

KIC 006205502

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})
006205502-01	OBS	No	3.713669	132.963972	80.1	11.062	7.2	6.3	1.14	6221	1.17	763.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006205502-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_FEW_DIFFS—HALO_GHOST

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

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

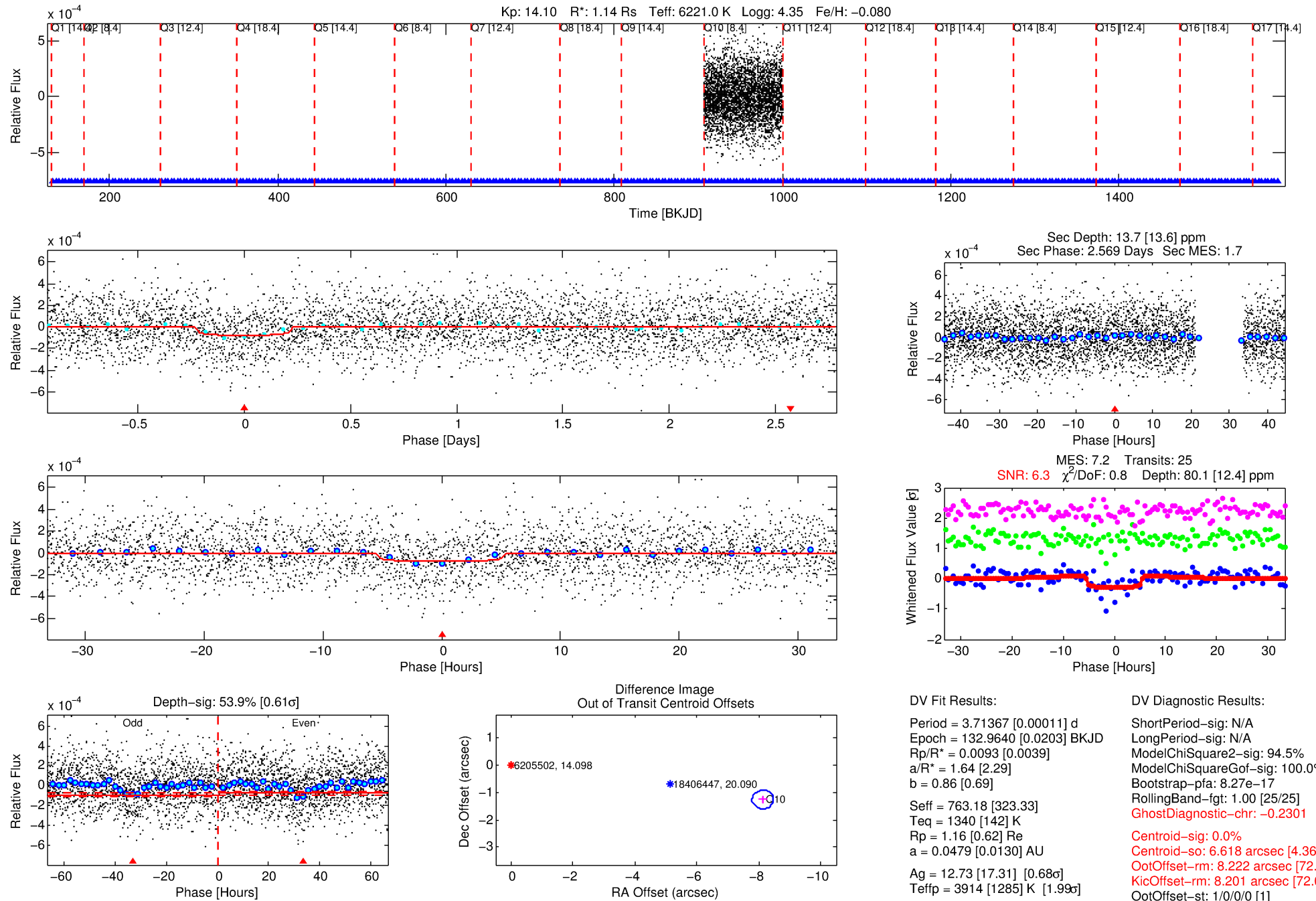
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006205502-01

No Significant Match Found

DV One-Page Summary

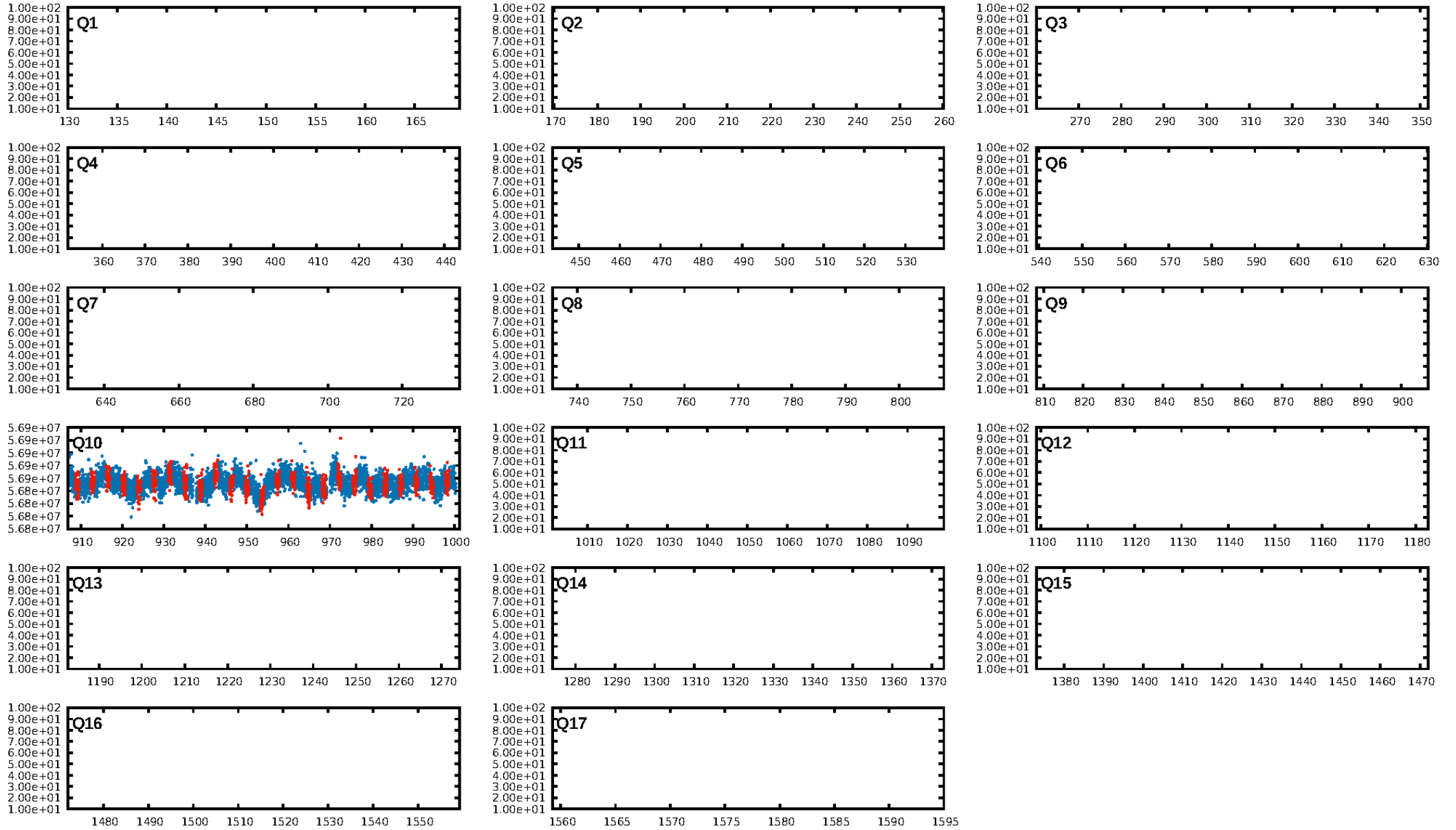
KIC: 6205502 Candidate: 1 of 1 Period: 3.714 d



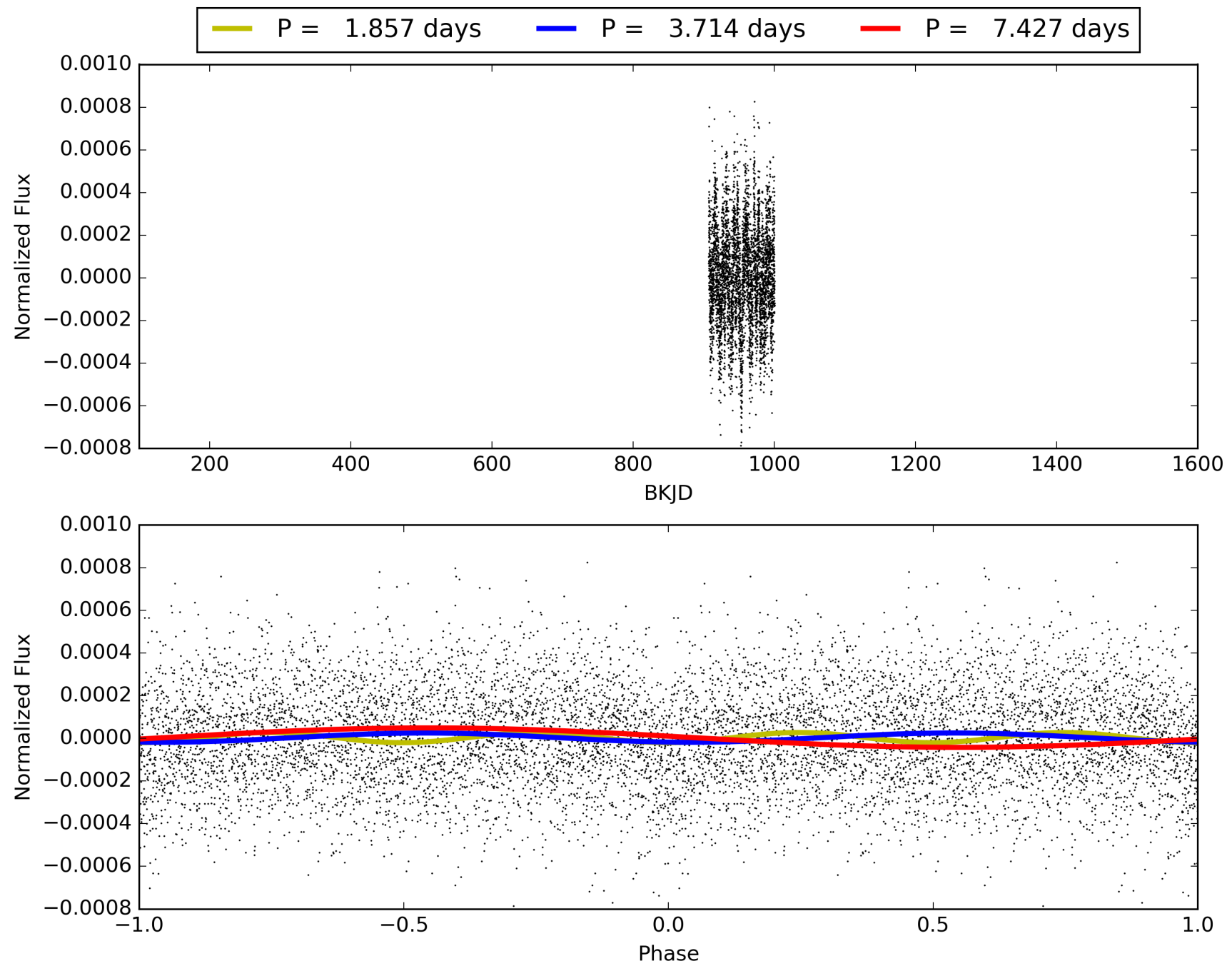
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:20:13 Z

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

TCE 006205502-01, PDC Light Curves

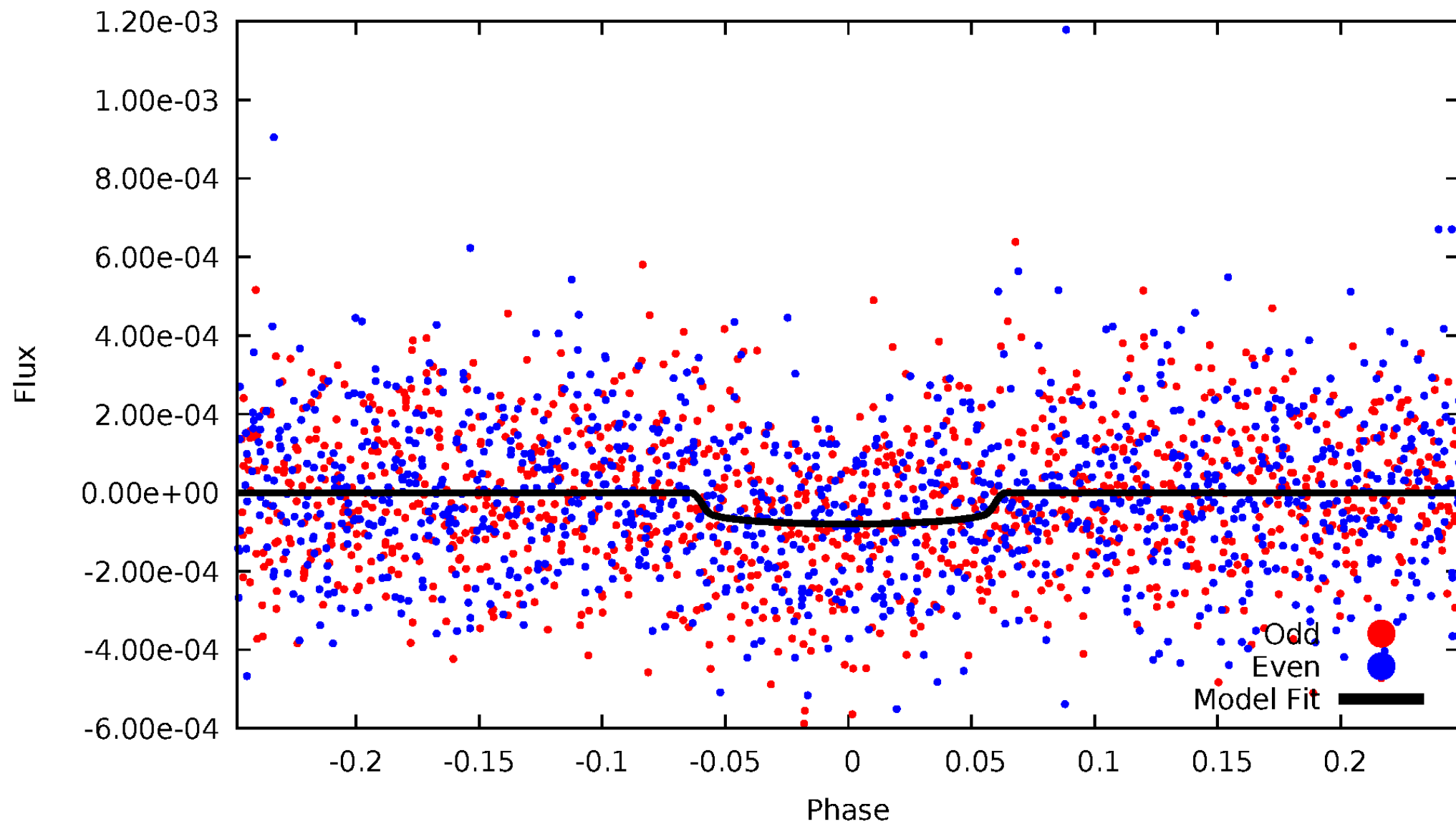


TCE 006205502-01



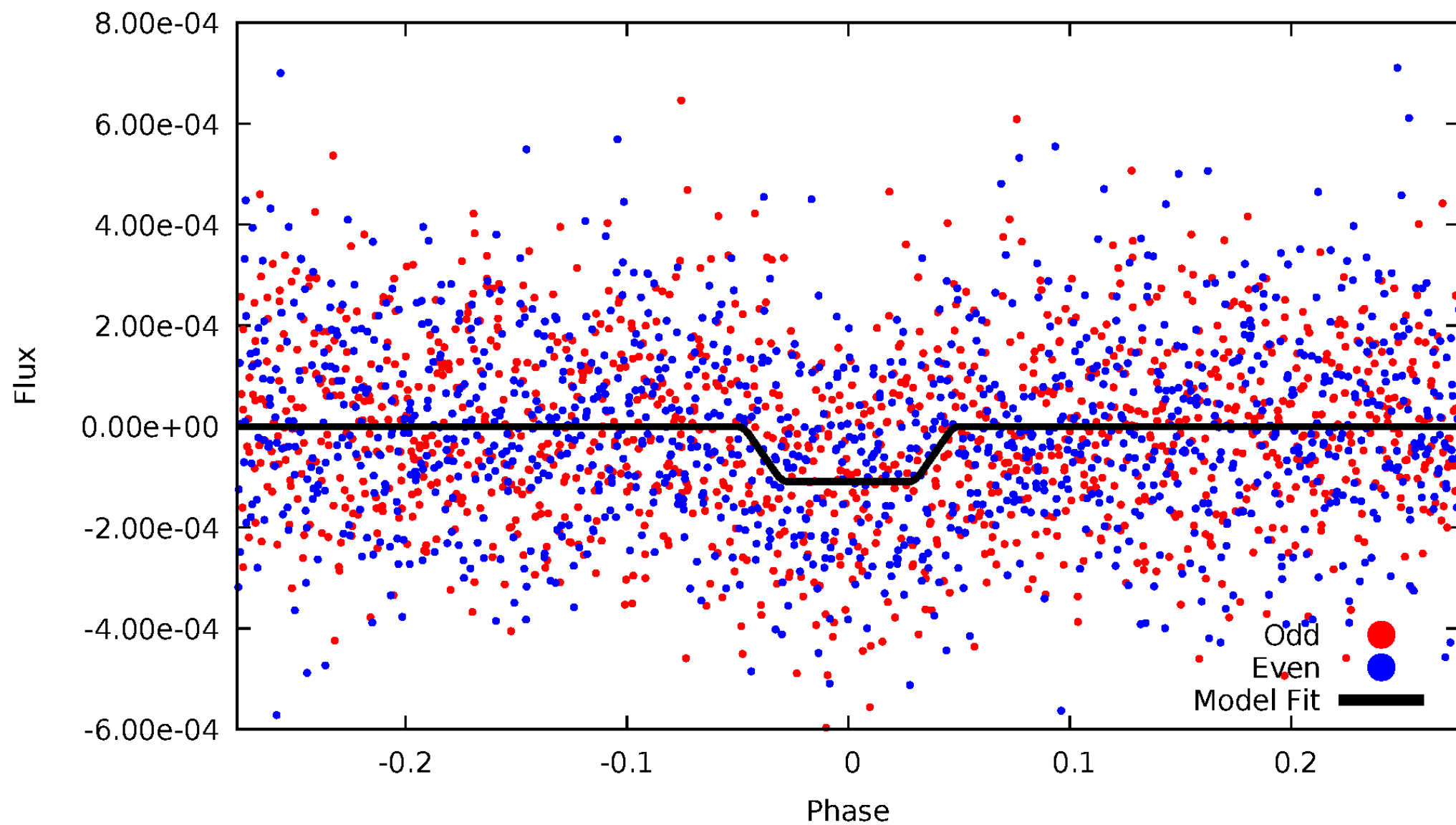
DV Odd/Even

TCE 006205502-01



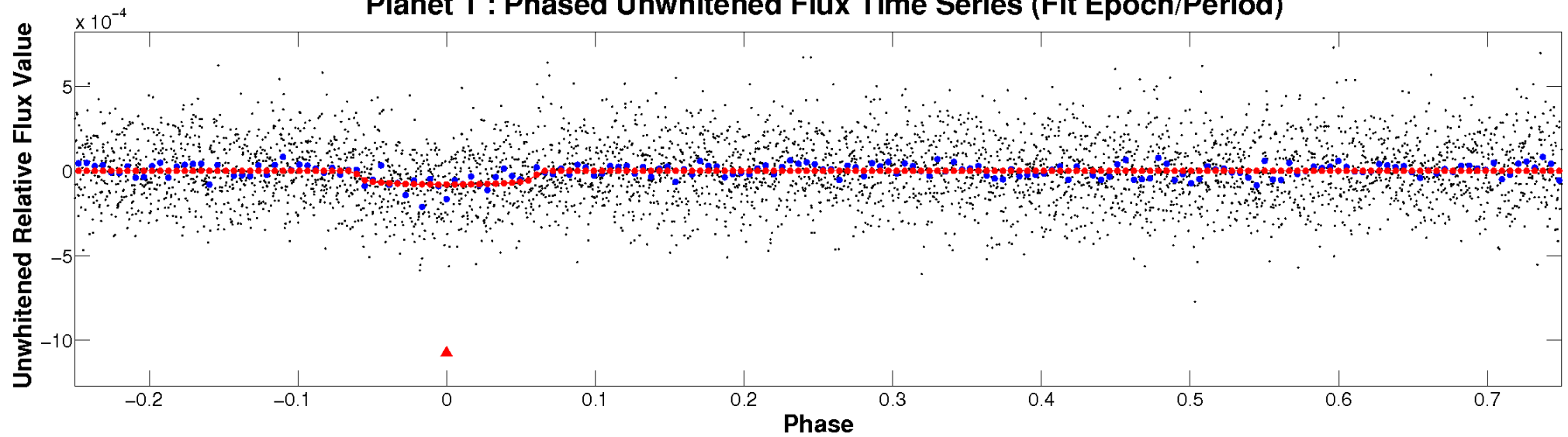
ALT Odd/Even

TCE 006205502-01

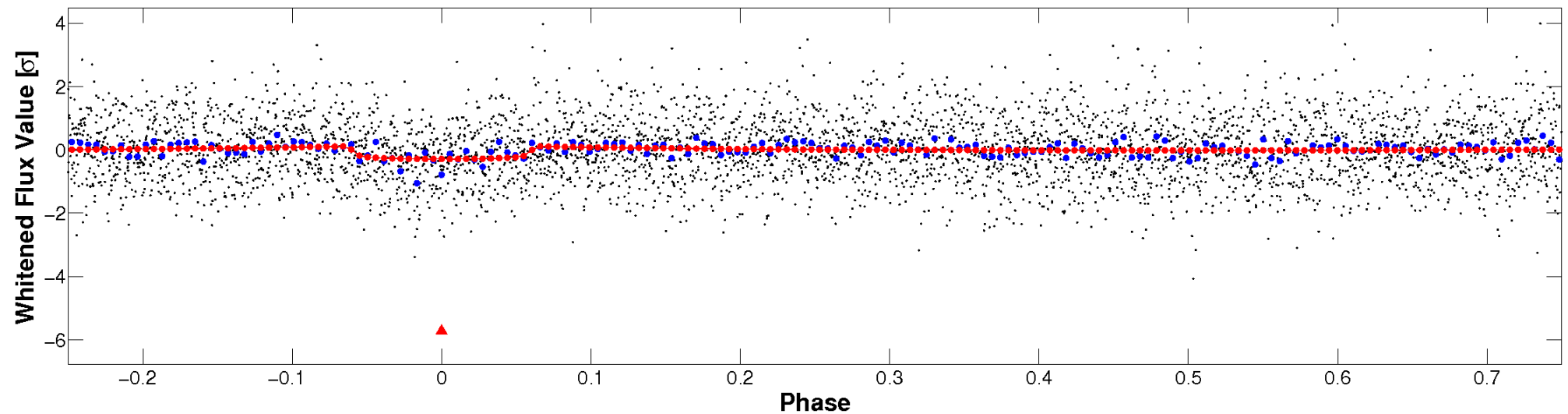


Non-Whitened Vs. Whitened Light Curve

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

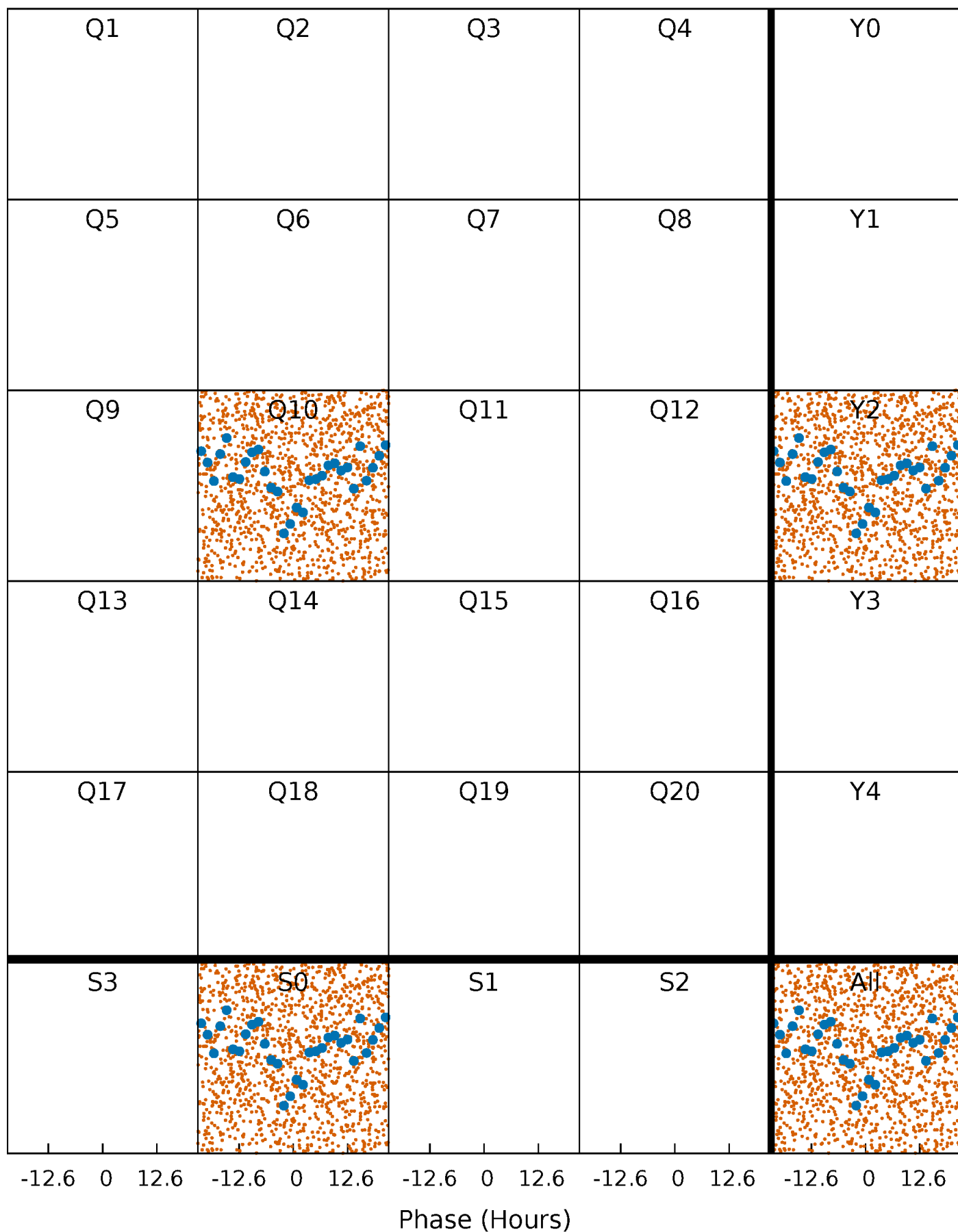


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



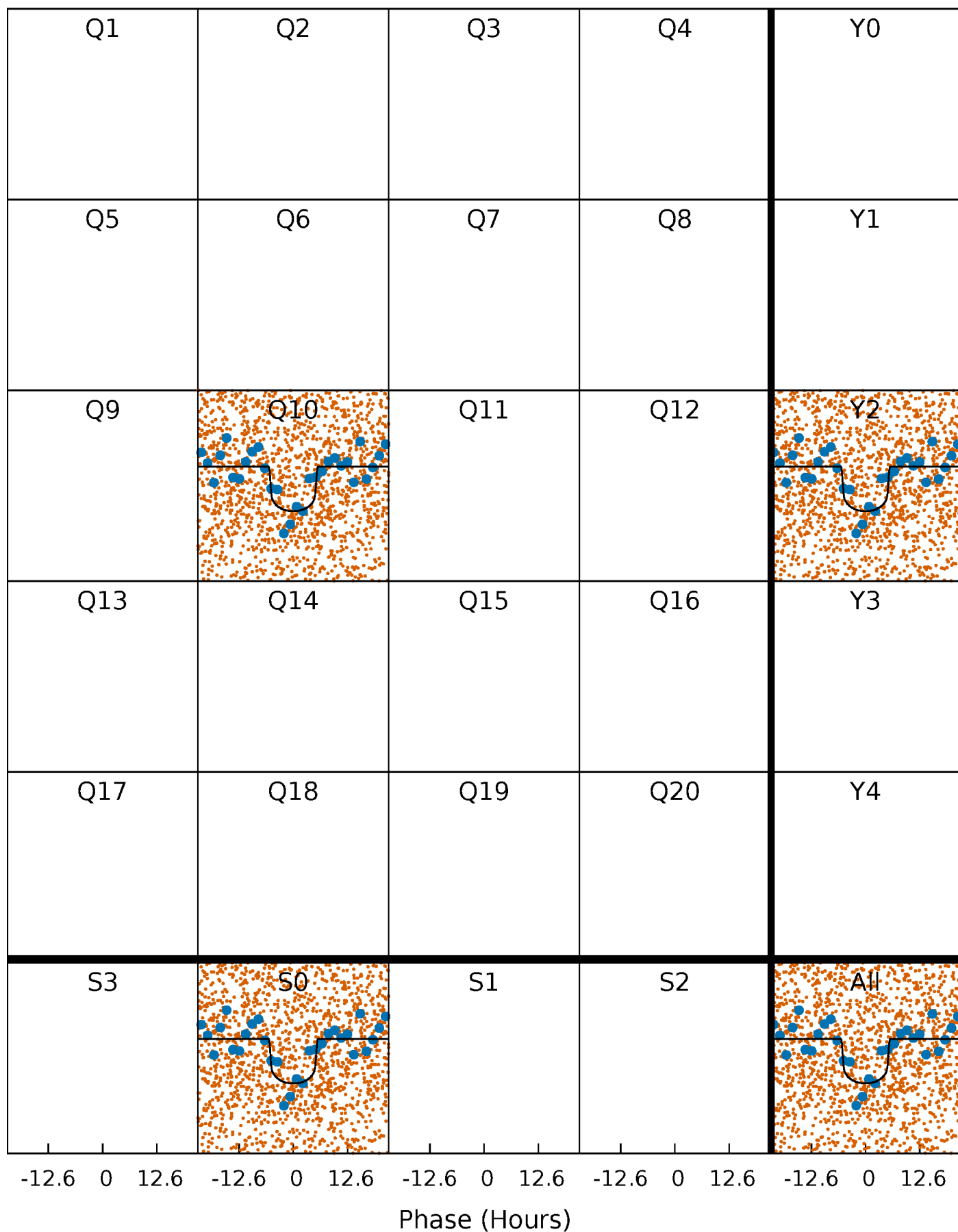
PDC Quarter-Phased Transit Curves

TCE 006205502-01 P= 3.713669 Days $T_0=132.963972$ (BKJD)



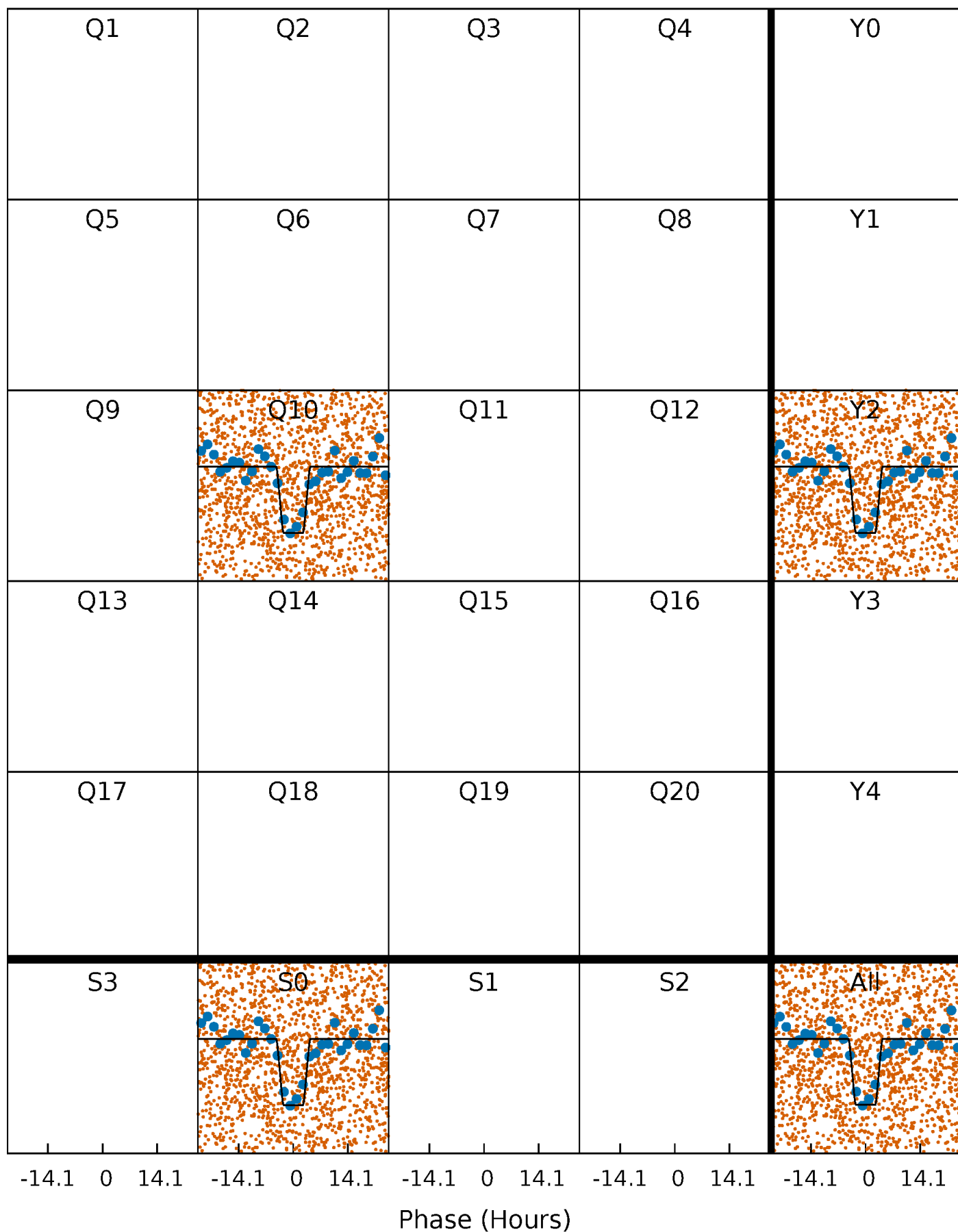
DV Quarter-Phased Transit Curves

TCE 006205502-01 P= 3.713669 Days $T_0=132.963972$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

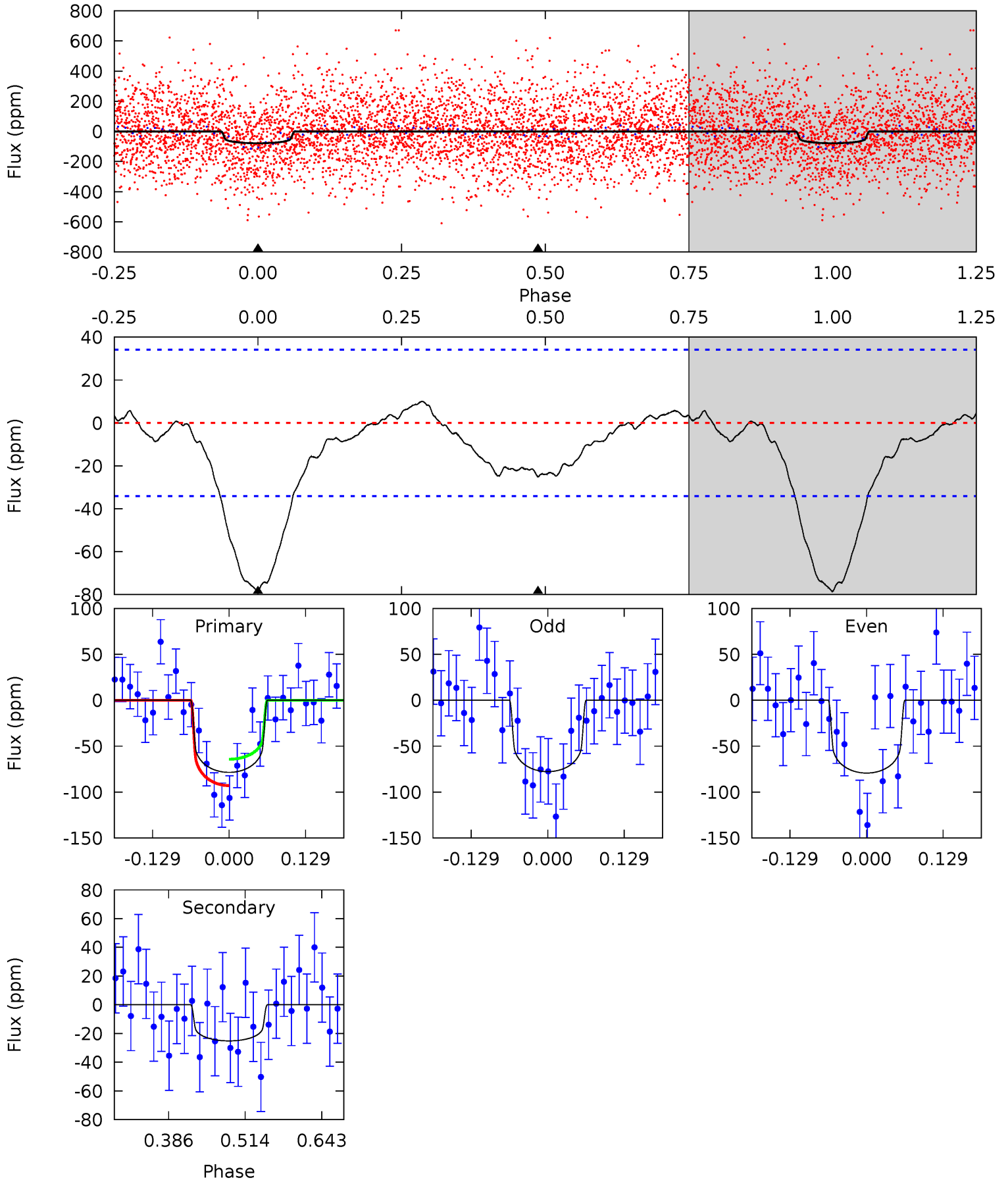
TCE 006205502-01 P= 3.713630 Days $T_0=132.942337$ (BKJD)



DV Model-Shift Uniqueness Test

006205502-01, P = 3.713669 Days, E = 132.963972 Days

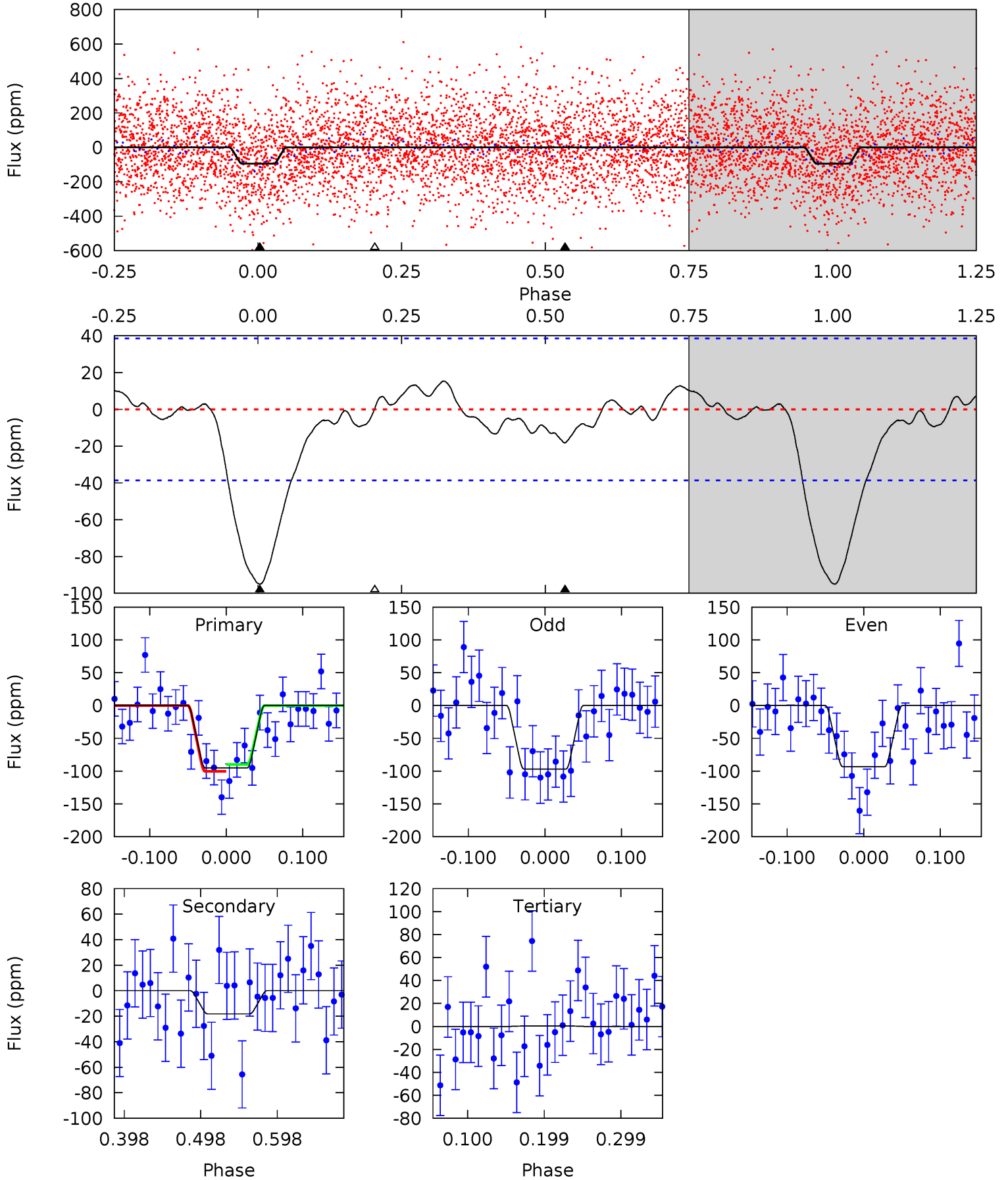
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.4	3.33	0	0	4.51	1.52	0.63	10.4	10.4	3.33	3.33	0.10	0.92	0.11	1.90



Alt Model-Shift Uniqueness Test

006205502-01, P = 3.713630 Days, E = 132.942337 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.2	2.15	-0.05	0	4.57	1.65	0.84	11.3	11.2	2.20	2.15	0.21	0.99	0.14	0.63



Stellar Parameters For KIC 006205502

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6221^{+194}_{-259}	$4.349^{+0.105}_{-0.210}$	$-0.080^{+0.250}_{-0.300}$	$1.143^{+0.375}_{-0.161}$	$1.060^{+0.183}_{-0.122}$	$1.001^{+0.485}_{-0.520}$
	+3%/-4%	+2%/-5%	+312%/-375%	+33%/-14%	+17%/-12%	+48%/-52%
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 006205502-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-25 ± 8	$1.26^{+0.53}_{-0.50}$	1892^{+131}_{-118}	4606^{+1184}_{-642}	20^{+36}_{-11}
Alt.	-18 ± 8	$1.34^{+0.60}_{-0.49}$	1881^{+155}_{-104}	4158^{+895}_{-618}	12^{+21}_{-8}

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

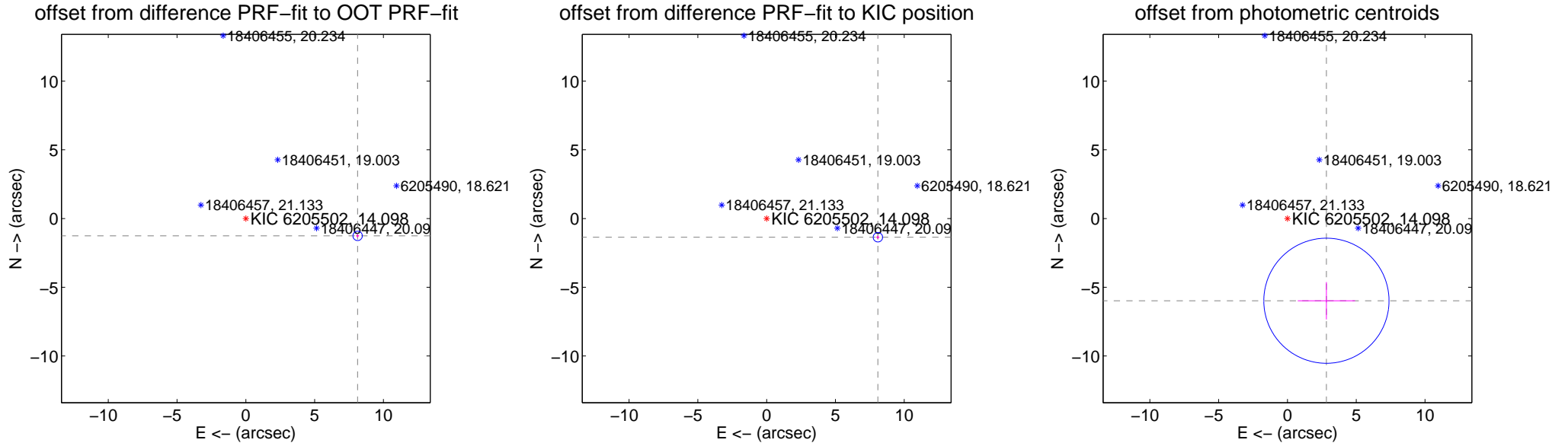
DV Centroid Data

Supplemental centroid analysis for 006205502-01. Kepler magnitude: 14.10. Transit SNR 6.26

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.222 \pm 0.114	72.22	-8.125 \pm 0.114	-1.262 \pm 0.123
PRF-fit source offset from KIC position	8.201 \pm 0.114	72.00	-8.087 \pm 0.114	-1.363 \pm 0.123
photometric centroid source offset	6.62 \pm 1.52	4.36	-2.83 \pm 2.08	-5.98 \pm 1.36



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.

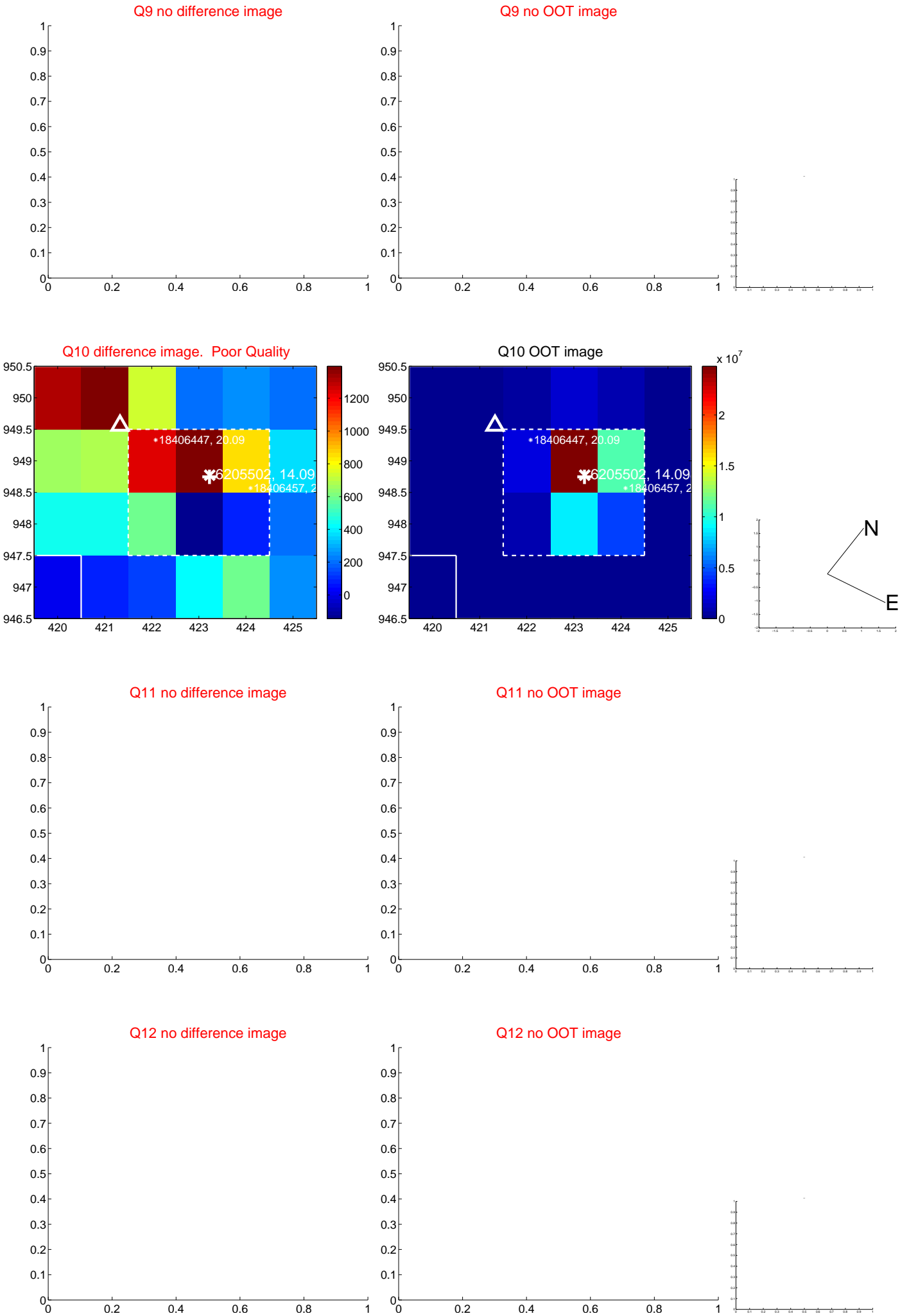
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



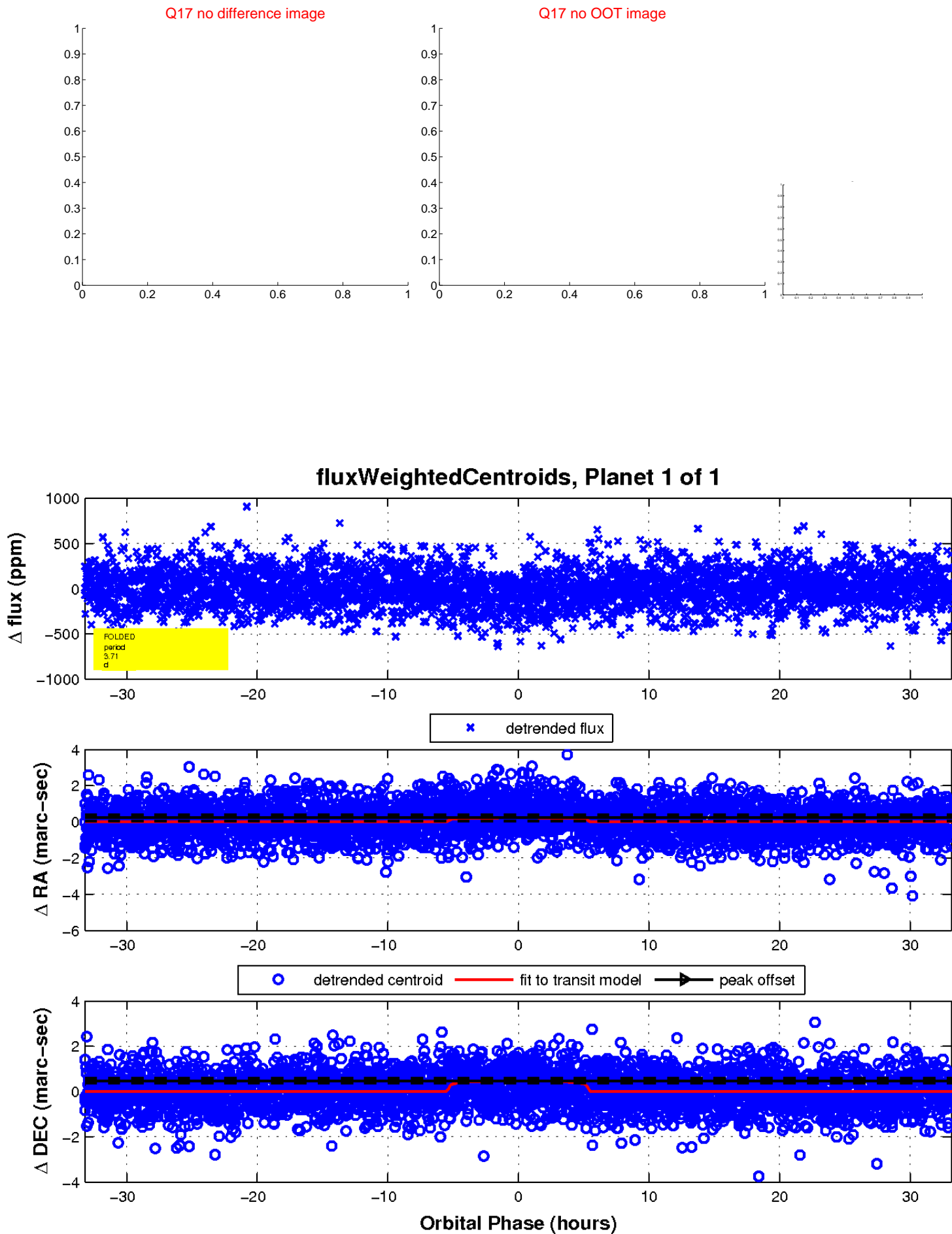
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

