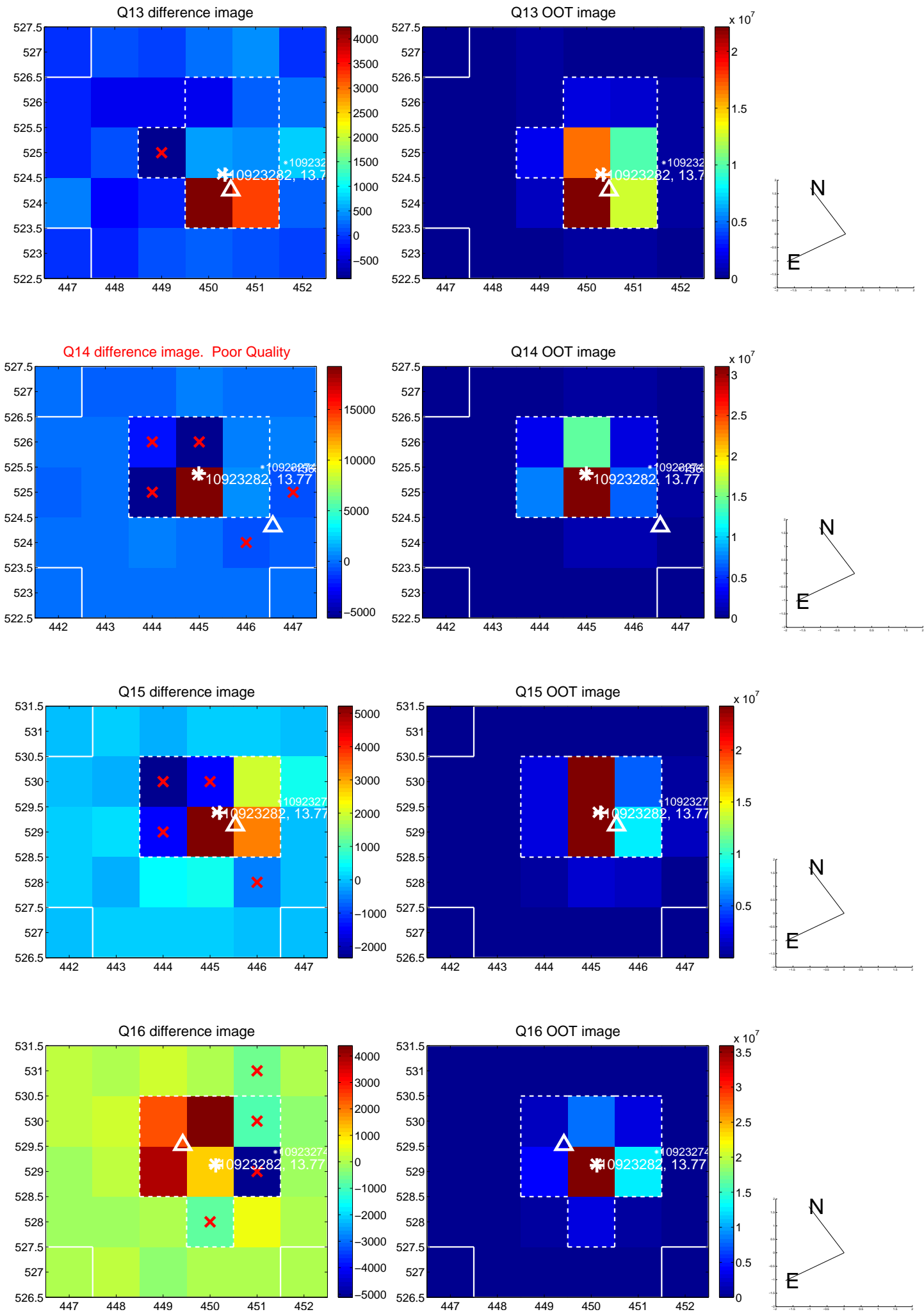
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



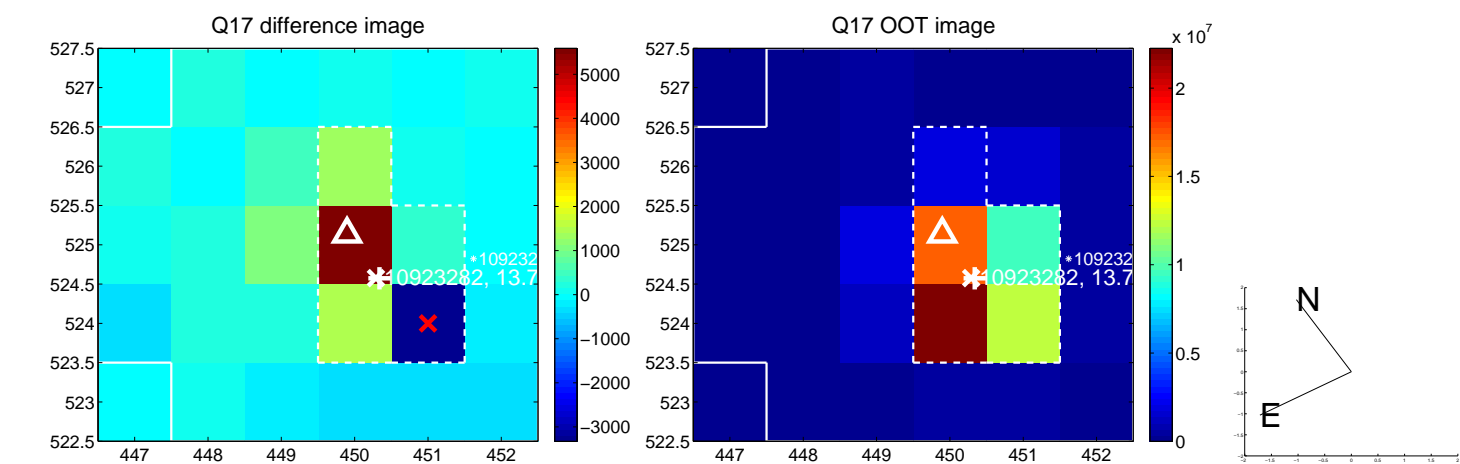
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



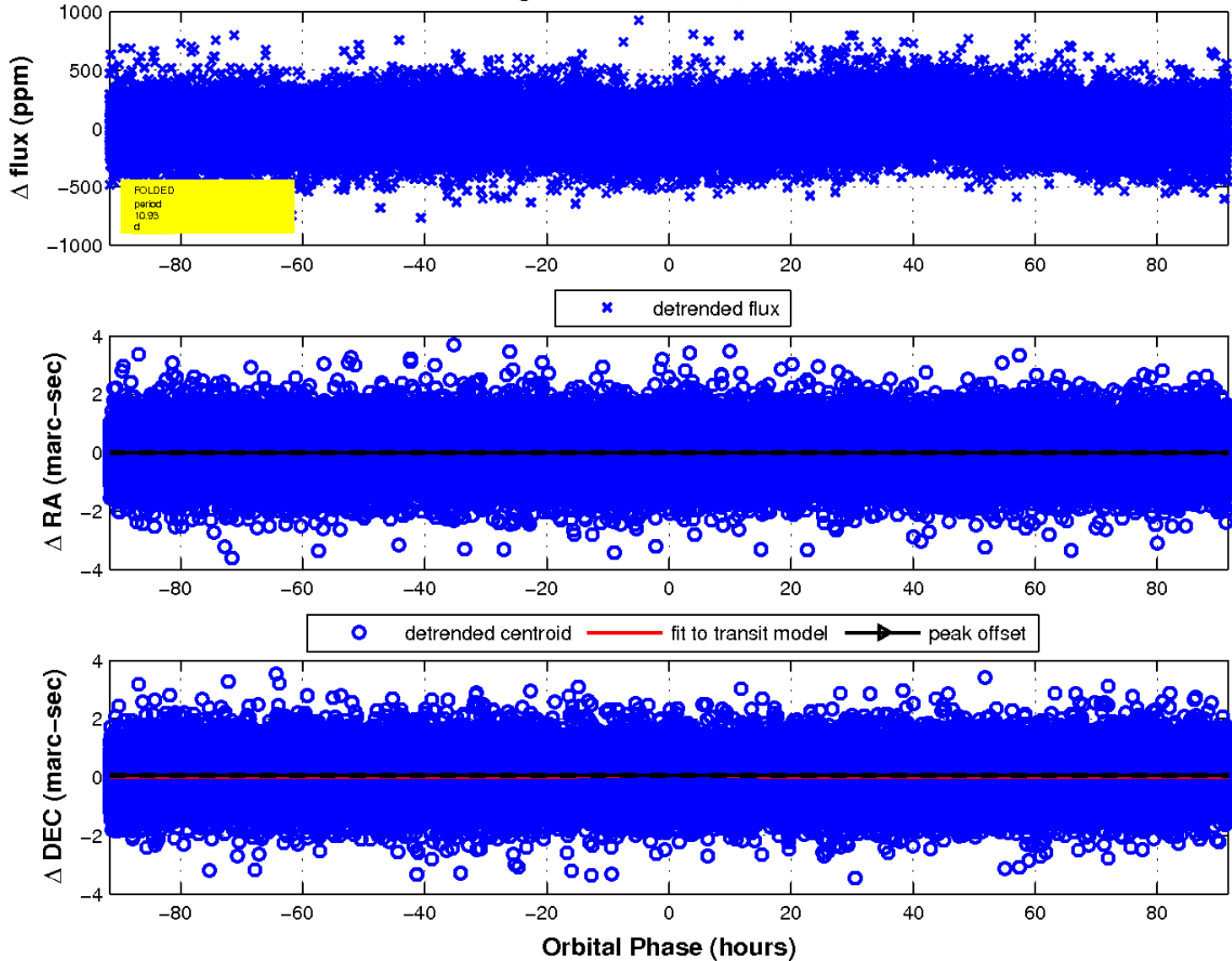
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

