

KIC 004179264

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})
004179264-01	OBS	No	468.889778	196.219853	178.3	17.871	8.5	8.1	1.39	5953	2.08	1.64

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004179264-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—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.

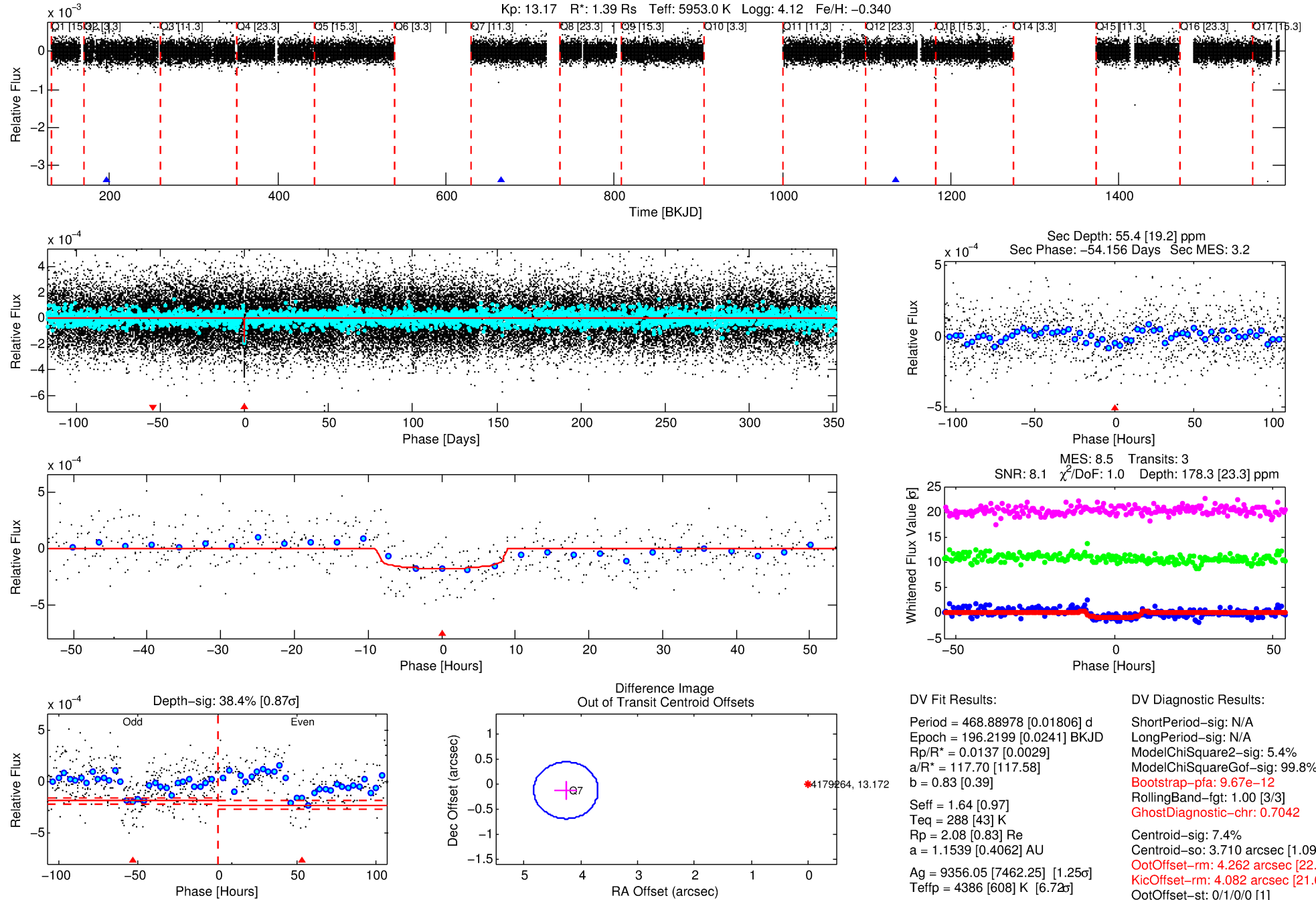
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004179264-01

No Significant Match Found

DV One-Page Summary

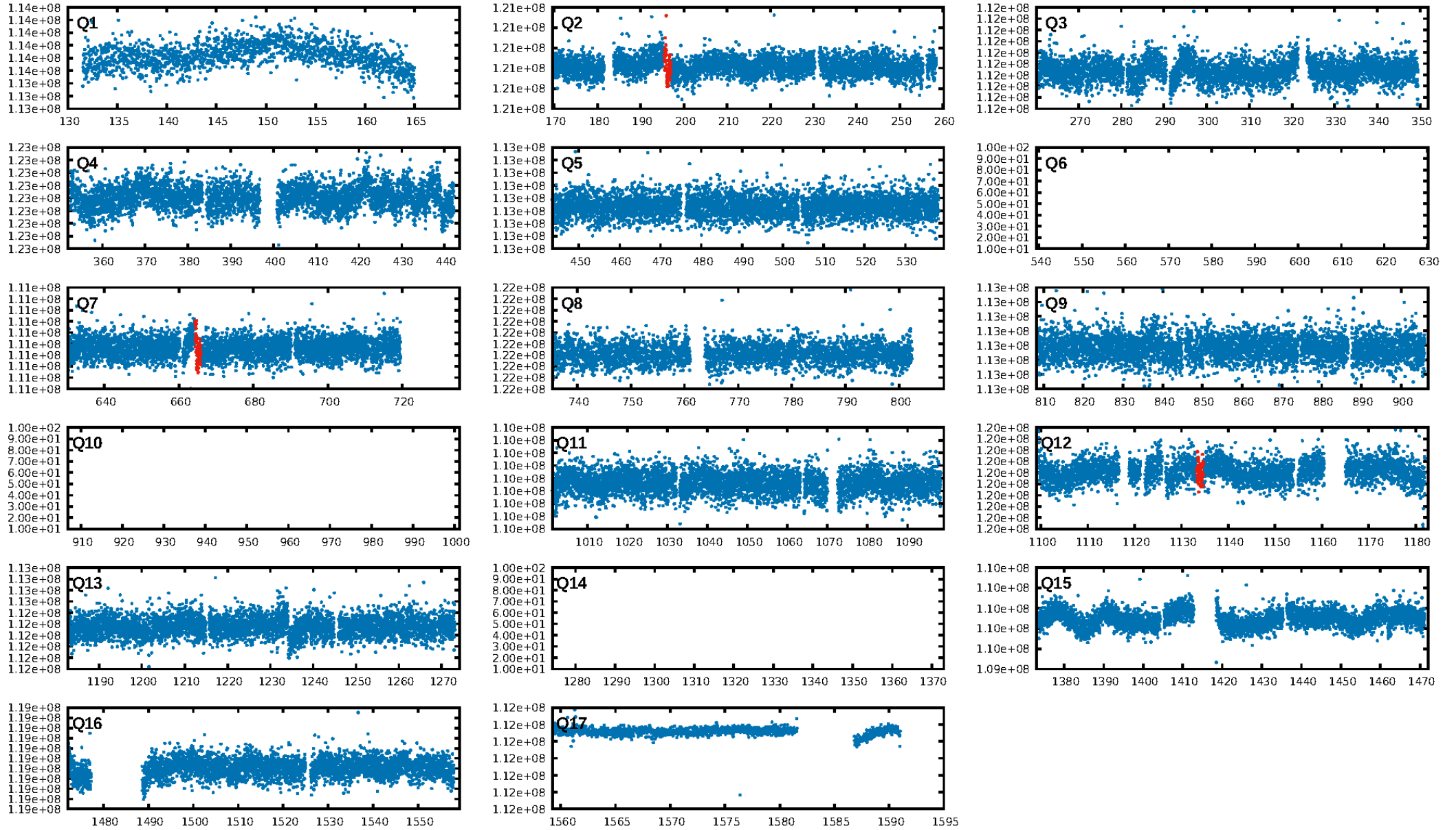
KIC: 4179264 Candidate: 1 of 1 Period: 468.890 d



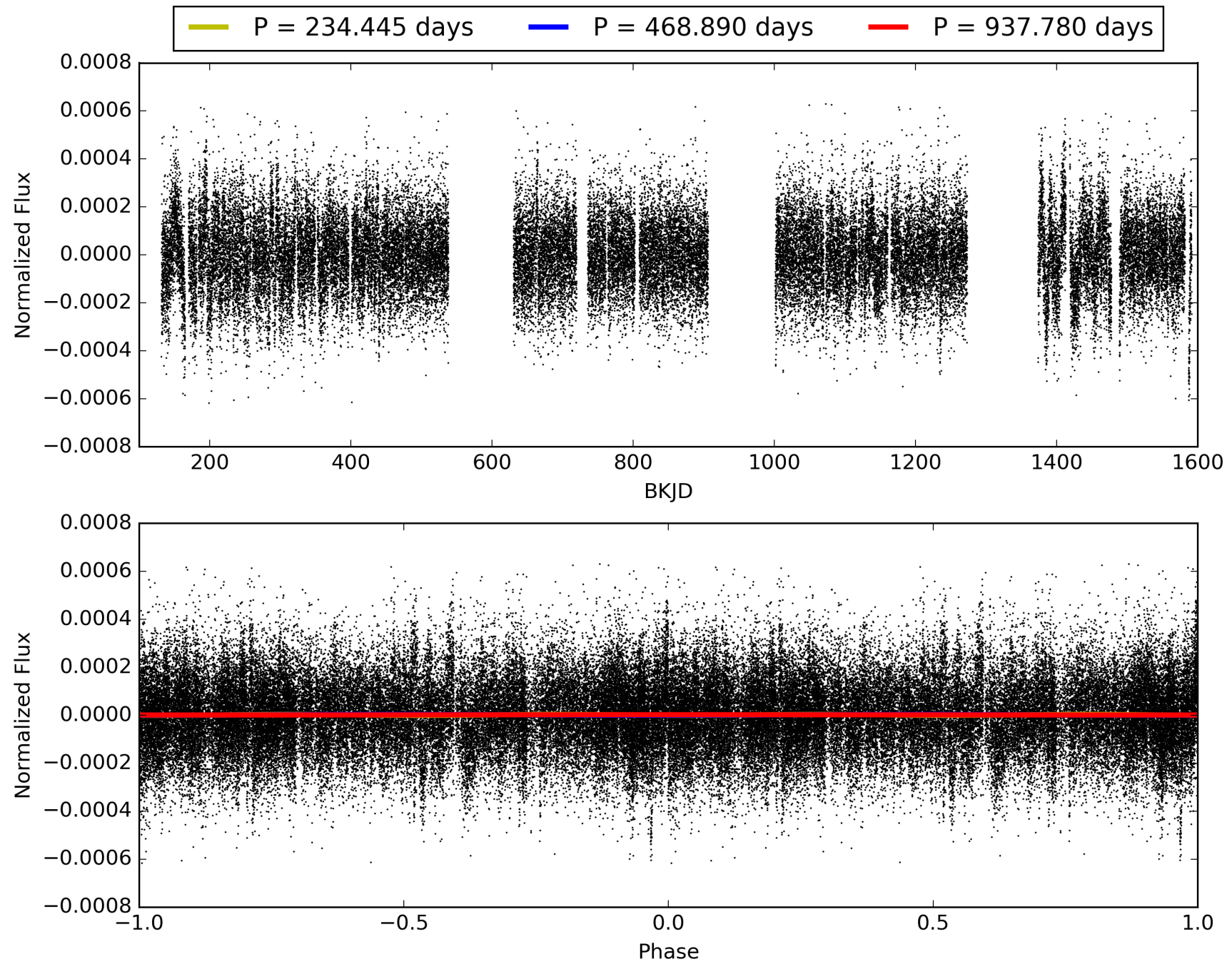
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 00:39:47 Z

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

TCE 004179264-01, PDC Light Curves

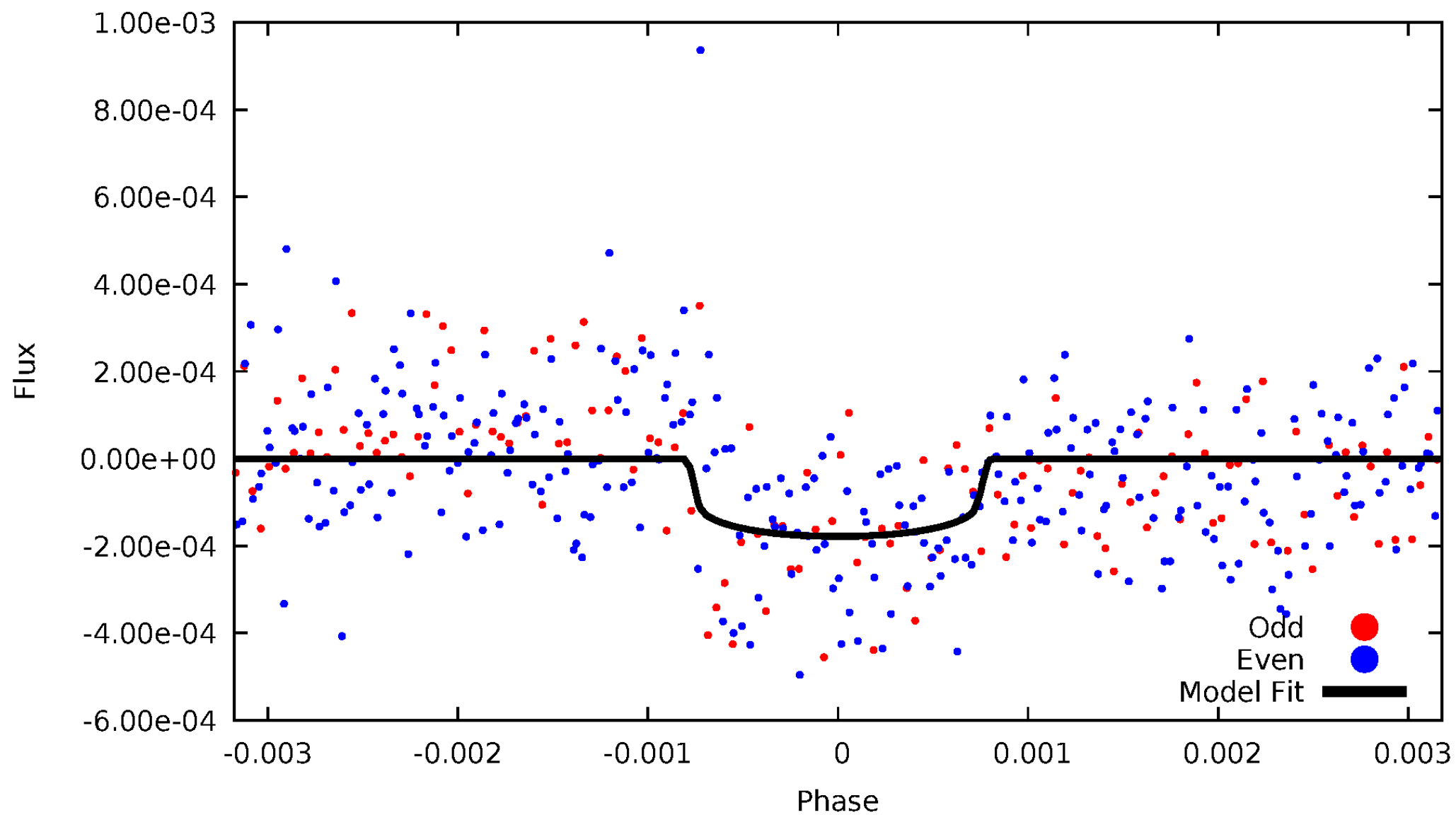


TCE 004179264-01



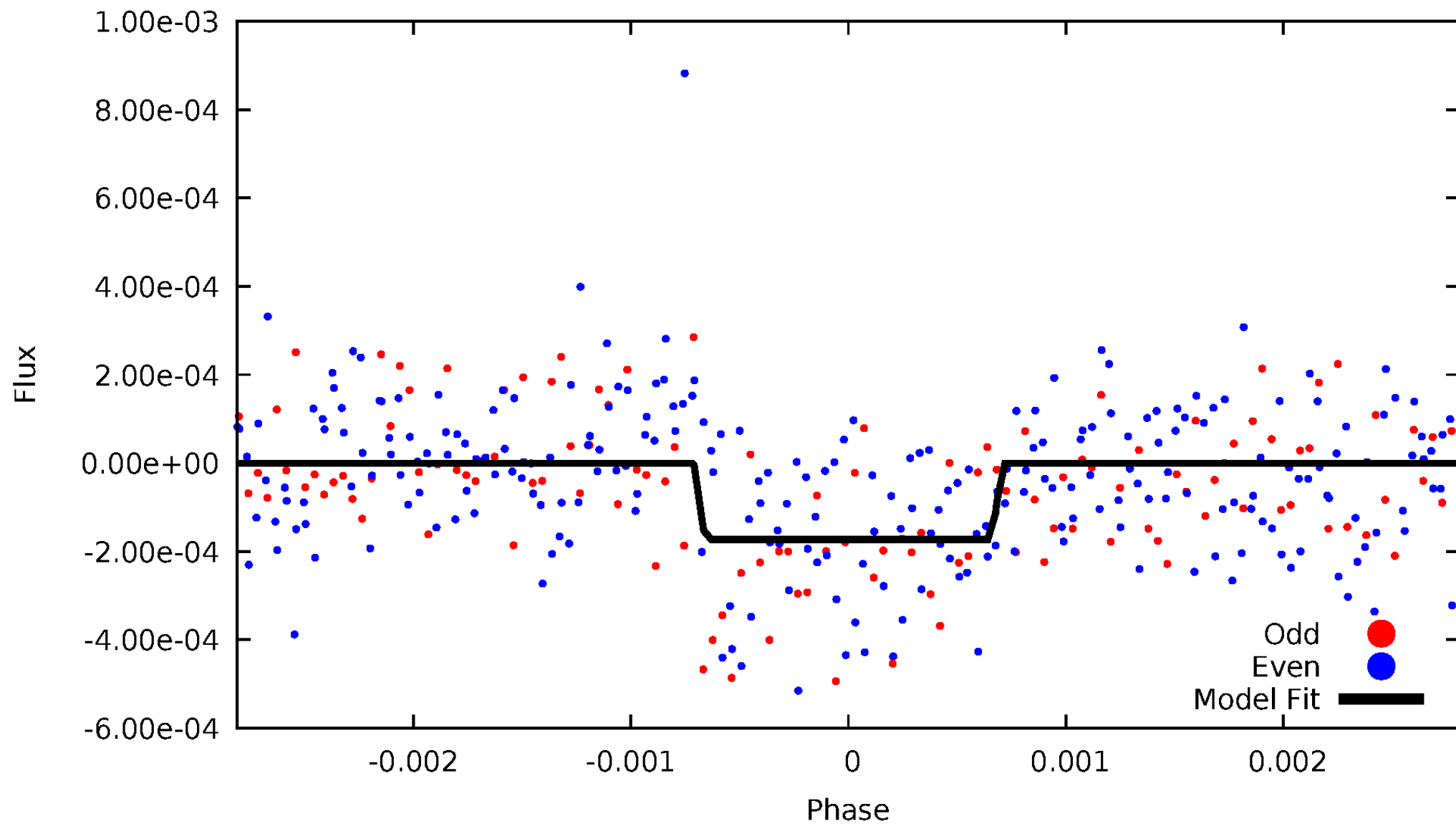
DV Odd/Even

TCE 004179264-01



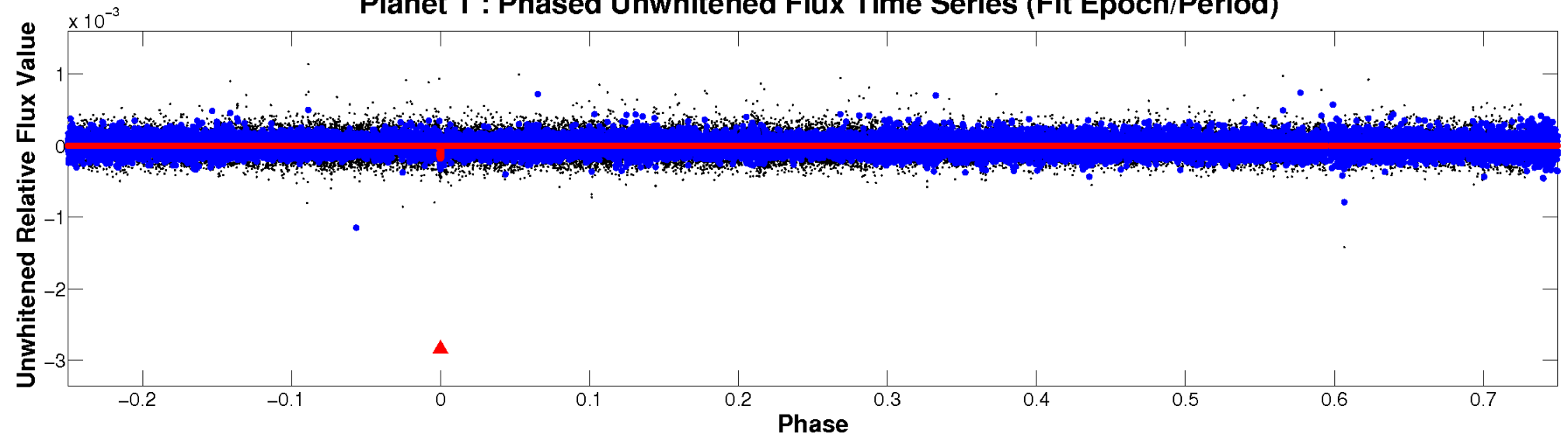
ALT Odd/Even

TCE 004179264-01

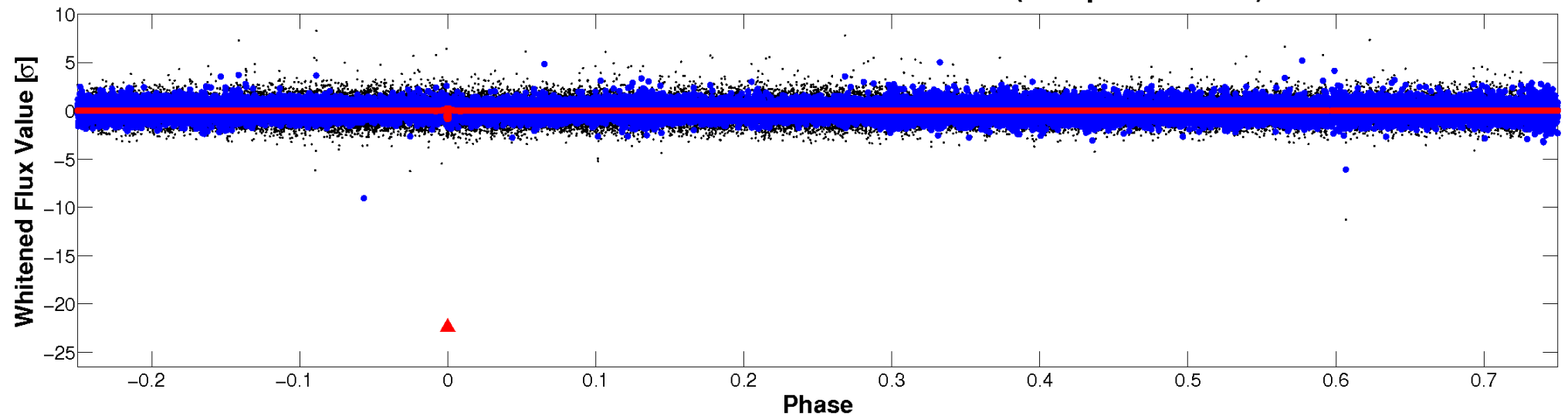


Non-Whitened Vs. Whitened Light Curve

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



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



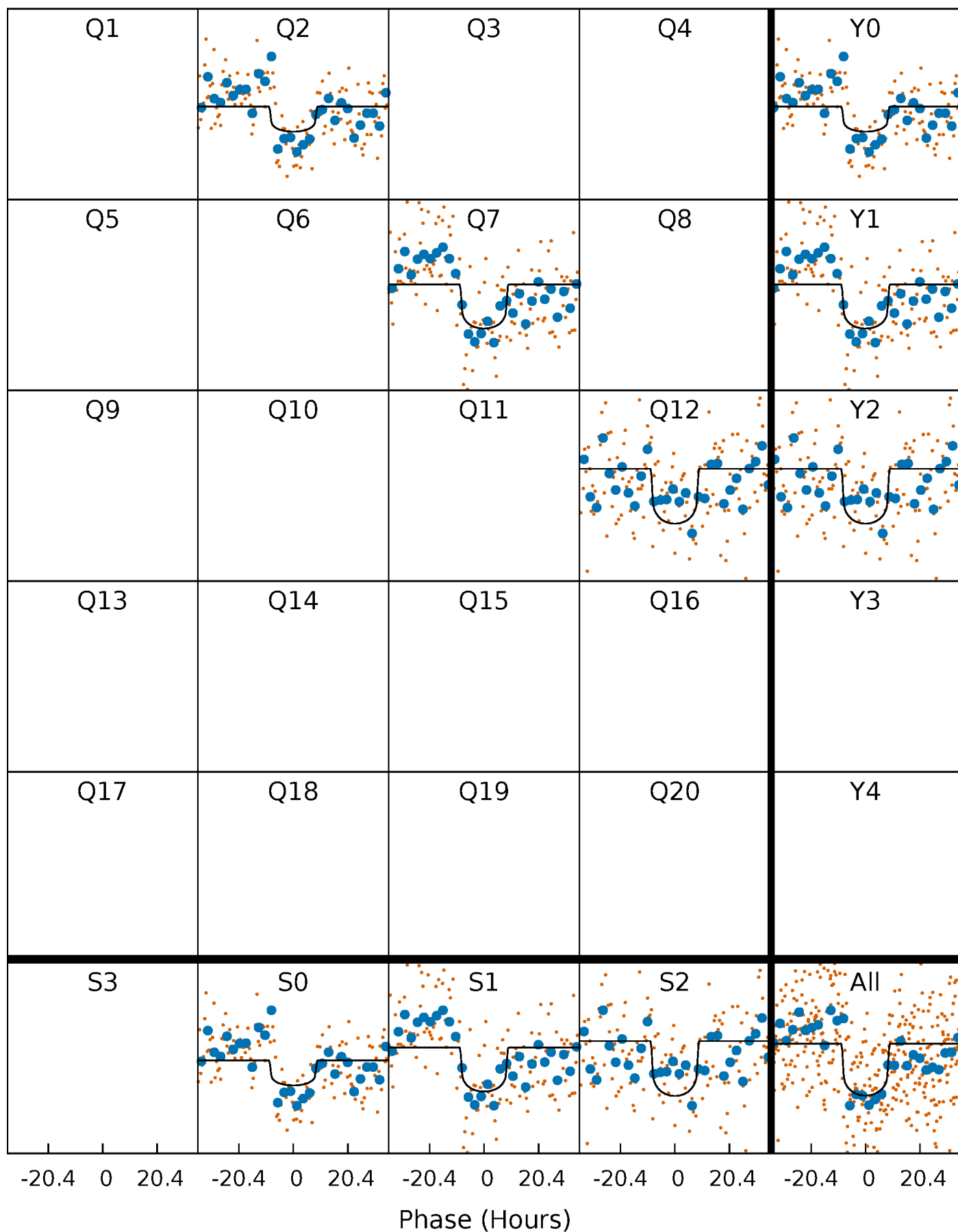
PDC Quarter-Phased Transit Curves

TCE 004179264-01 P=468.889778 Days $T_0=196.219853$ (BKJD)



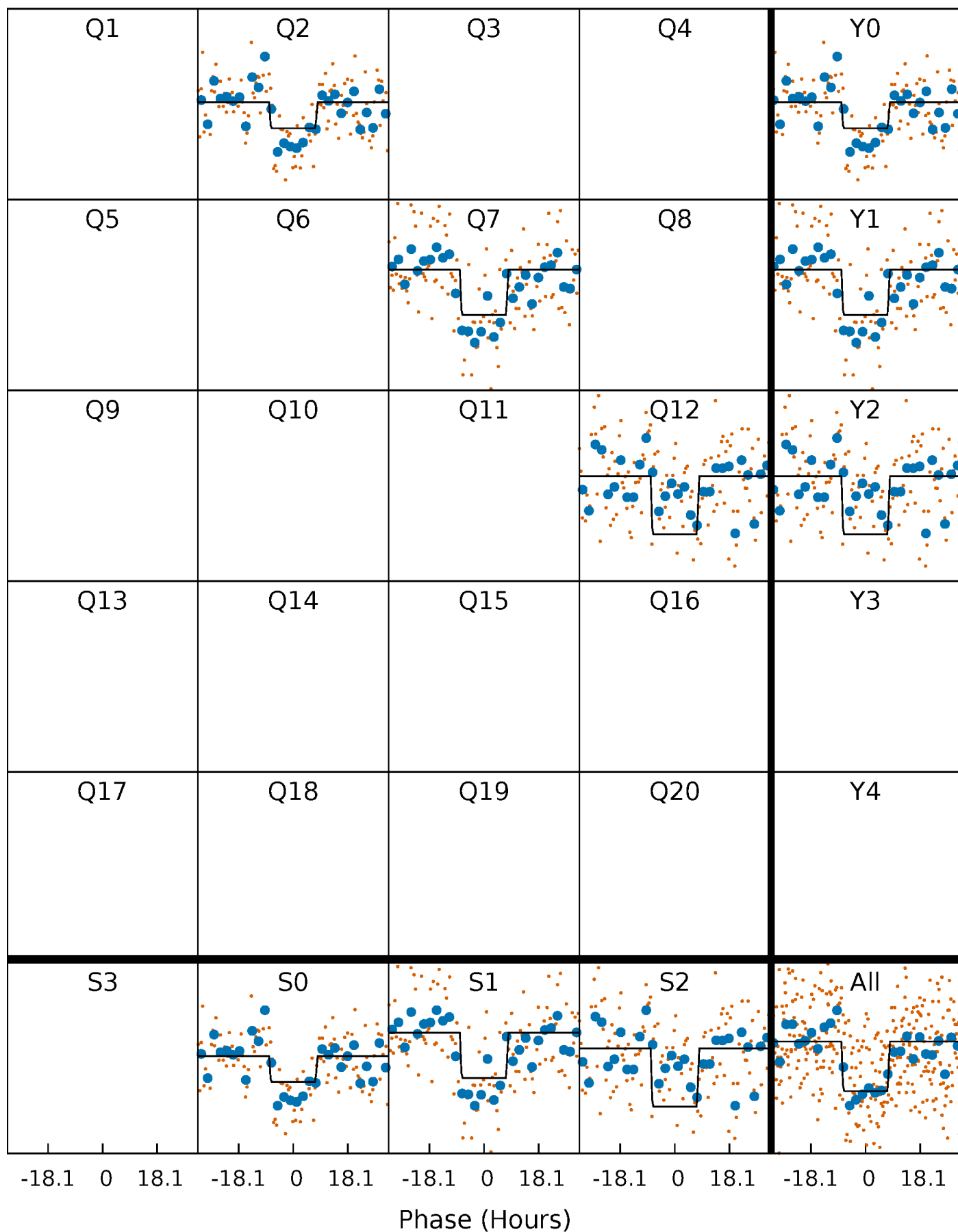
DV Quarter-Phased Transit Curves

TCE 004179264-01 P=468.889778 Days $T_0=196.219853$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

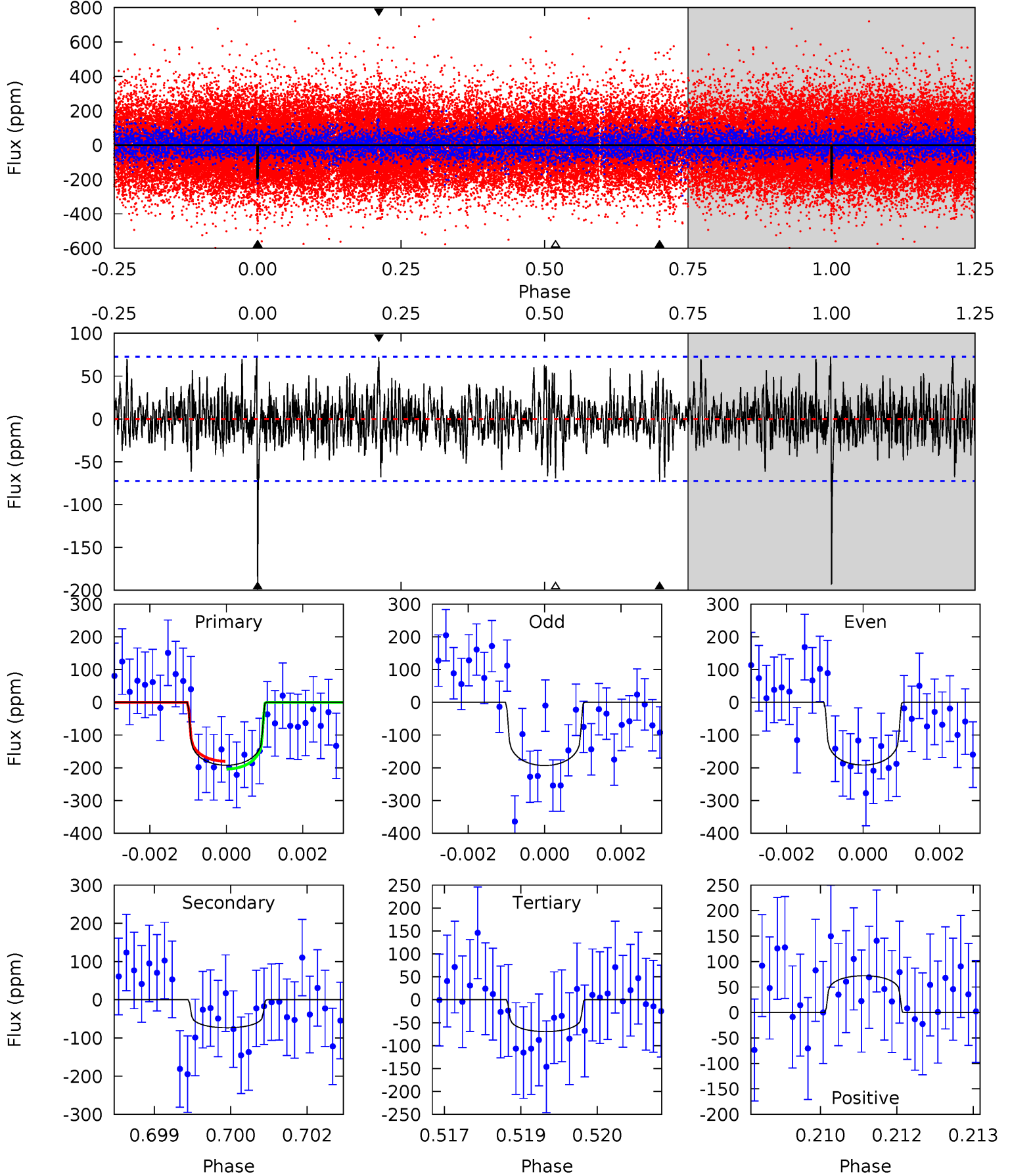
TCE 004179264-01 P=468.868468 Days $T_0=196.233424$ (BKJD)



DV Model-Shift Uniqueness Test

004179264-01, P = 468.889778 Days, E = 196.219853 Days

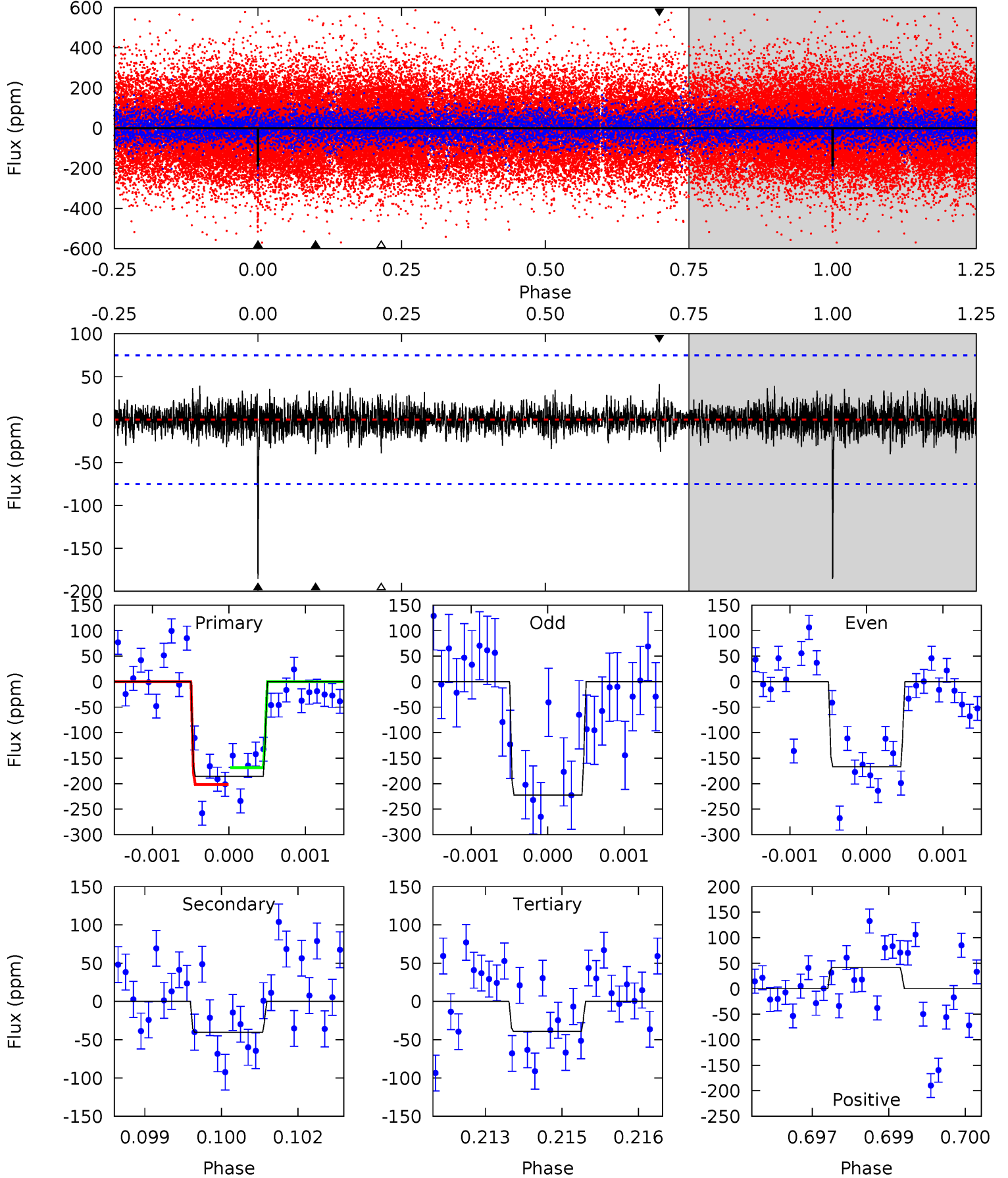
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.2	5.43	5.14	5.34	5.37	3.16	1.51	9.08	8.88	0.29	0.09	0.05	0.95	0.28	0.88



Alt Model-Shift Uniqueness Test

004179264-01, P = 468.868468 Days, E = 196.233424 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.3	2.89	2.80	2.97	5.39	3.19	0.76	10.5	10.4	0.09	-0.08	1.88	0.83	0.18	1.18



Stellar Parameters For KIC 004179264

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5953^{+161}_{-161}	$4.120^{+0.350}_{-0.150}$	$-0.340^{+0.300}_{-0.300}$	$1.392^{+0.389}_{-0.475}$	$0.931^{+0.129}_{-0.106}$	$0.486^{+1.201}_{-0.220}$
	+3%/-3%	+8%/-4%	+88%/-88%	+28%/-34%	+14%/-11%	+247%/-45%
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 004179264-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-73 ± 14	$1.97^{+0.57}_{-0.54}$	395^{+33}_{-42}	4806^{+581}_{-385}	13679^{+12978}_{-5317}
Alt.	-40 ± 14	$1.89^{+0.59}_{-0.50}$	397^{+29}_{-41}	4352^{+520}_{-480}	8242^{+8642}_{-4096}

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 $A_{obs} \gg 1.0$

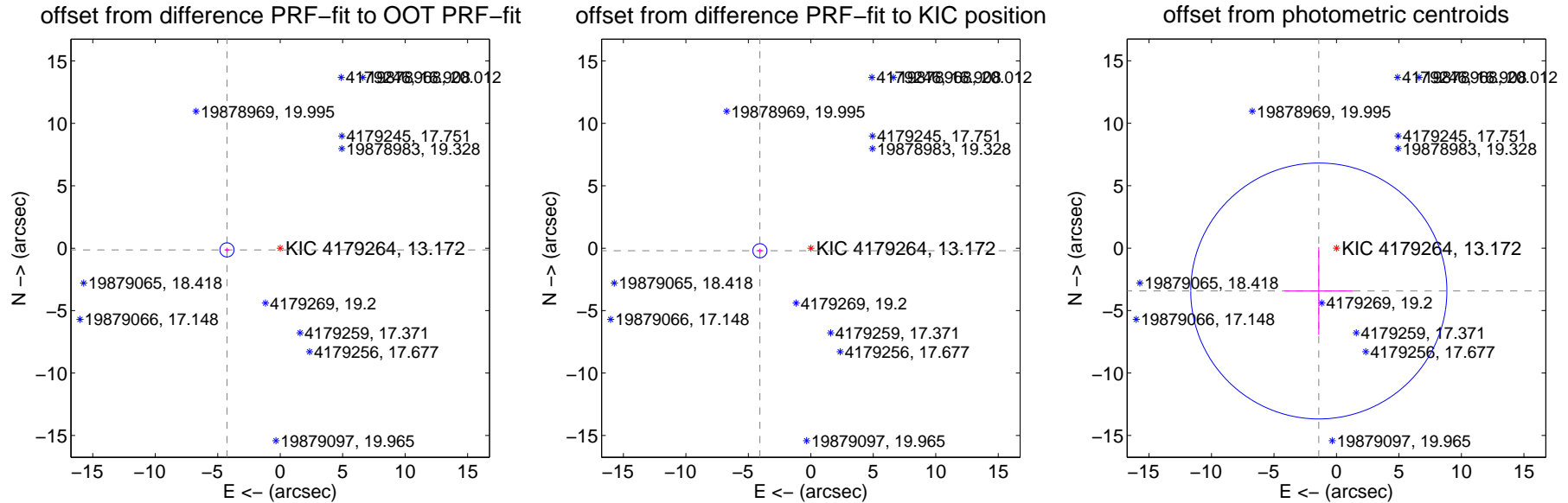
DV Centroid Data

Supplemental centroid analysis for 004179264-01. Kepler magnitude: 13.17. Transit SNR 8.10

There are 0 quarters with good PRF difference image offsets

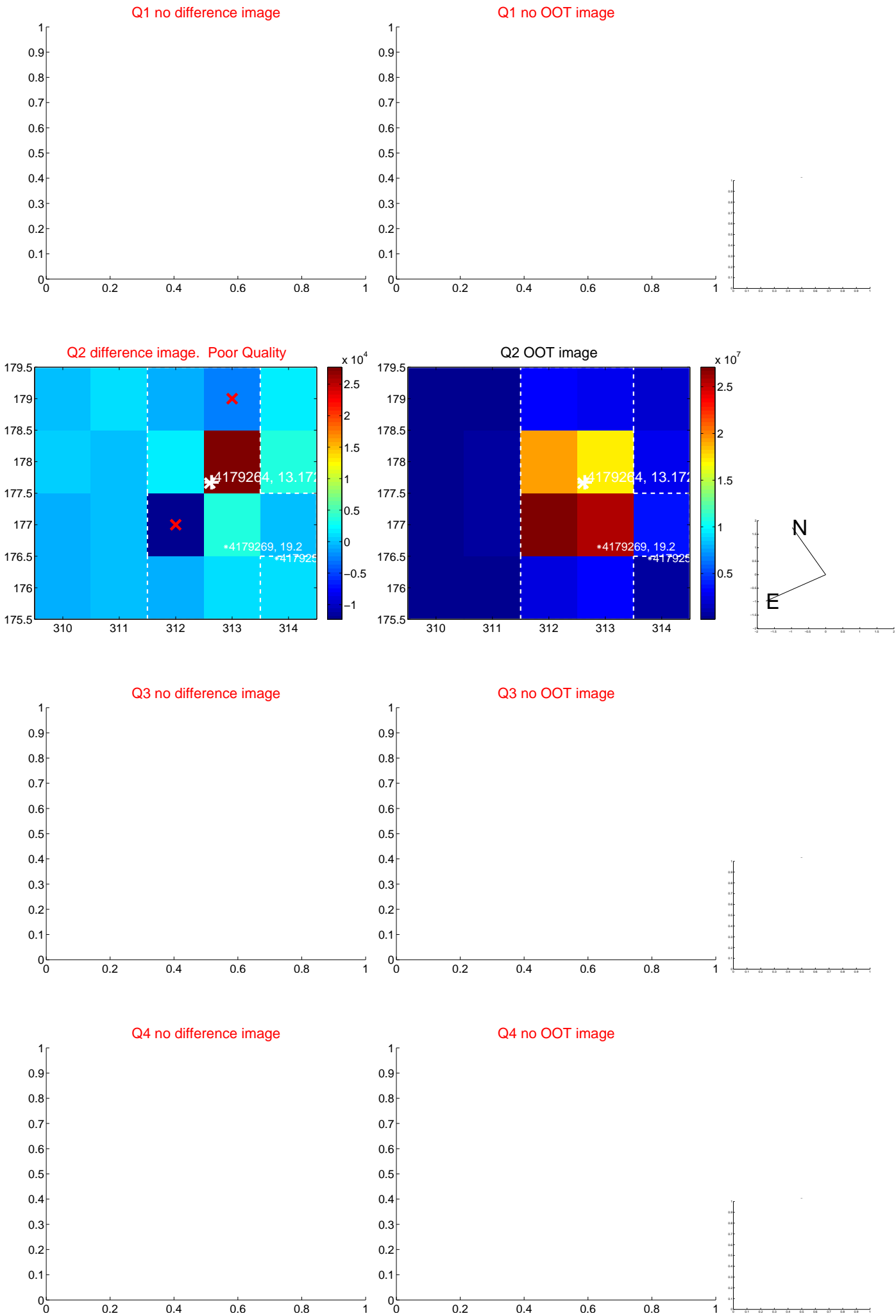
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.262 ± 0.189	22.60	4.260 ± 0.189	-0.135 ± 0.169
PRF-fit source offset from KIC position	4.082 ± 0.189	21.64	4.077 ± 0.189	-0.205 ± 0.169
photometric centroid source offset	3.71 ± 3.42	1.09	1.41 ± 2.75	-3.43 ± 3.52

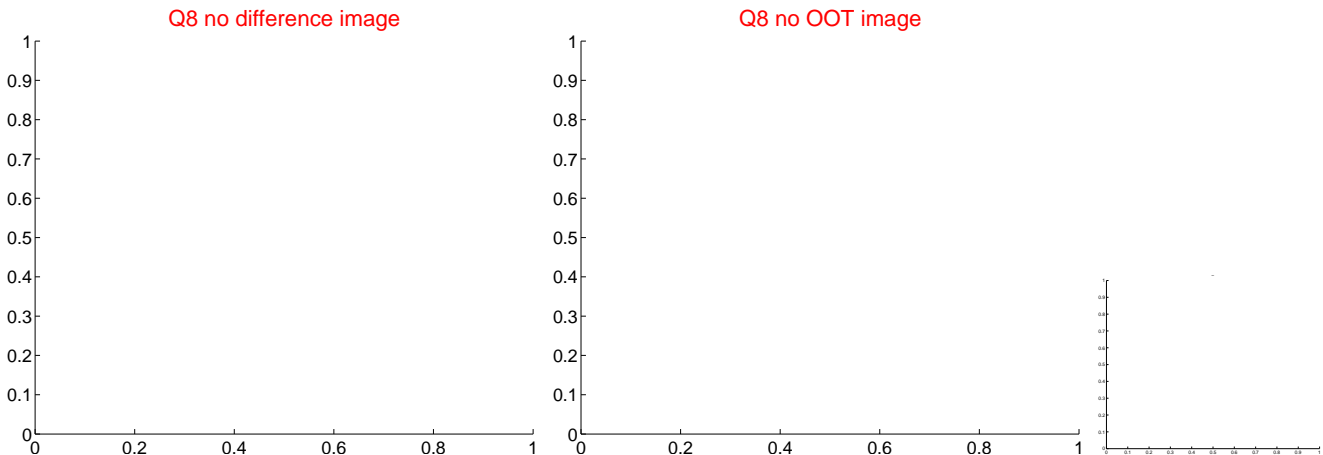
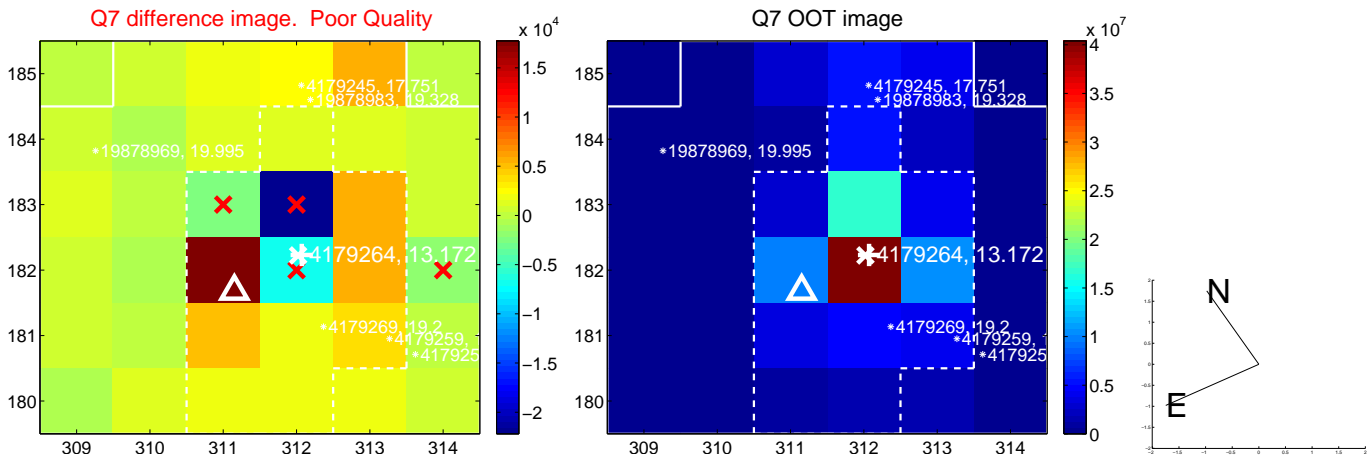


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



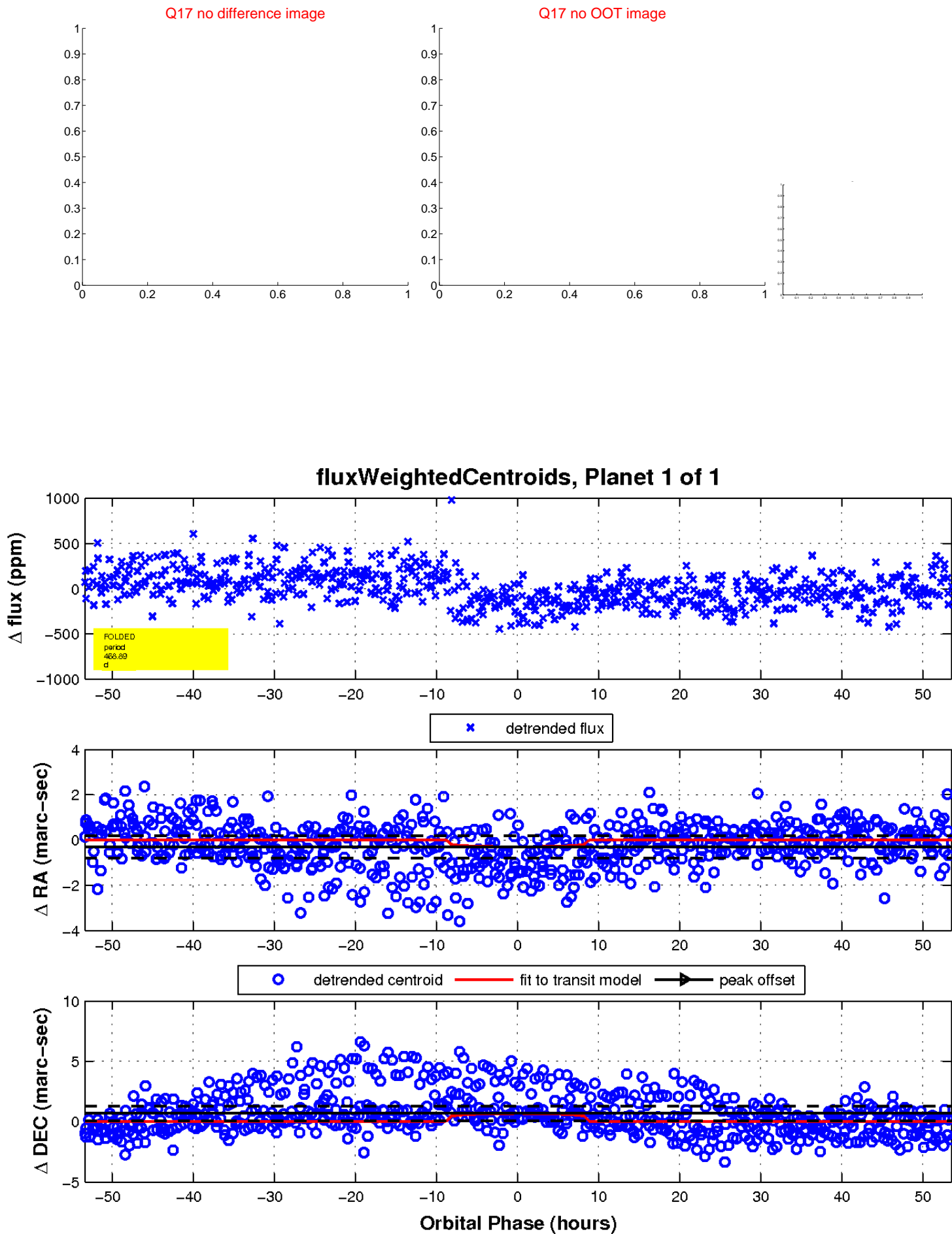
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UKIRT Image

