

KIC 007960279

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})
007960279-01	OBS	No	433.030127	312.484036	467.1	12.499	7.2	7.1	0.81	5377	1.78	0.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007960279-01	OBS	FP	0.05	1	0	0	0	INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

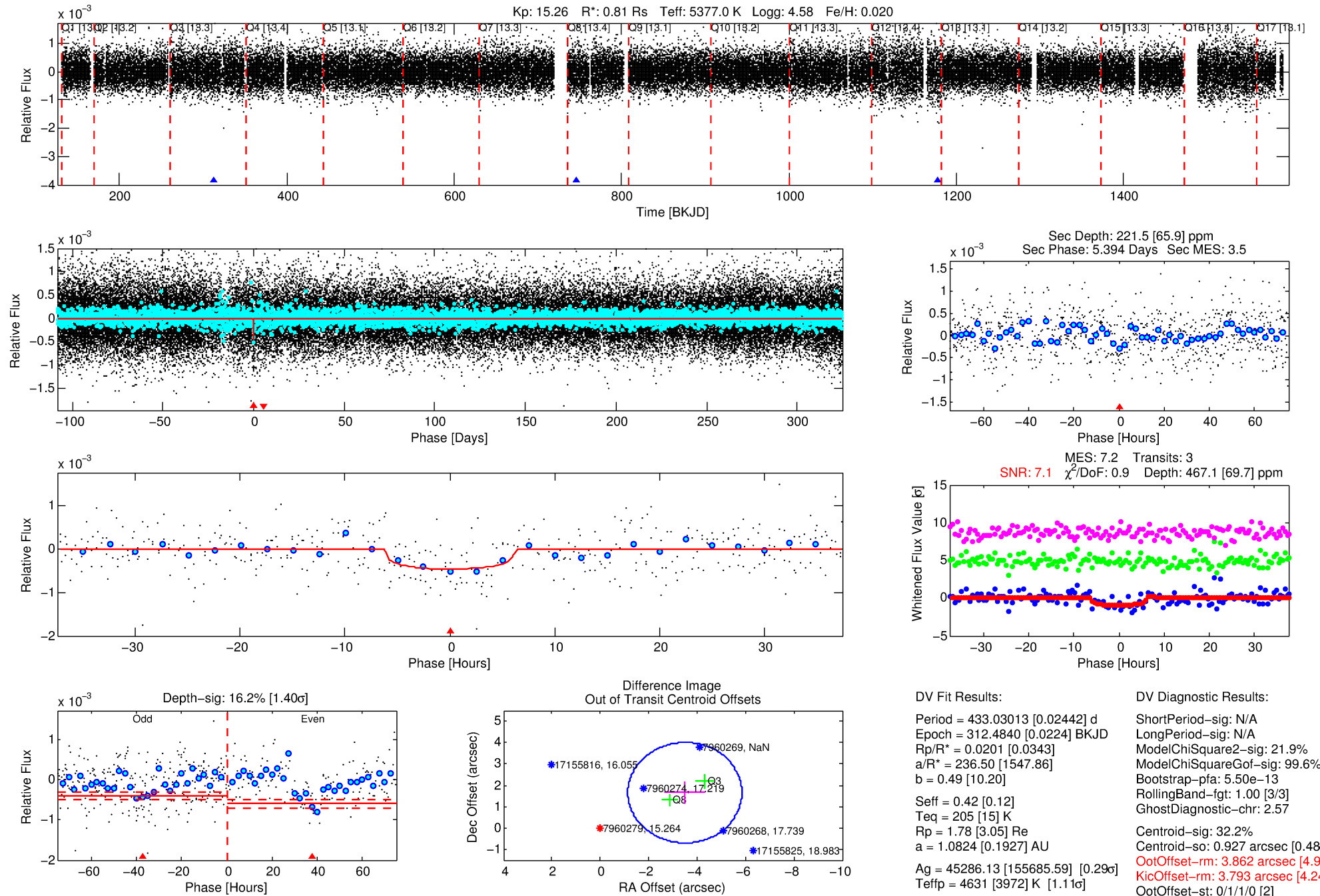
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007960279-01

No Significant Match Found

DV One-Page Summary

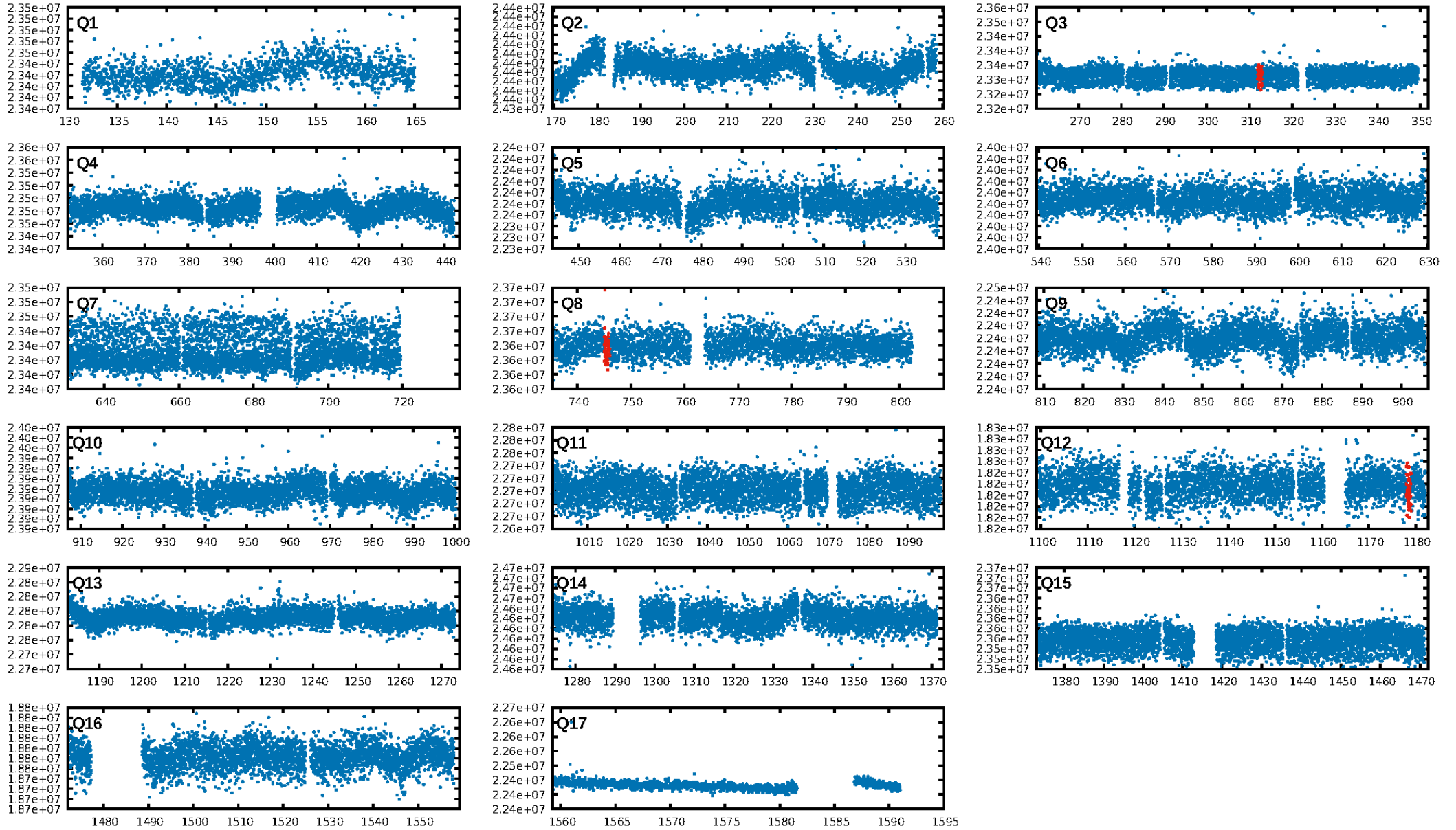
KIC: 7960279 Candidate: 1 of 1 Period: 433.030 d



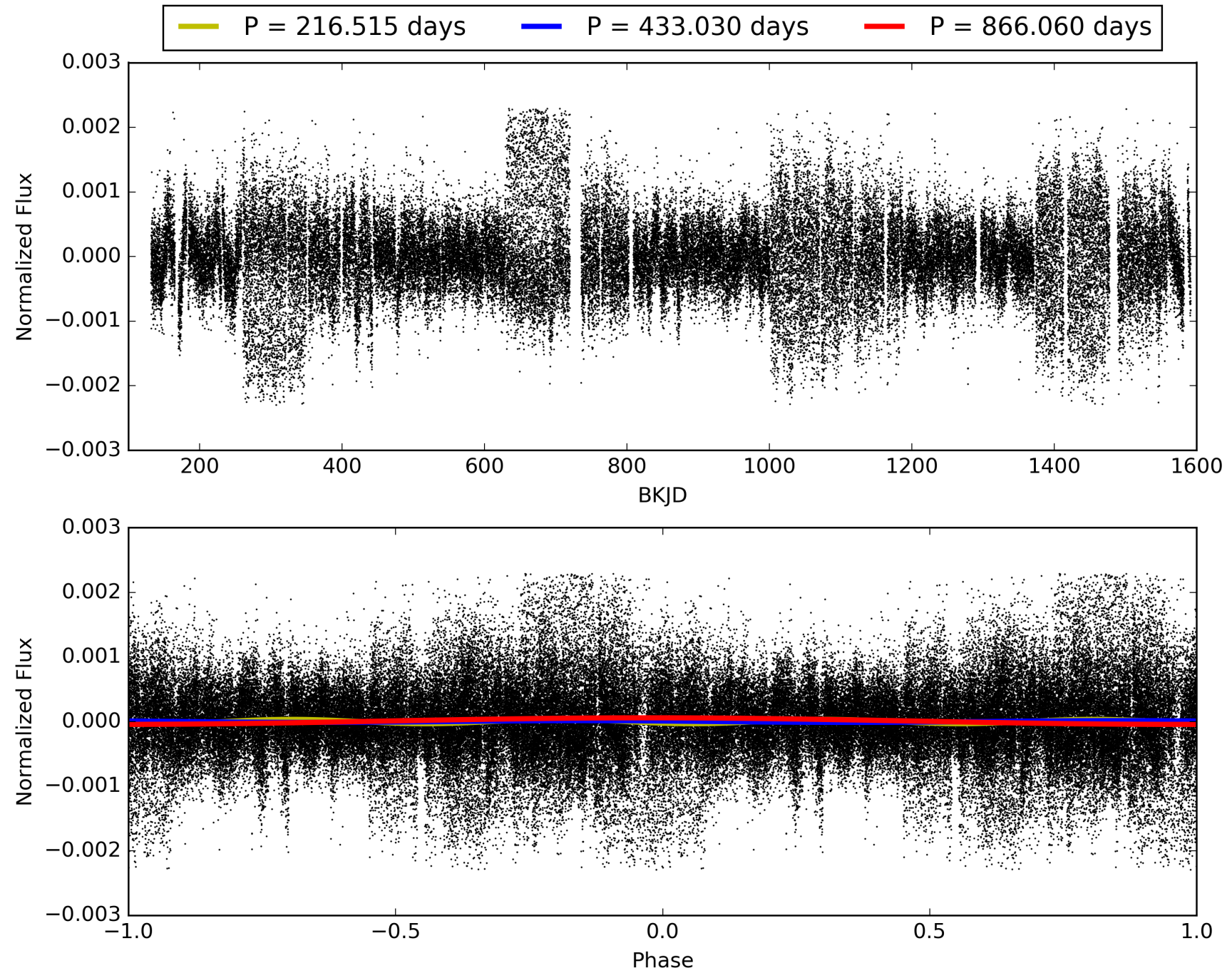
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 09:42:04 Z

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

TCE 007960279-01, PDC Light Curves

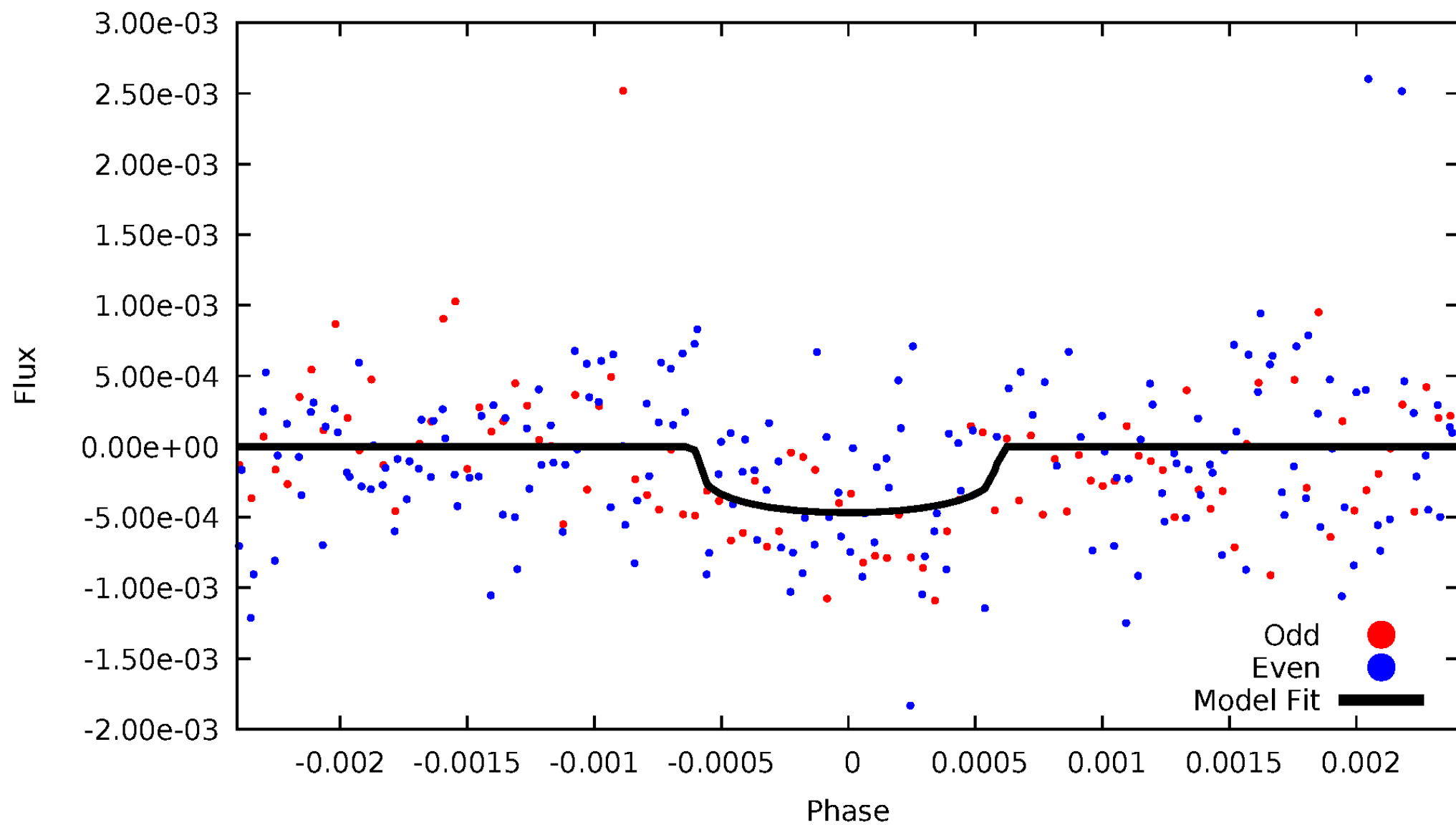


TCE 007960279-01



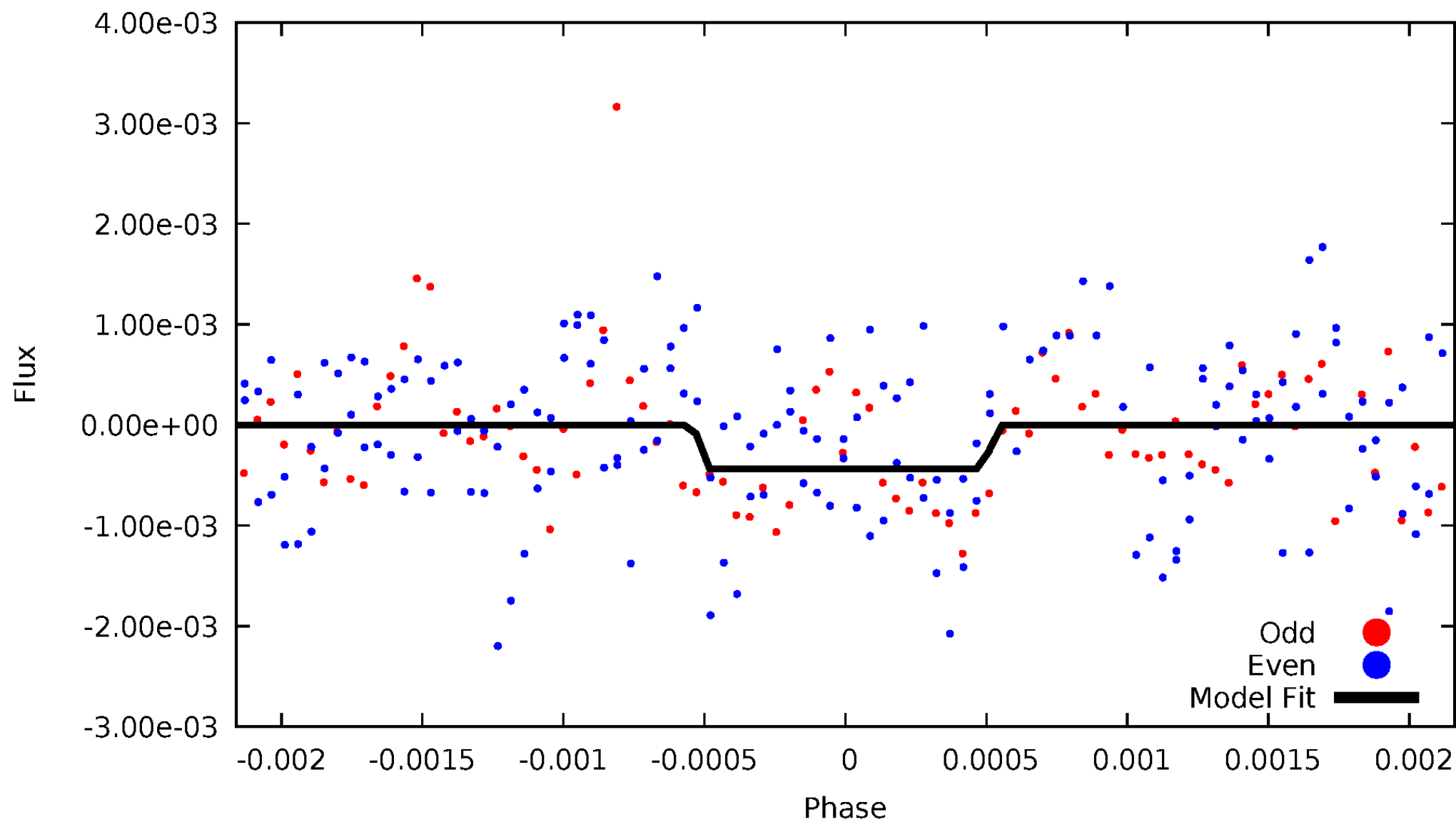
DV Odd/Even

TCE 007960279-01



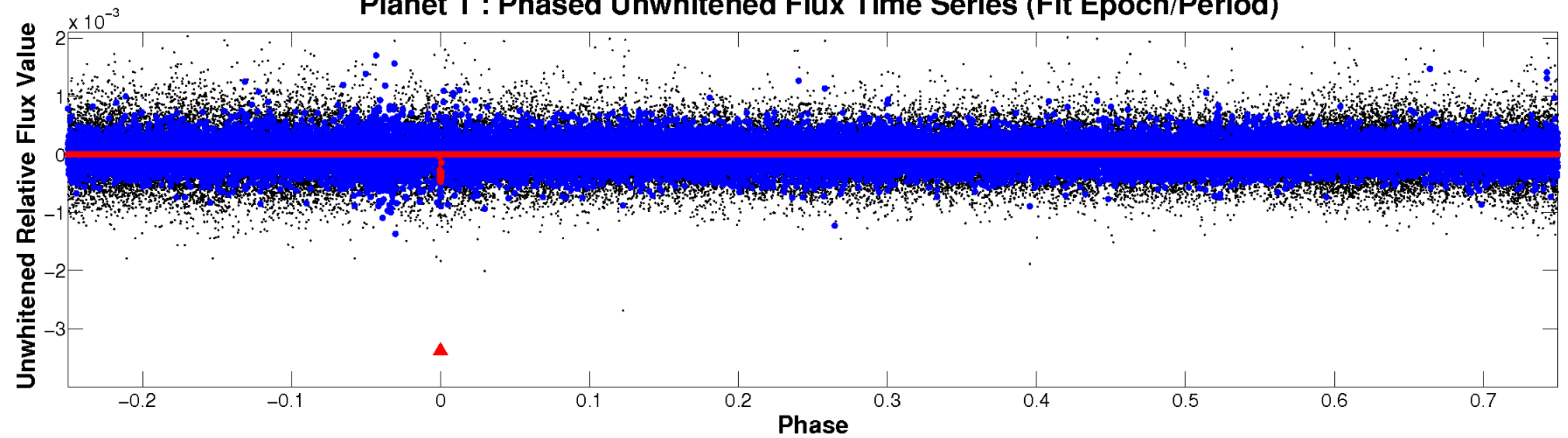
ALT Odd/Even

TCE 007960279-01

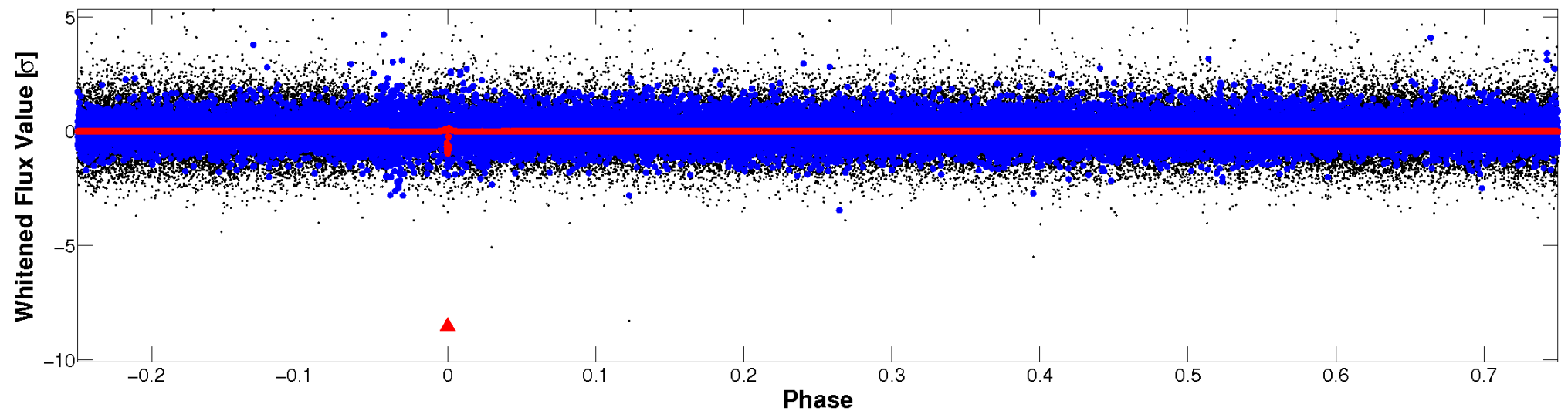


Non-Whitened Vs. Whitened Light Curve

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

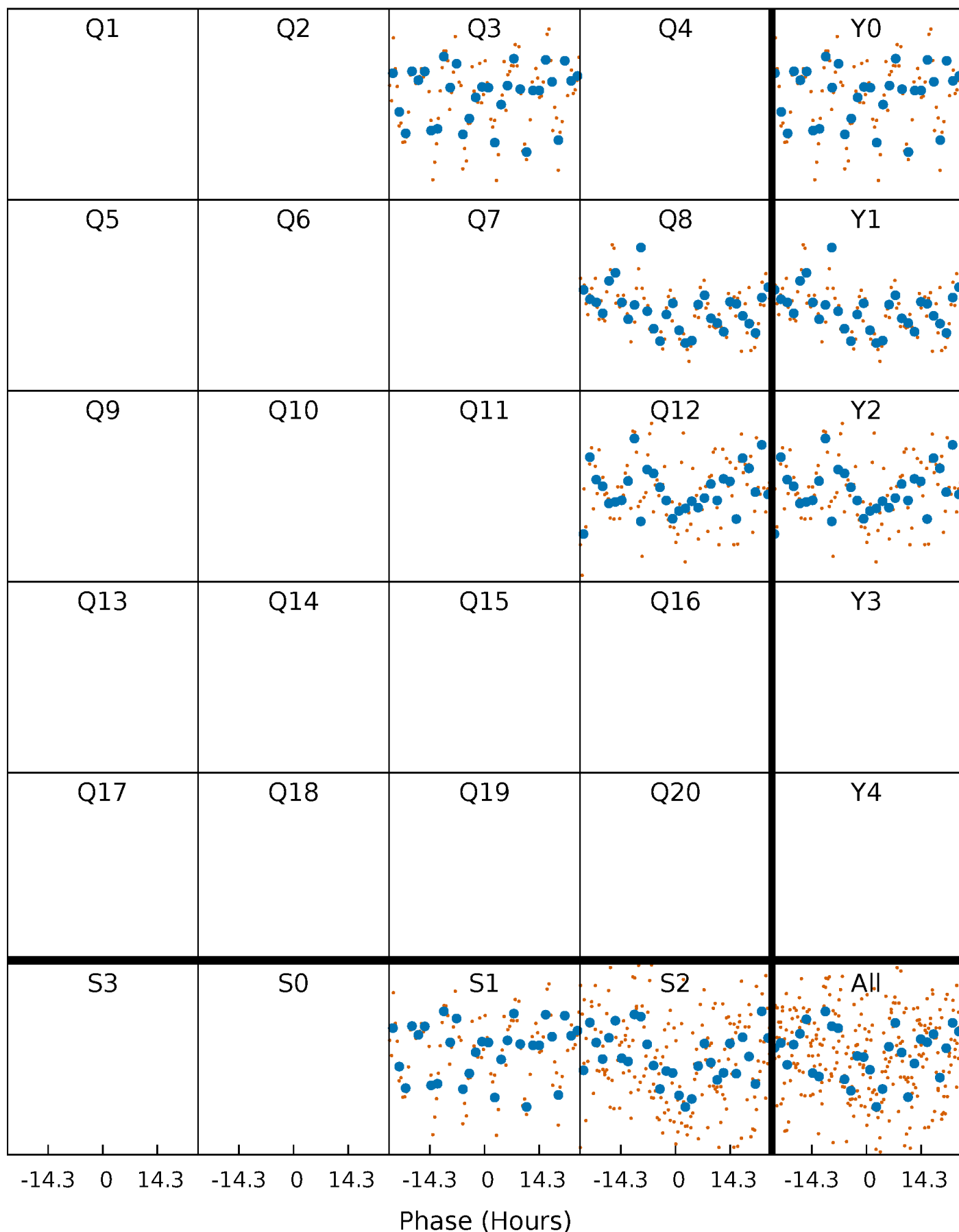


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



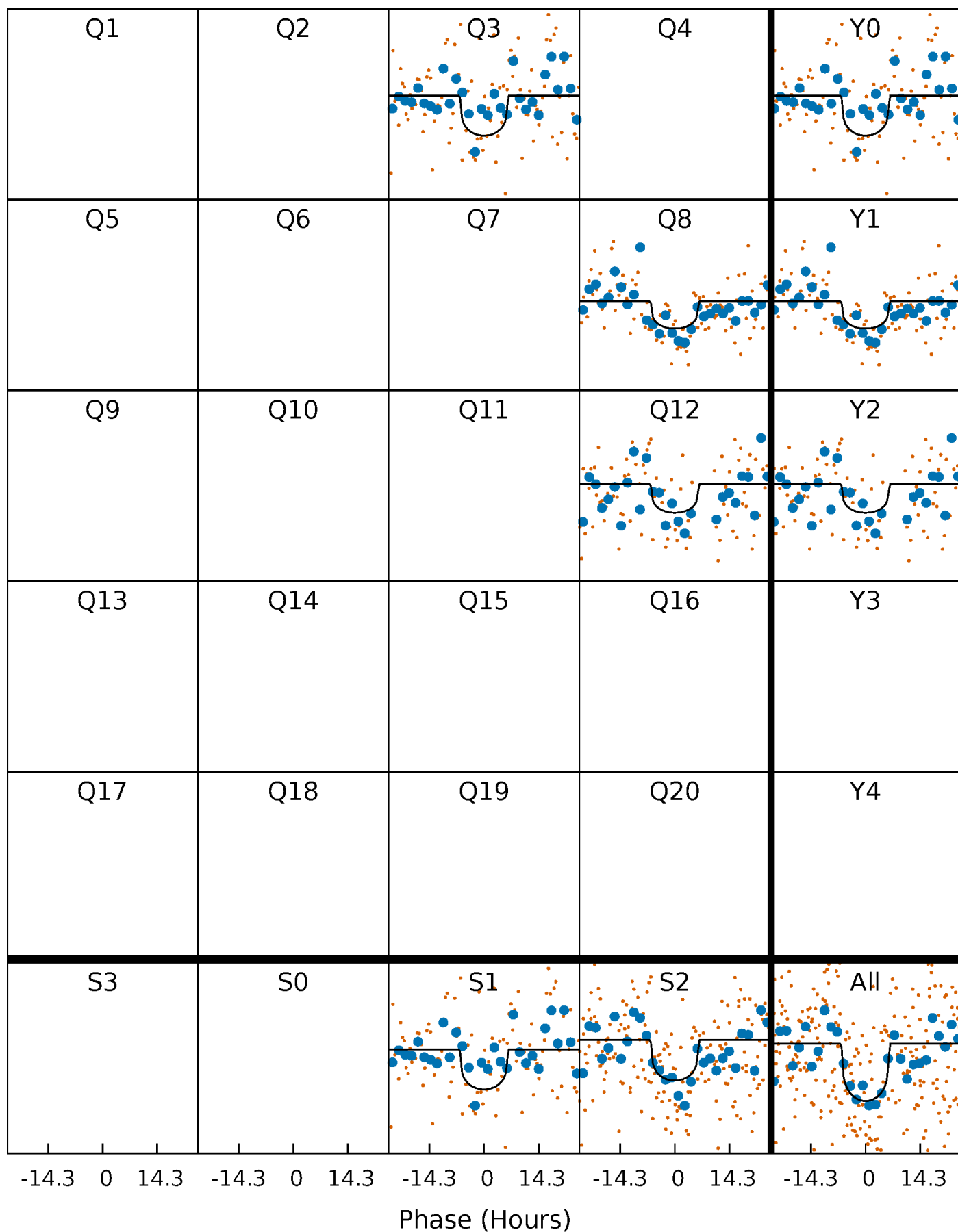
PDC Quarter-Phased Transit Curves

TCE 007960279-01 P=433.030127 Days $T_0=312.484036$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007960279-01 P=433.030127 Days $T_0=312.484036$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

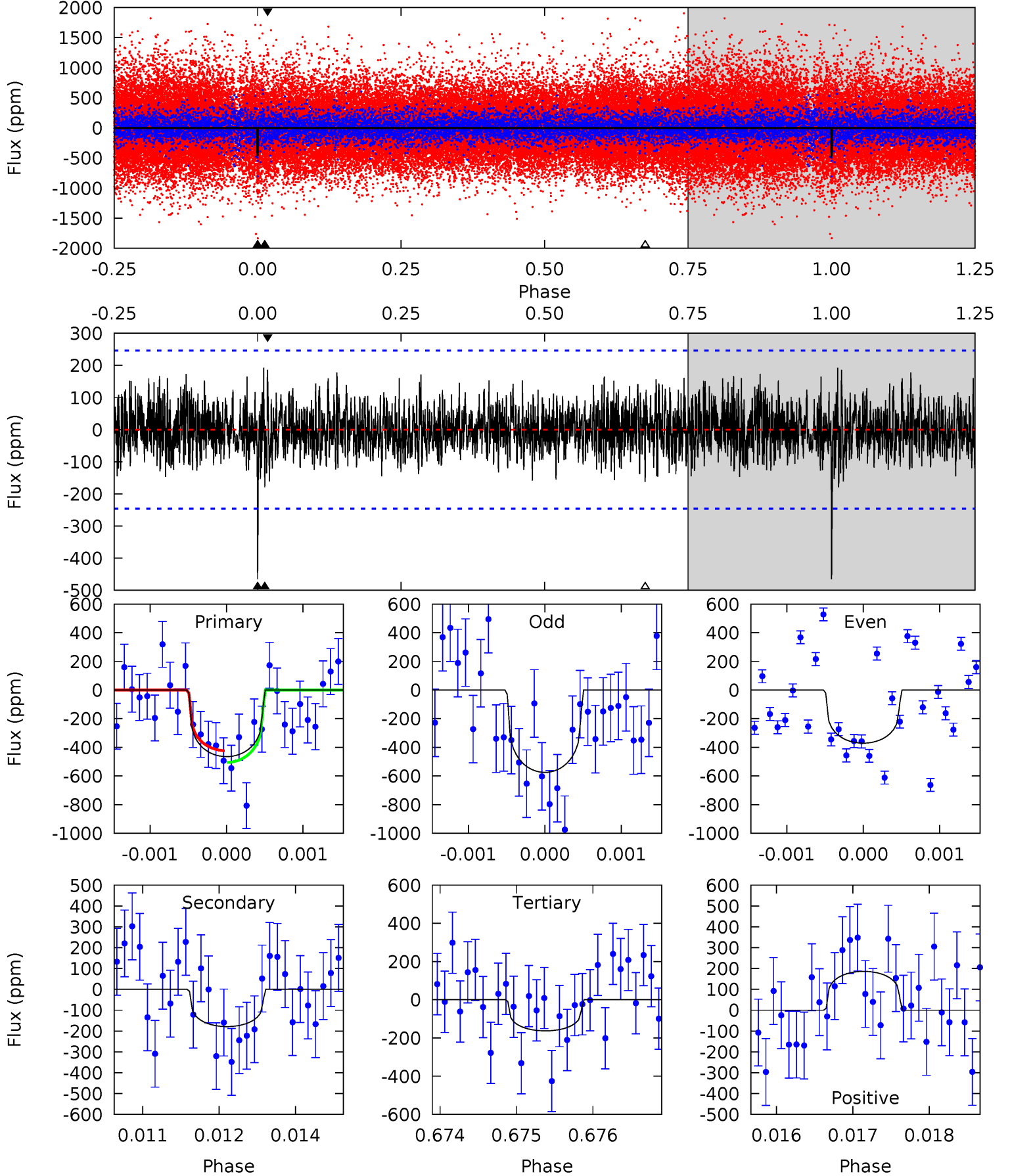
TCE 007960279-01 P=433.028004 Days $T_0=312.453825$ (BKJD)



DV Model-Shift Uniqueness Test

007960279-01, $P = 433.030127$ Days, $E = 312.484036$ Days

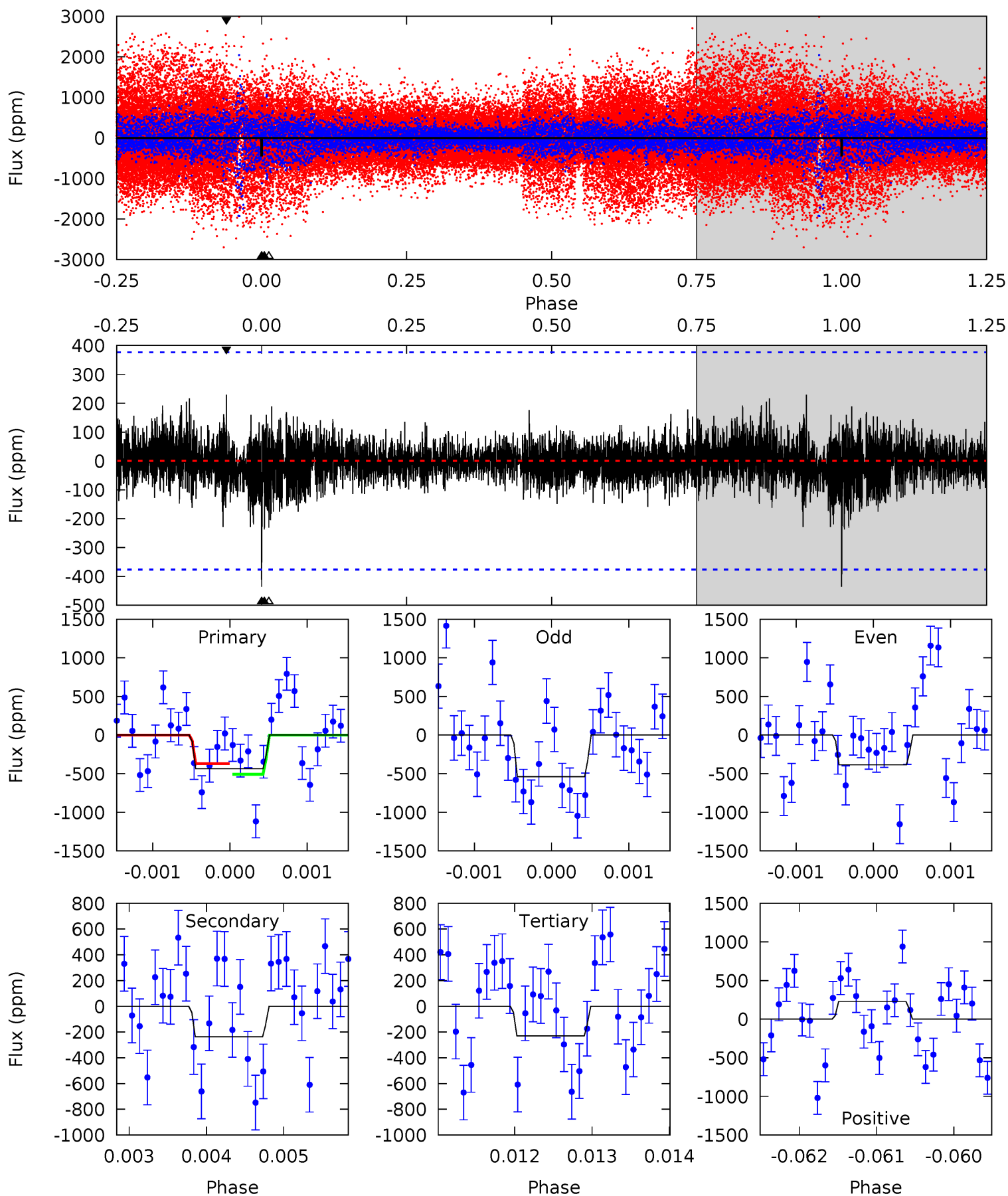
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.2	3.94	3.58	4.10	5.41	3.23	1.22	6.65	6.13	0.35	-0.16	2.15	0.86	0.29	0.90



Alt Model-Shift Uniqueness Test

007960279-01, P = 433.028004 Days, E = 312.453825 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.30	3.42	3.33	3.31	5.44	3.27	0.70	2.97	2.98	0.09	0.10	1.00	1.08	0.34	1.02



Stellar Parameters For KIC 007960279

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5377^{+177}_{-177}	$4.575^{+0.026}_{-0.145}$	$0.020^{+0.250}_{-0.300}$	$0.811^{+0.169}_{-0.068}$	$0.902^{+0.073}_{-0.097}$	$2.387^{+0.431}_{-0.936}$
	+3%/-3%	+1%/-3%	+1250%/-1500%	+21%/-8%	+8%/-11%	+18%/-39%
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 007960279-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-179 ± 45	$2.86^{+2.86}_{-1.92}$	294^{+15}_{-13}	3862^{+2260}_{-747}	$13621^{+109926}_{-10265}$
Alt.	-236 ± 69	$3.04^{+2.89}_{-1.94}$	294^{+16}_{-12}	3965^{+2084}_{-770}	$15899^{+109685}_{-11900}$

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

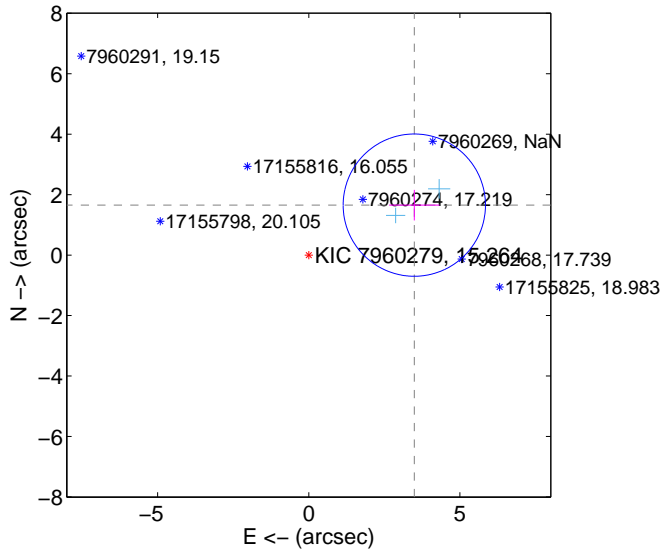
Supplemental centroid analysis for 007960279-01. Kepler magnitude: 15.26. Transit SNR 7.07

There are 2 quarters with good PRF difference image offsets

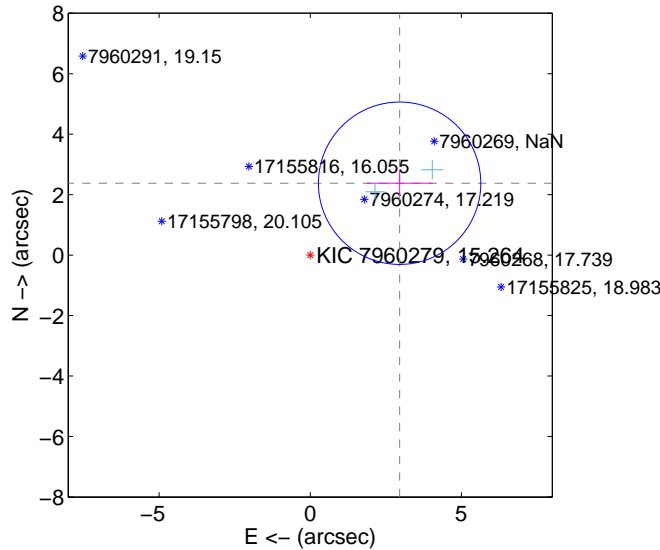
The direct PRF centroid is offset from the target star catalog position by about 1.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.862 ± 0.784	4.92	-3.491 ± 0.834	1.653 ± 0.506
PRF-fit source offset from KIC position	3.793 ± 0.895	4.24	-2.955 ± 1.098	2.377 ± 0.420
photometric centroid source offset	0.93 ± 1.91	0.48	-0.54 ± 2.06	-0.75 ± 1.83

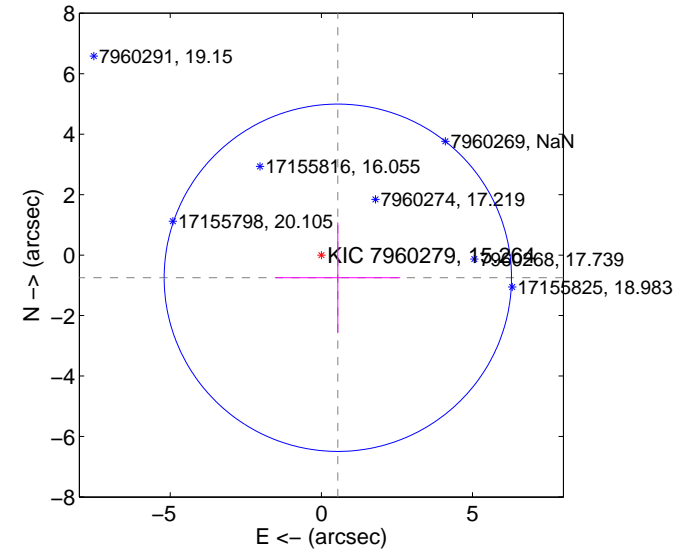
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

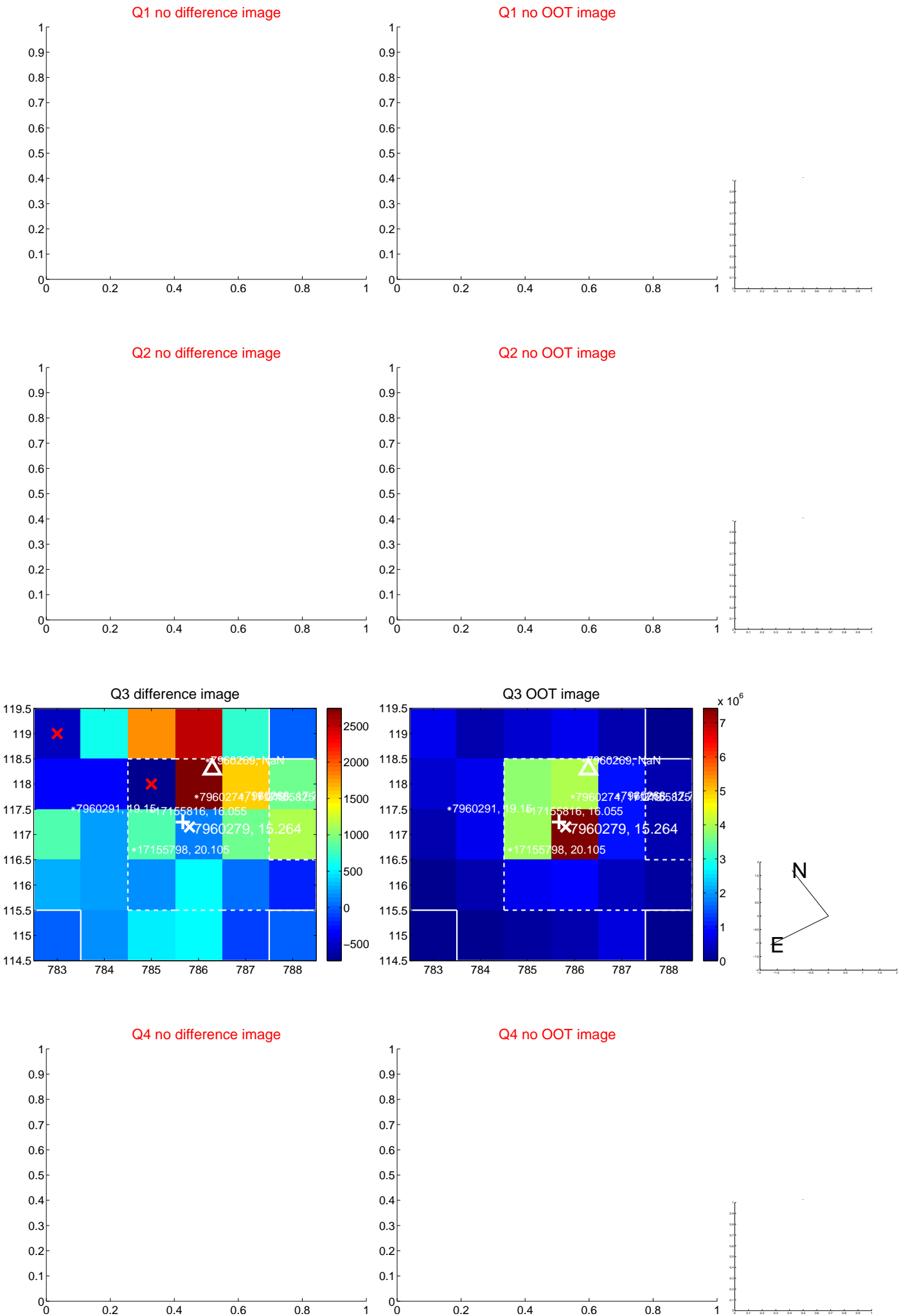


offset from photometric centroids

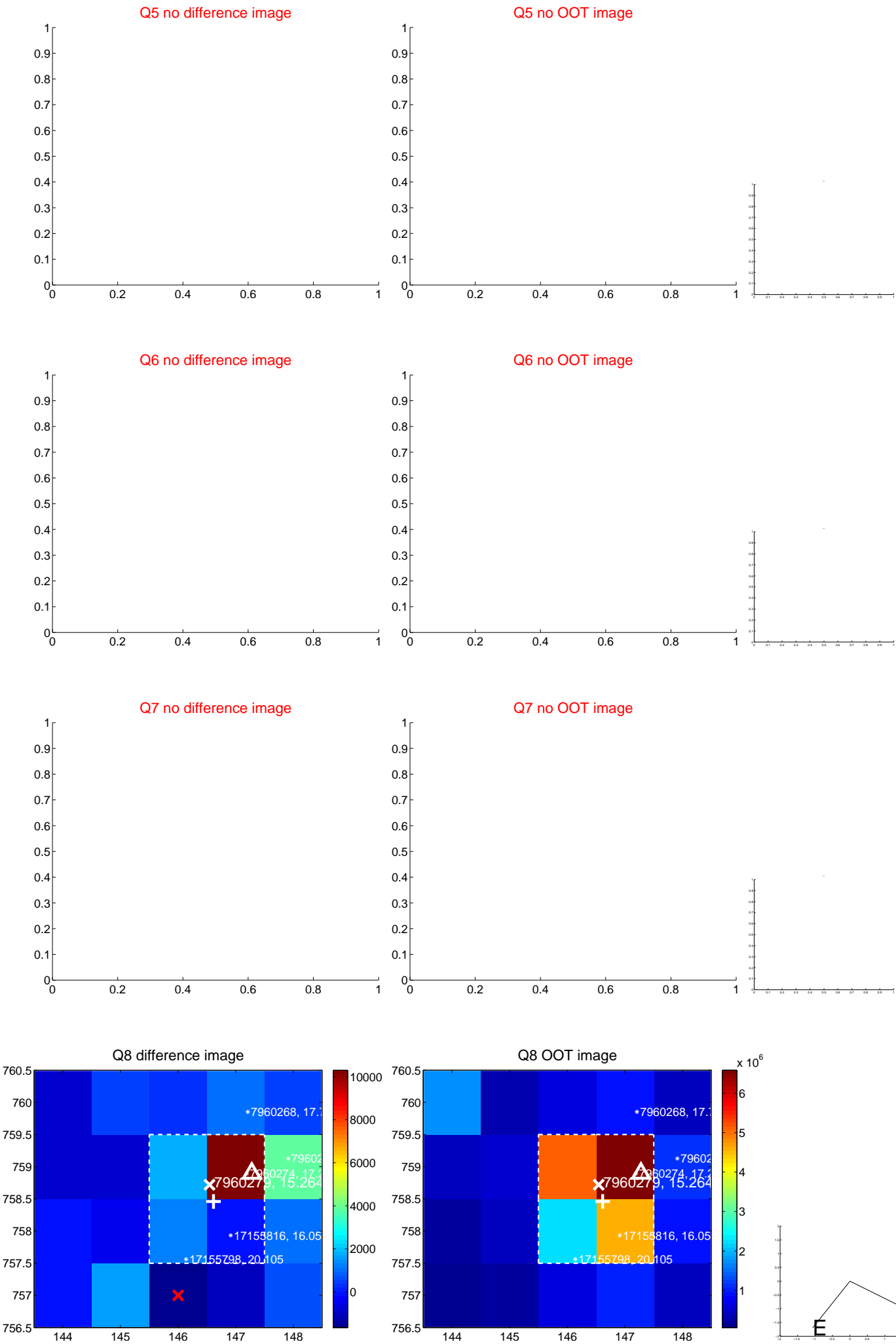


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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 ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



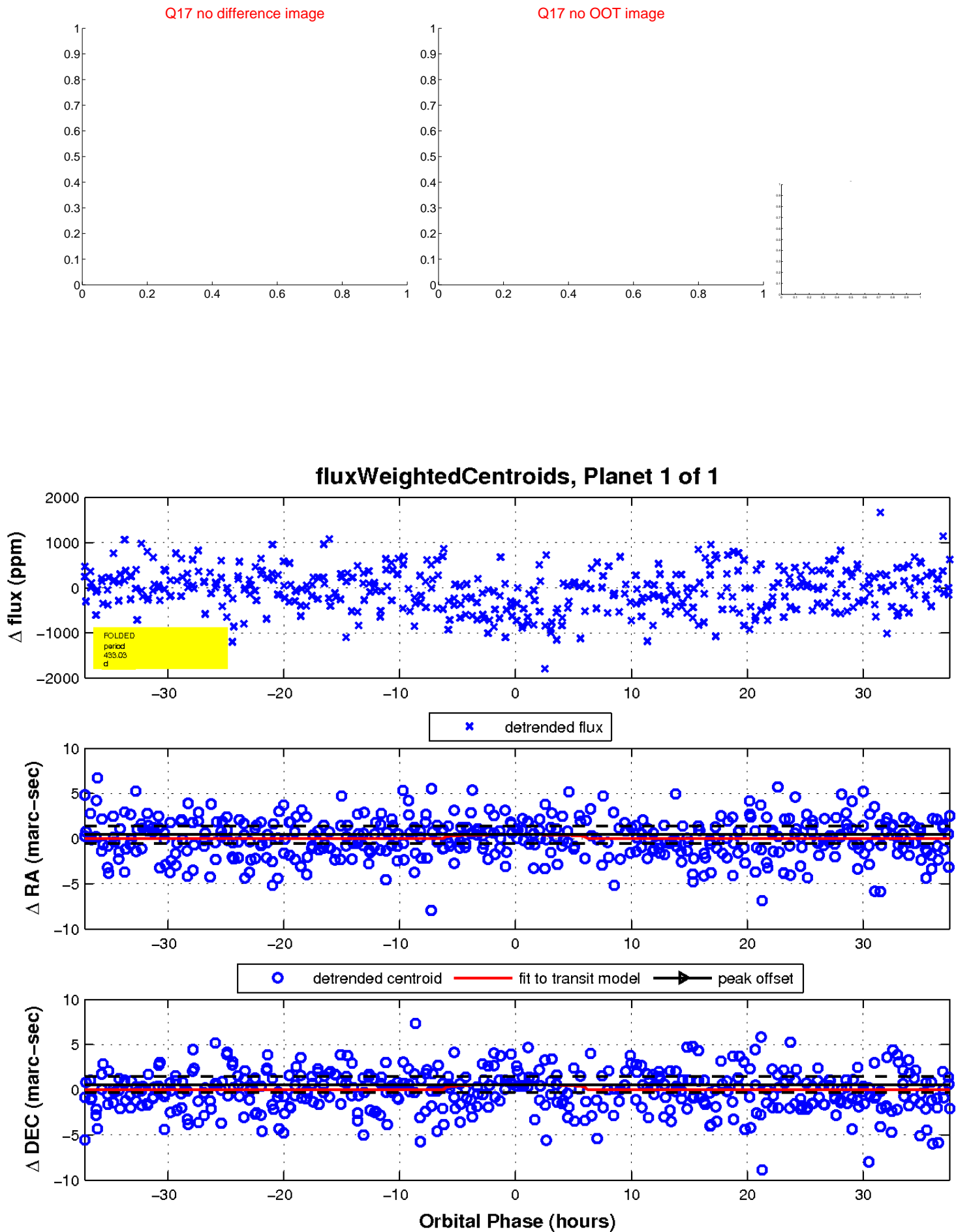
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

