

# KIC 008395107

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
008395107-01	OBS	No	254.081137	379.861857	328.8	1.593	7.4	1.0	1.09	6380	2.27	2.67

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008395107-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_TER_ALT—MOD_POS_ALT— 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.

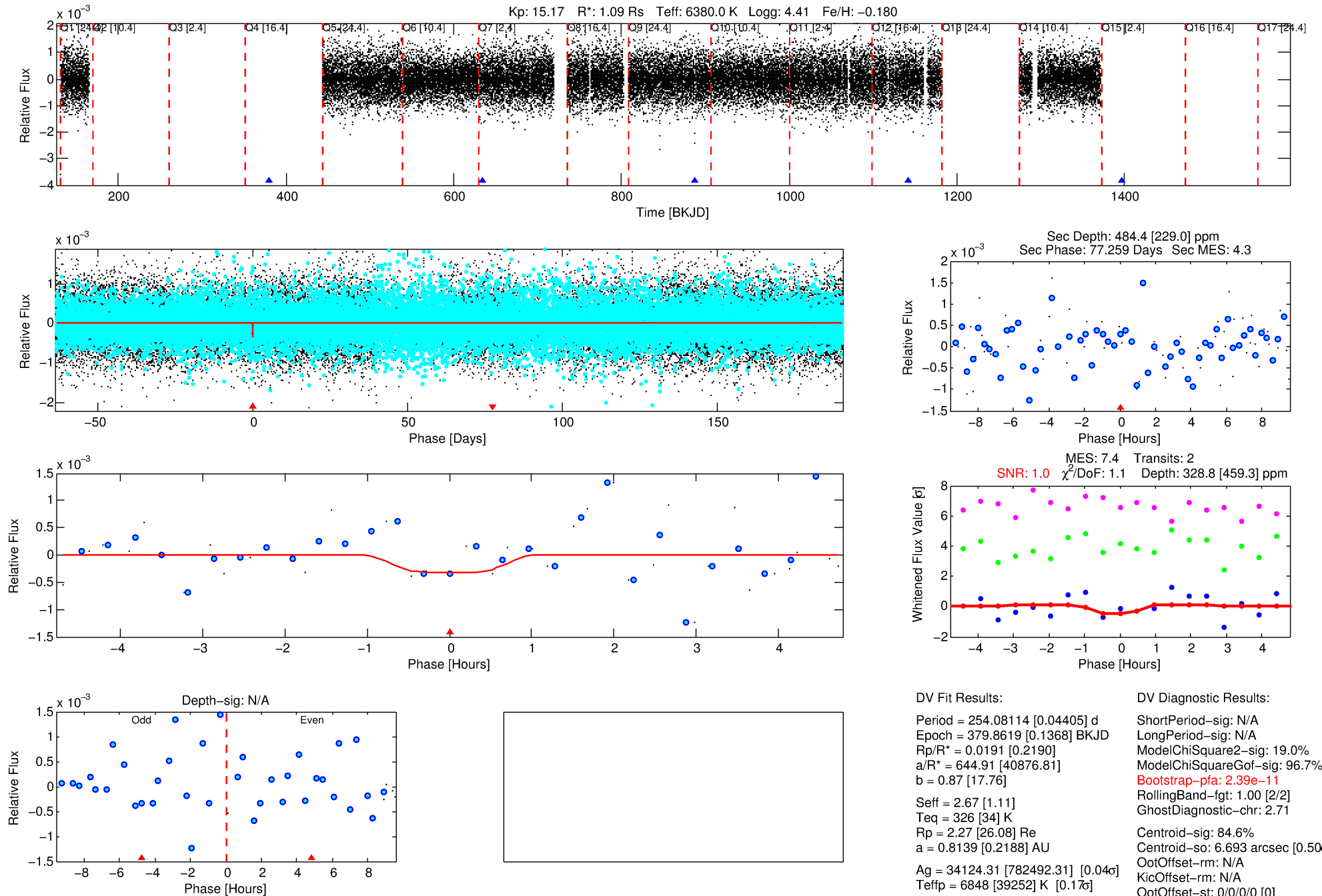
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 008395107-01

No Significant Match Found

# DV One-Page Summary

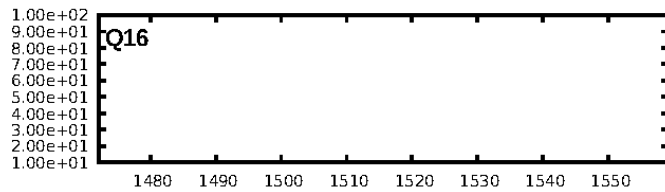
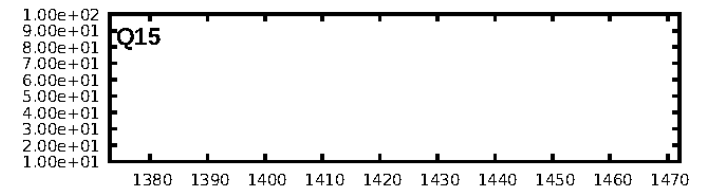
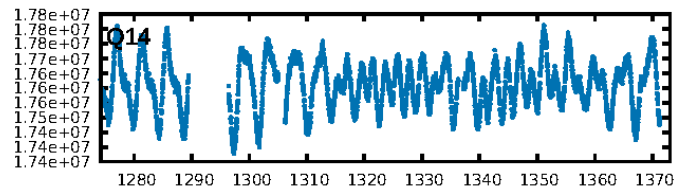
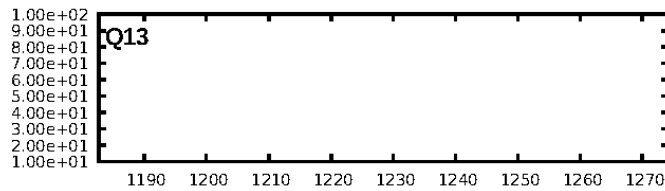
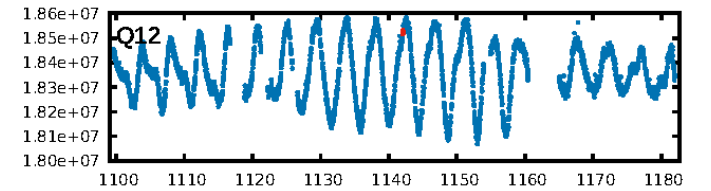
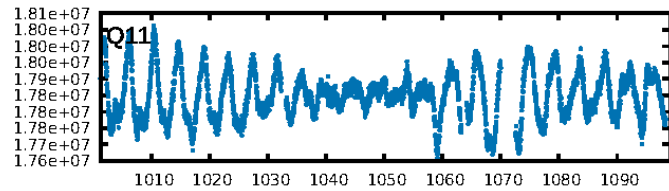
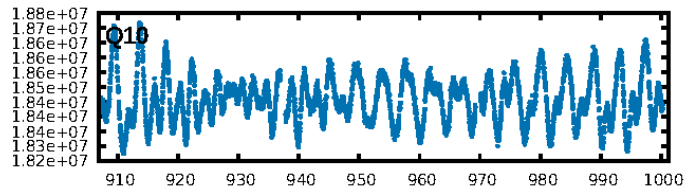
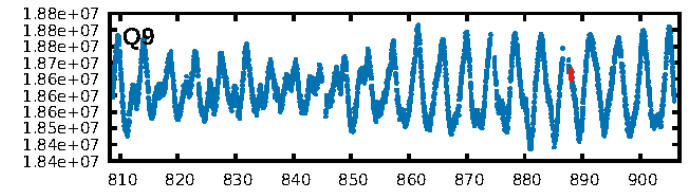
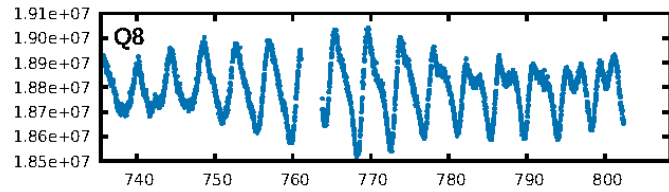
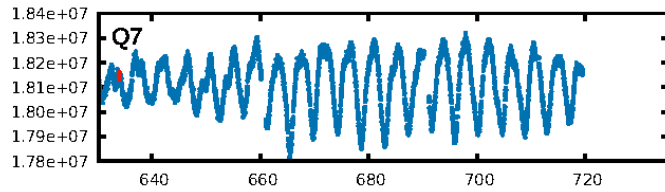
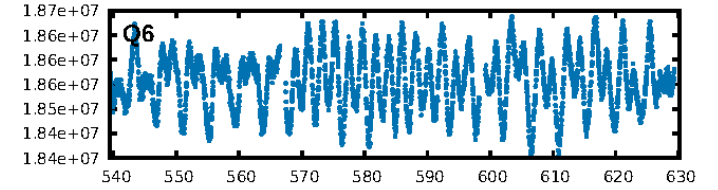
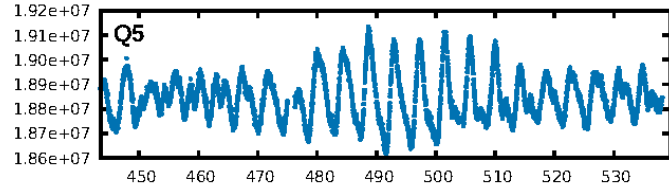
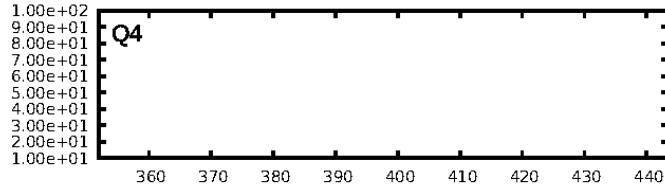
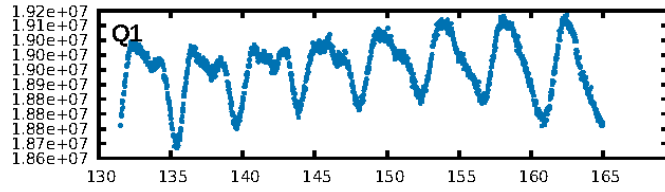
KIC: 8395107 Candidate: 1 of 1 Period: 254.081 d



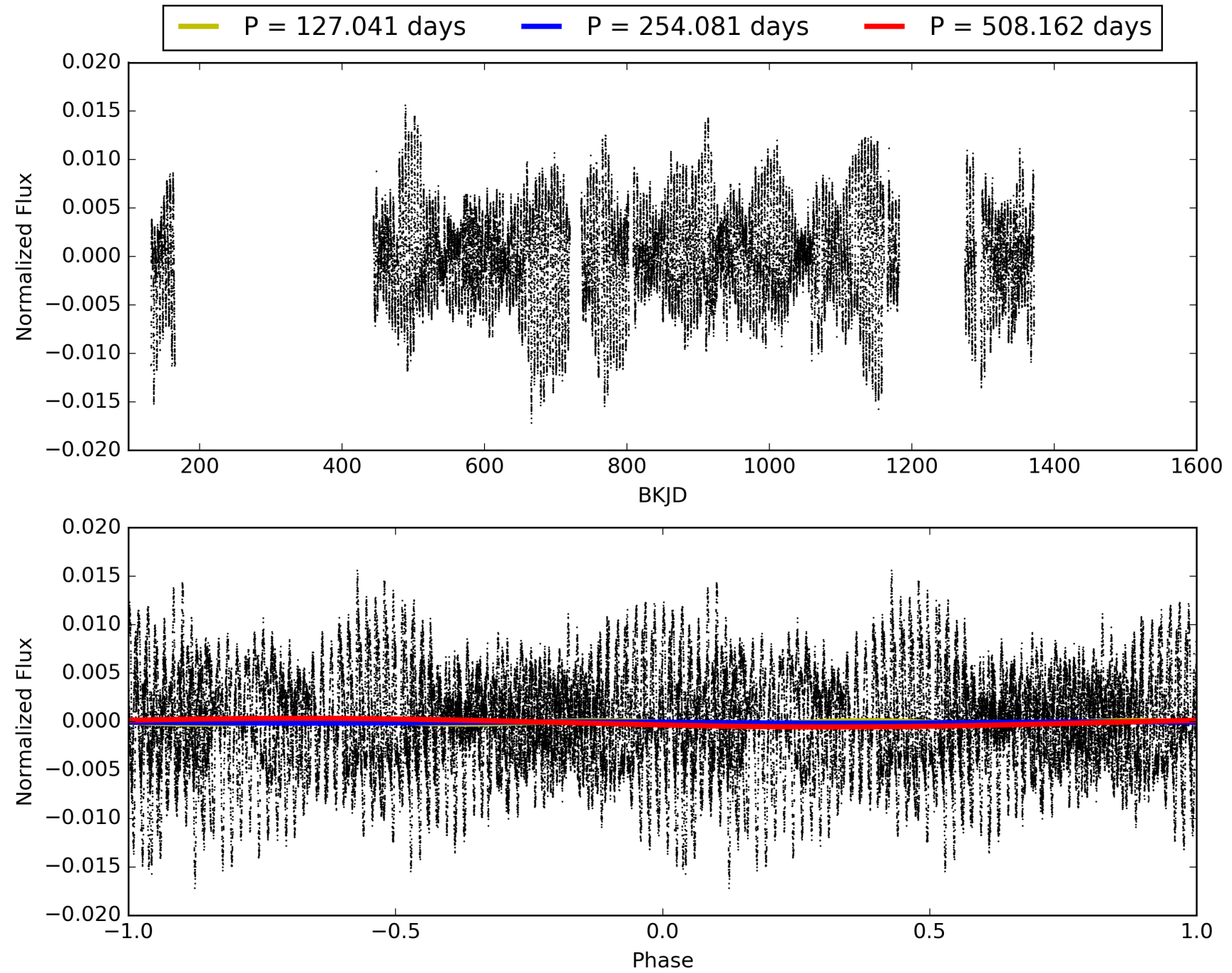
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 19:33:39 Z

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

# TCE 008395107-01, PDC Light Curves

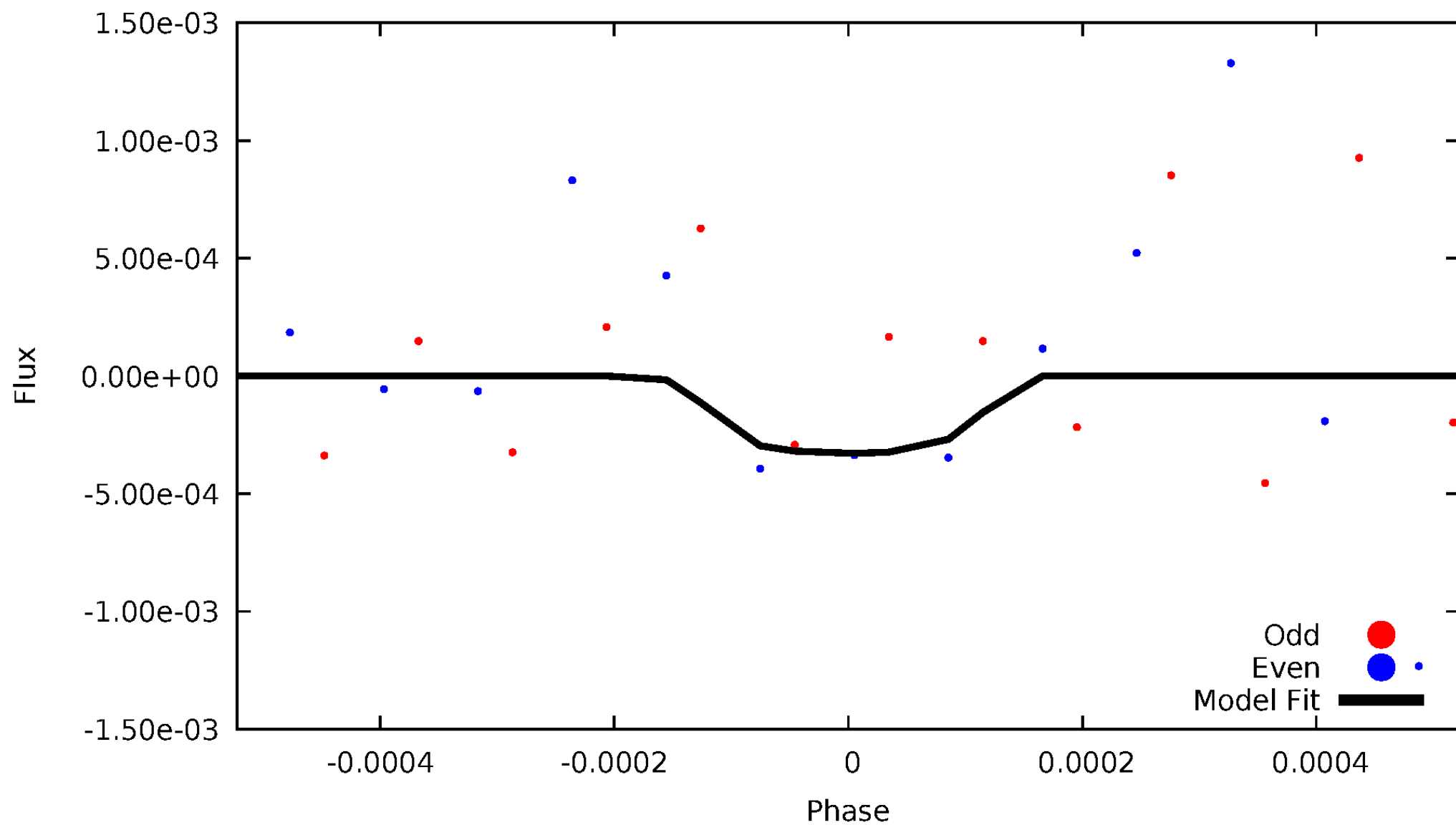


TCE 008395107-01



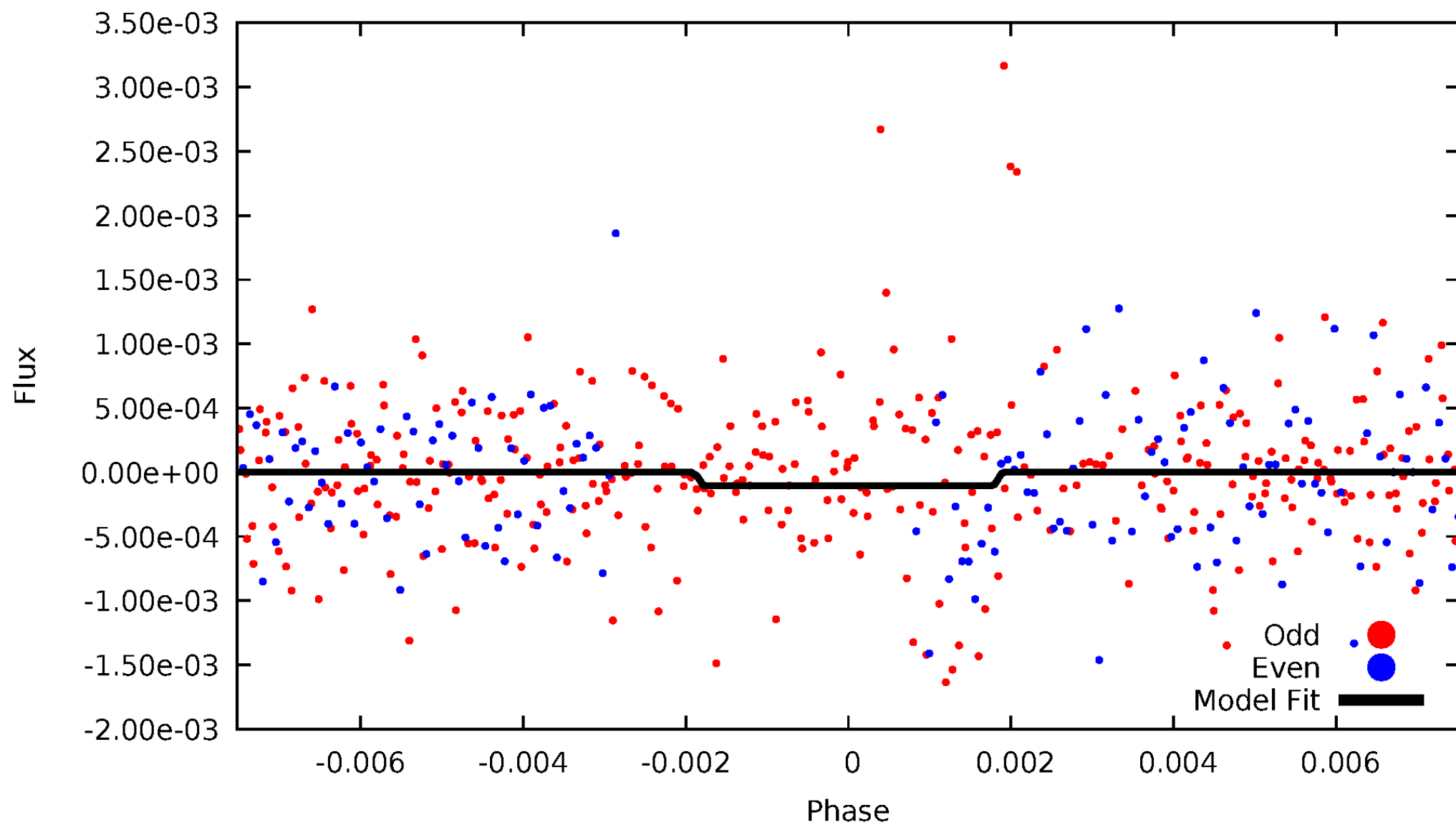
# DV Odd/Even

TCE 008395107-01



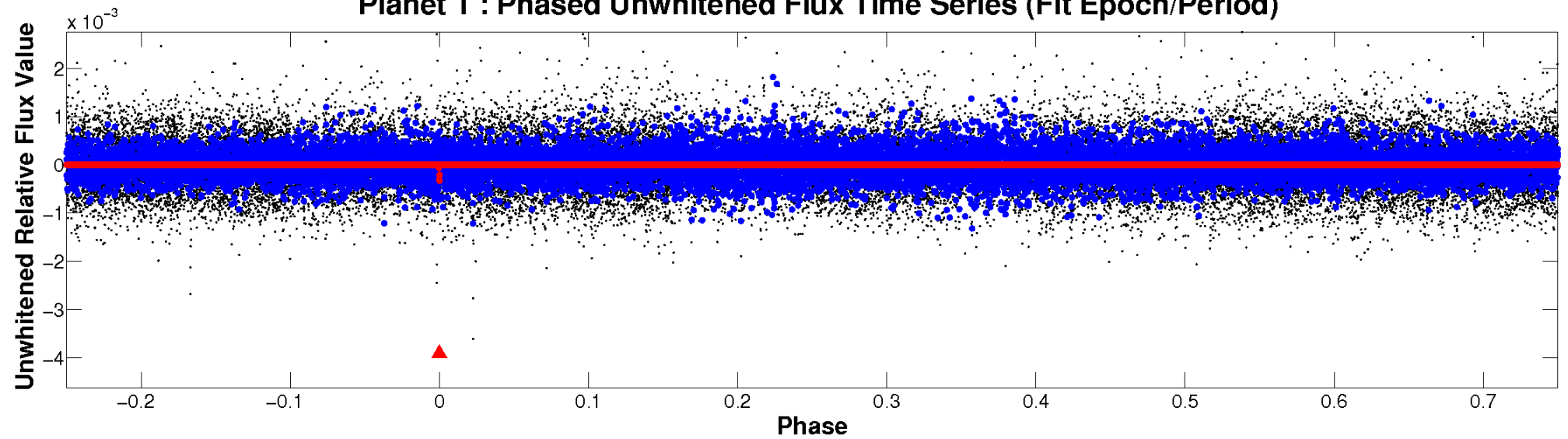
# ALT Odd/Even

TCE 008395107-01

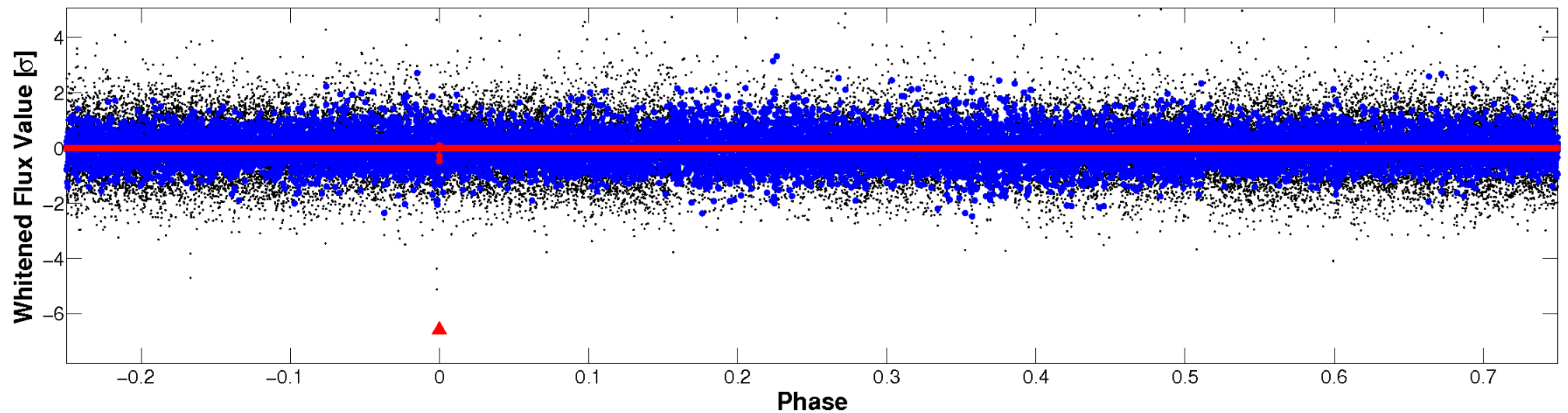


# Non-Whitened Vs. Whitened Light Curve

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

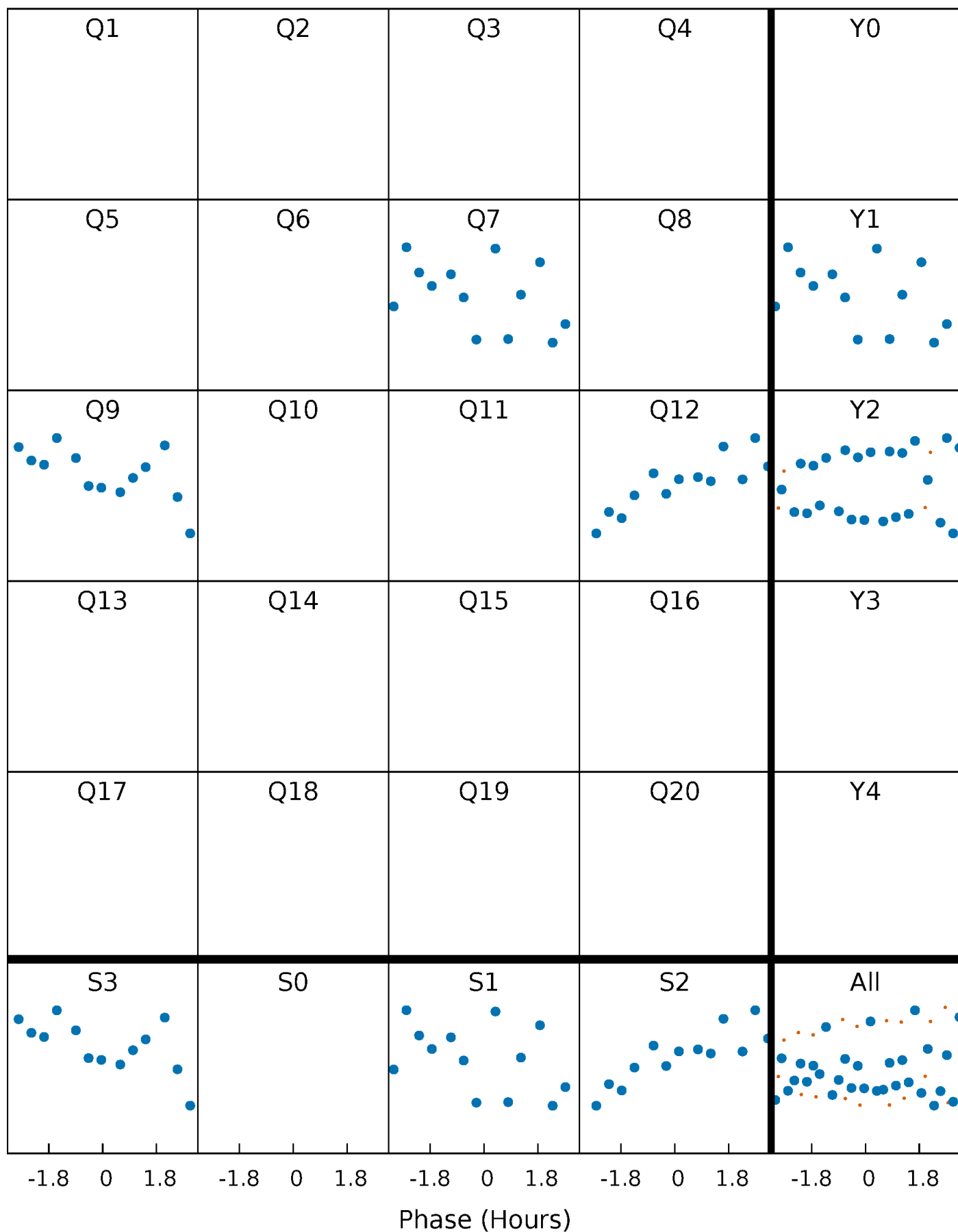


**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**



# PDC Quarter-Phased Transit Curves

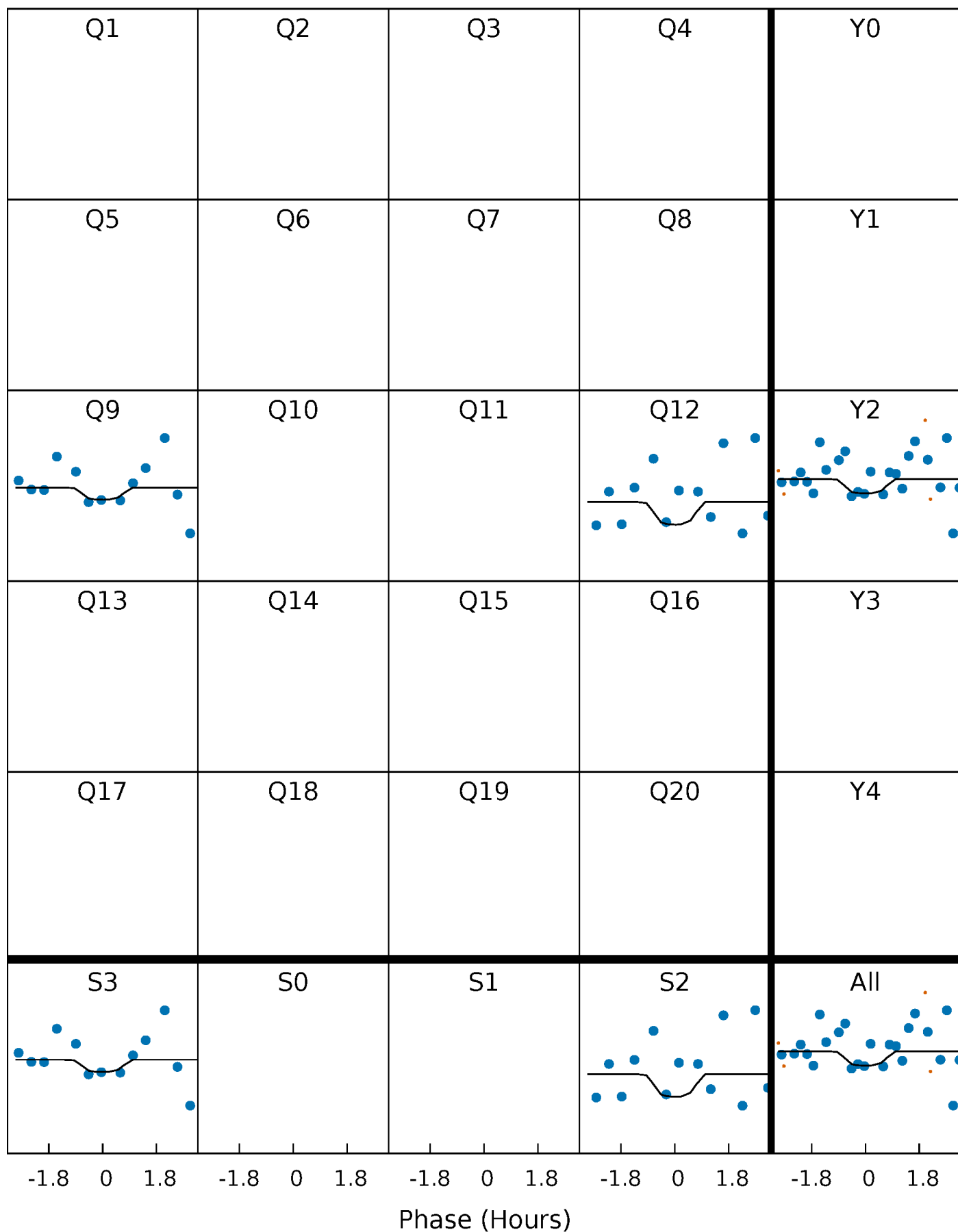
TCE 008395107-01 P=254.081137 Days  $T_0=379.861857$  (BKJD)





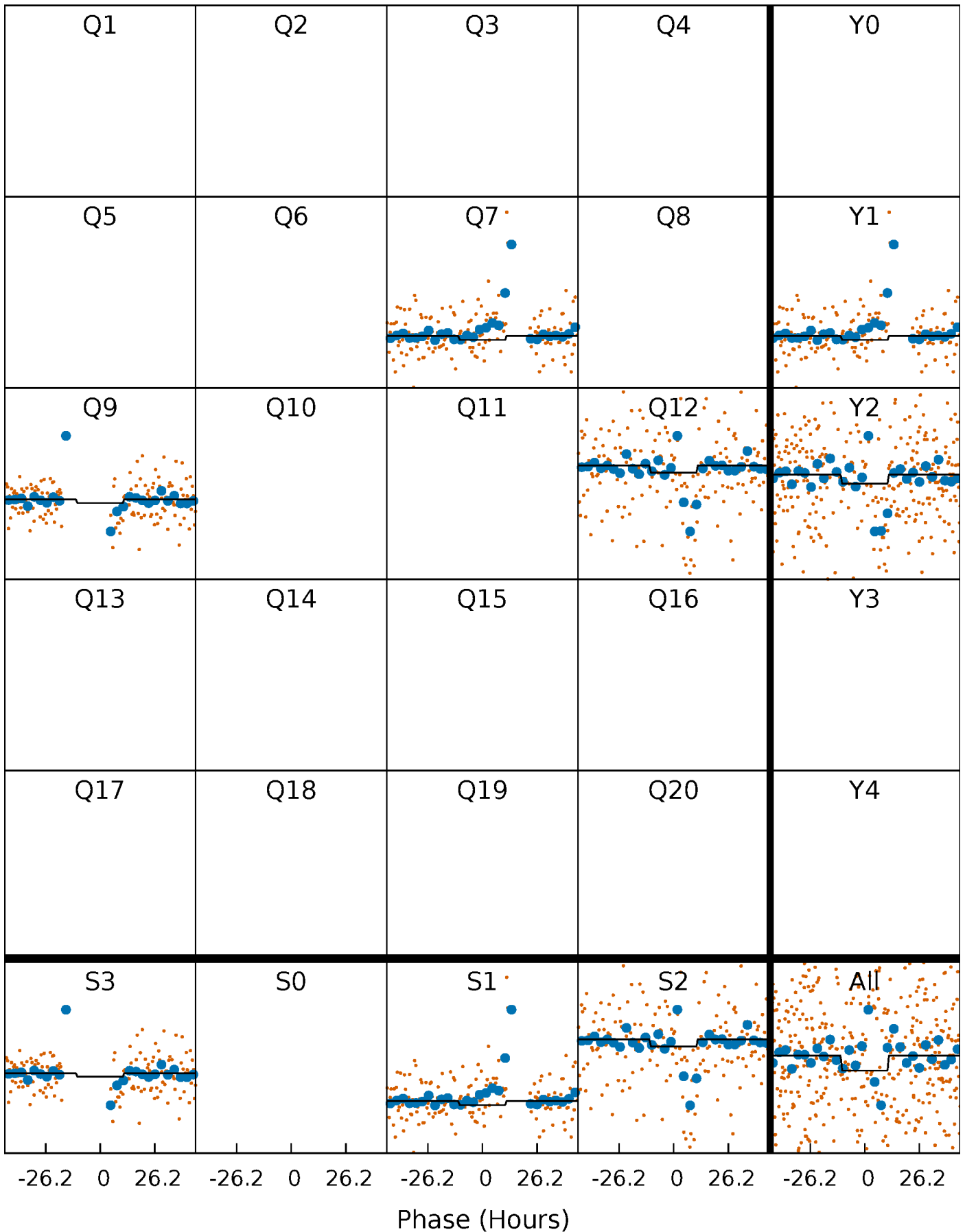
# DV Quarter-Phased Transit Curves

TCE 008395107-01 P=254.081137 Days  $T_0=379.861857$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

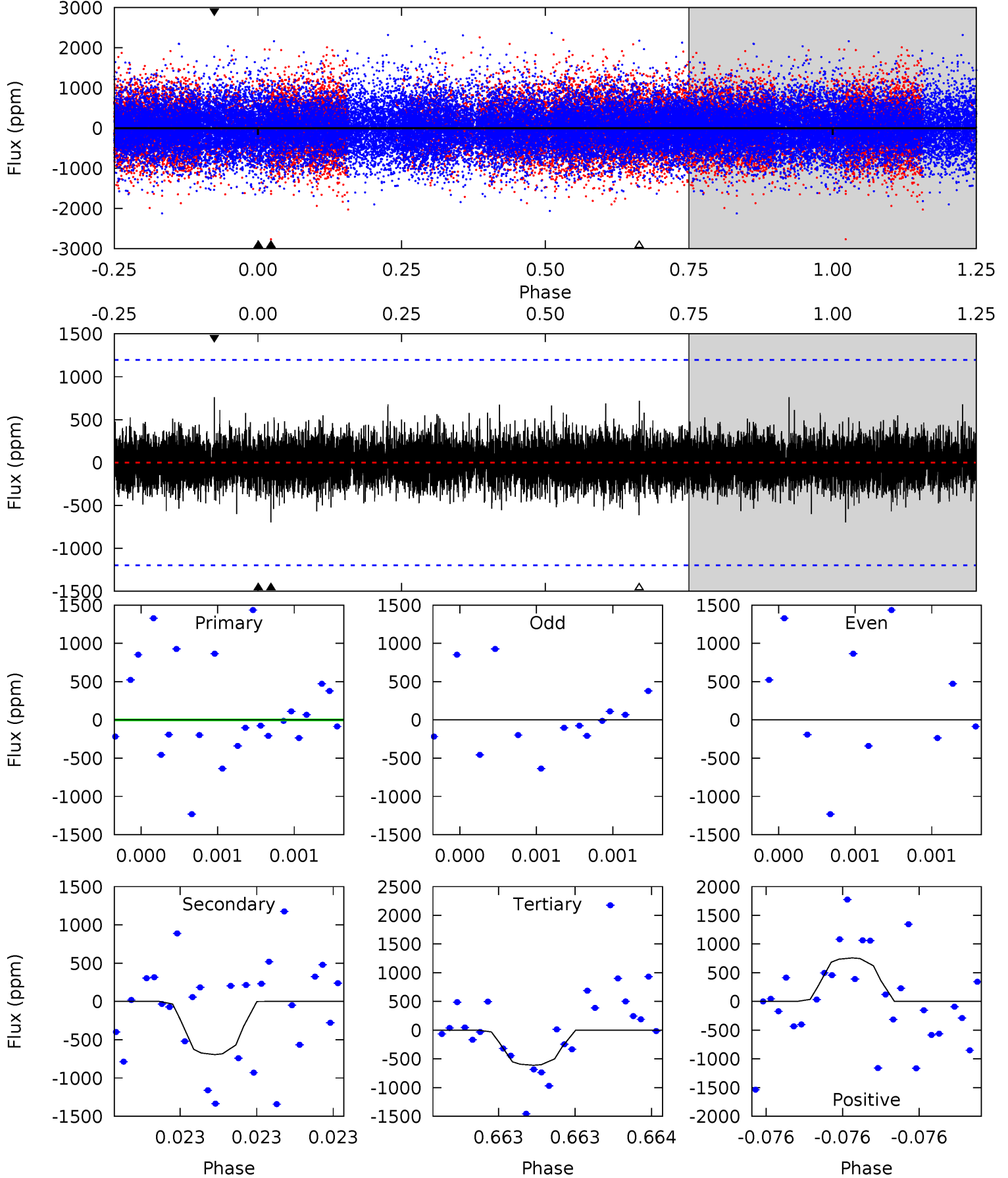
TCE 008395107-01 P=254.200298 Days  $T_0=378.962679$  (BKJD)



# DV Model-Shift Uniqueness Test

008395107-01, P = 254.081137 Days, E = 125.780720 Days

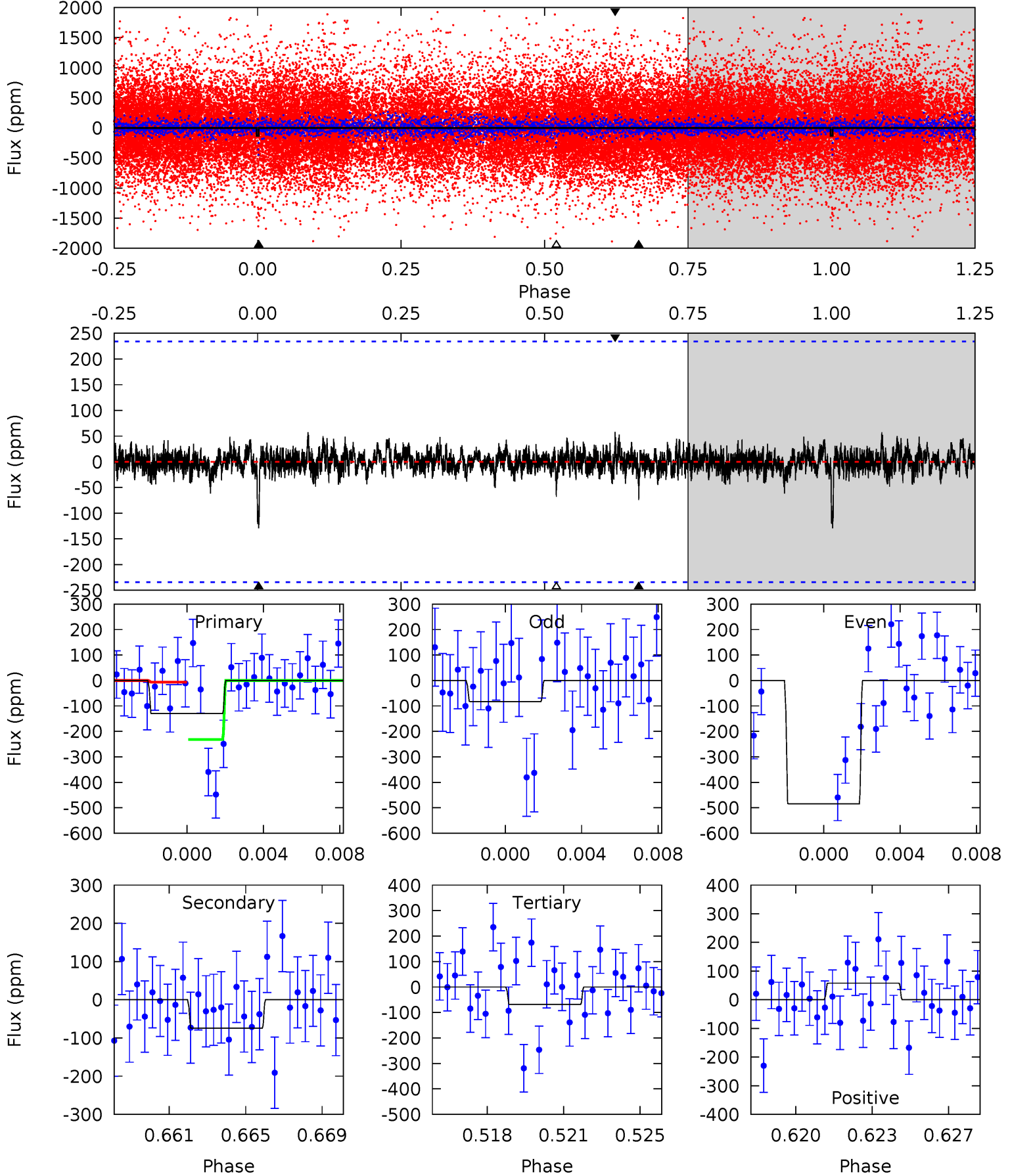
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.79	3.29	2.90	3.60	5.67	3.62	0.76	-2.11	-2.81	0.39	-0.31	0.74	1.00	0.52	0.16



# Alt Model-Shift Uniqueness Test

008395107-01, P = 254.200298 Days, E = 124.762381 Days

Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.88	1.65	1.51	1.29	5.21	2.90	0.33	1.37	1.59	0.14	0.36	3.00	0.79	0.31	2.49



### Stellar Parameters For KIC 008395107

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$6380^{+176}_{-242}$	$4.409^{+0.070}_{-0.210}$	$-0.180^{+0.250}_{-0.300}$	$1.091^{+0.352}_{-0.151}$	$1.112^{+0.164}_{-0.148}$	$1.206^{+0.382}_{-0.653}$
	+3%/-4%	+2%/-5%	+139%/-167%	+32%/-14%	+15%/-13%	+32%/-54%
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 008395107-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	$A_{obs}$
DV	$-695 \pm 211$	$19.26^{+21.02}_{-14.02}$	$463^{+36}_{-26}$	$3227^{+1777}_{-626}$	$671^{+8580}_{-530}$
Alt.	$-74 \pm 45$	$18.88^{+19.81}_{-13.59}$	$463^{+38}_{-26}$	$2353^{+1020}_{-399}$	$60^{+887}_{-48}$

$T_{max}$  = 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  $A_{obs} \gg 1.0$

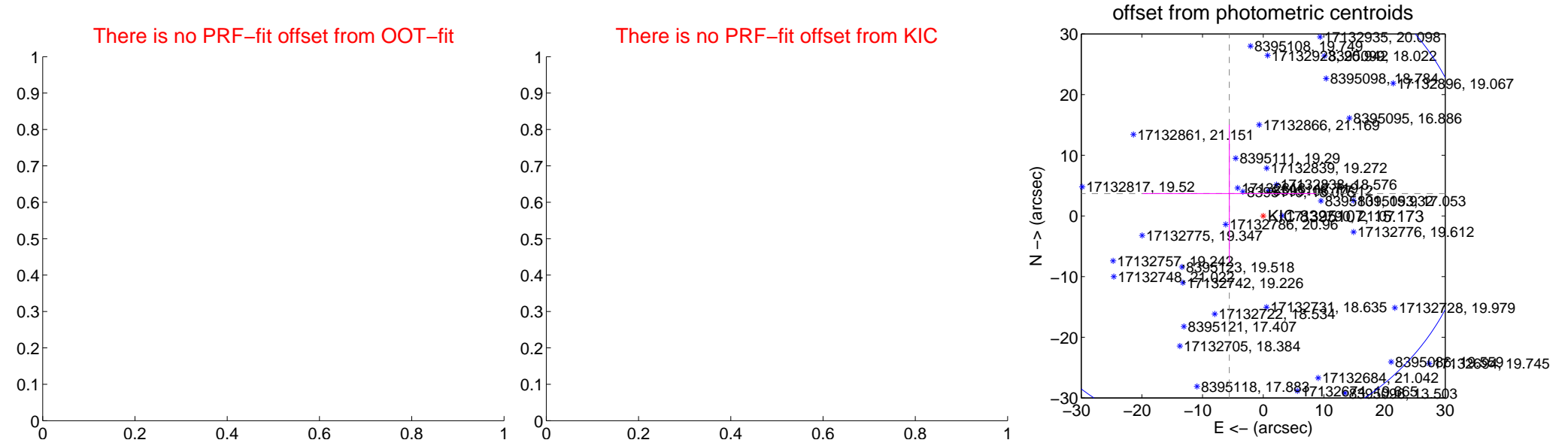
## DV Centroid Data

Supplemental centroid analysis for 008395107-01. Kepler magnitude: 15.17. Transit SNR 1.04

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	$6.69 \pm 13.47$	0.50	$5.59 \pm 14.29$	$3.68 \pm 11.35$



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- $\sigma$  uncertainty. Blue circle: three- $\sigma$ . 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.

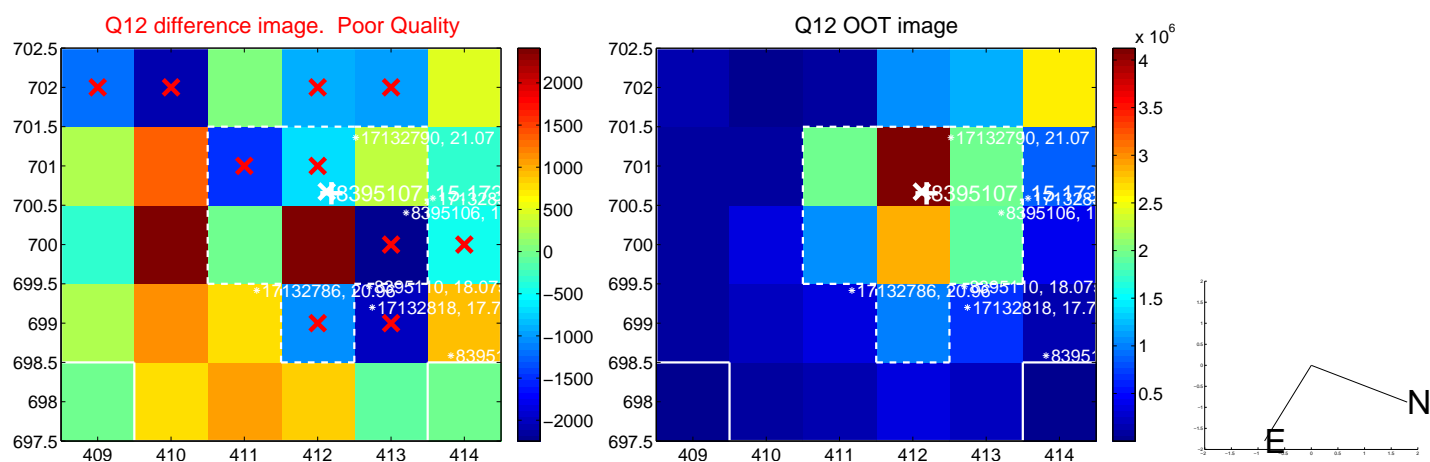
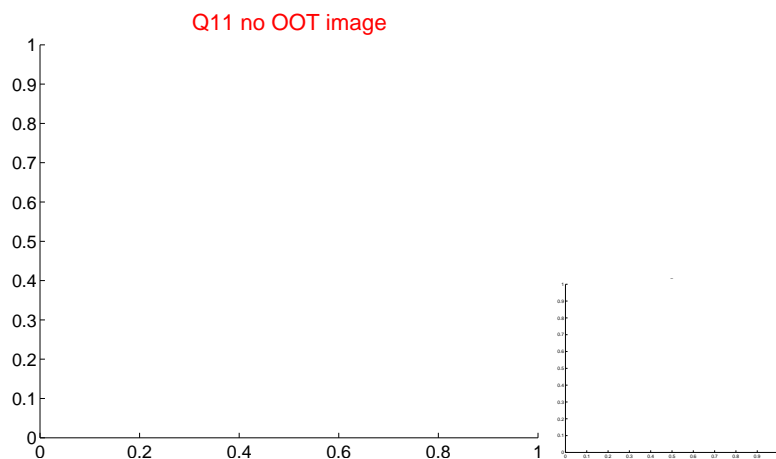
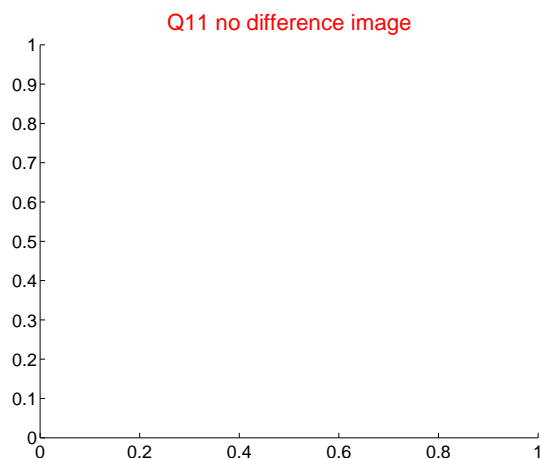
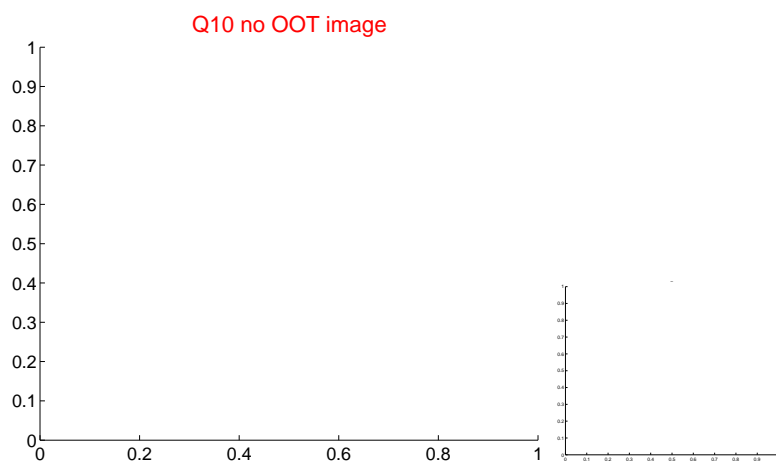
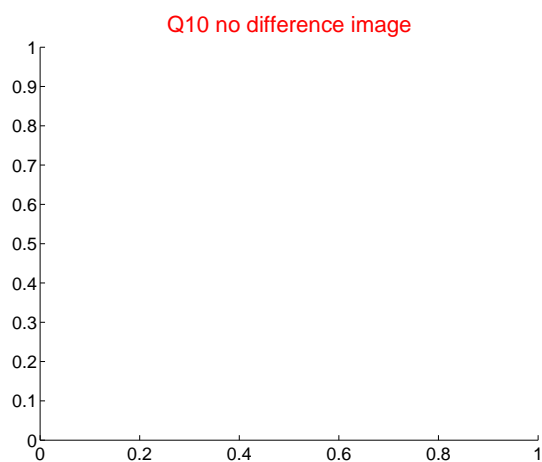
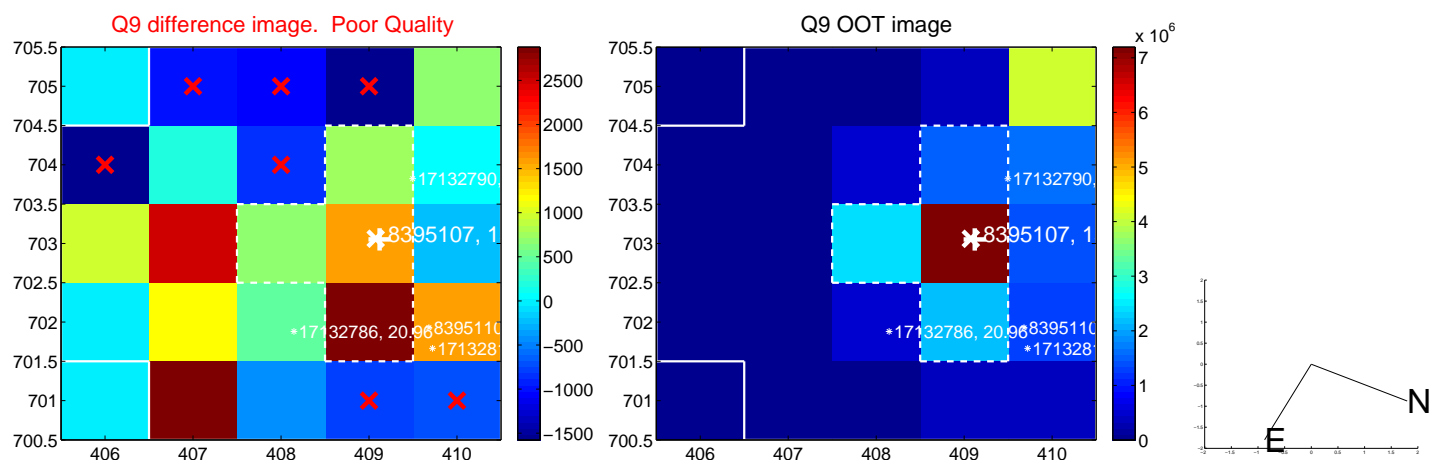


white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.





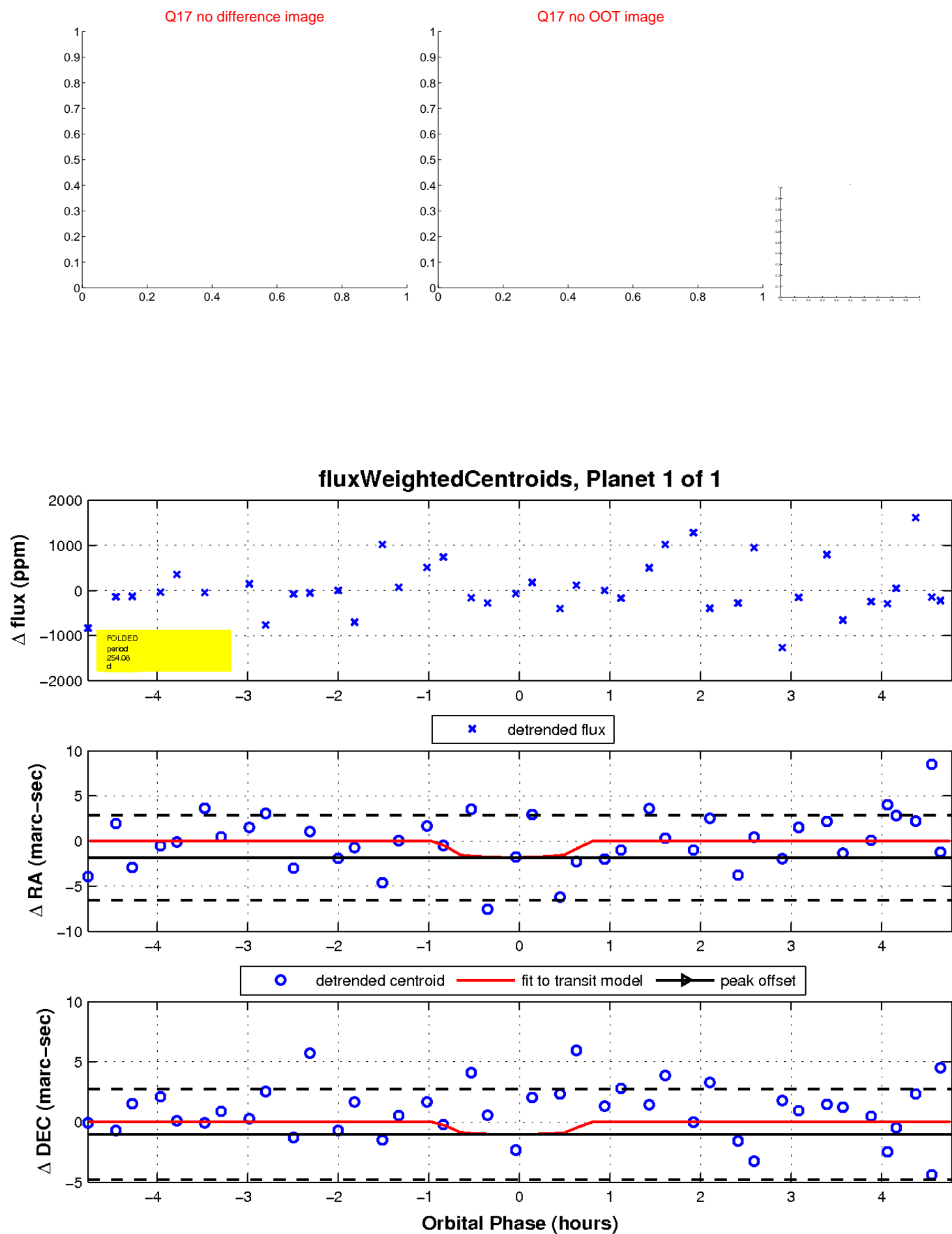
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# UKIRT Image

Declination

