

# KIC 008326663

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
008326663-01	OBS	No	0.838569	132.131716	0.1	6.520	8.6	0.0	0.82	5465	0.04	2173.10

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008326663-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT

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

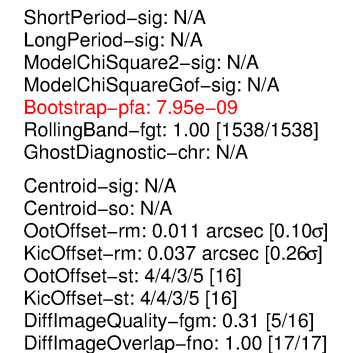
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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.

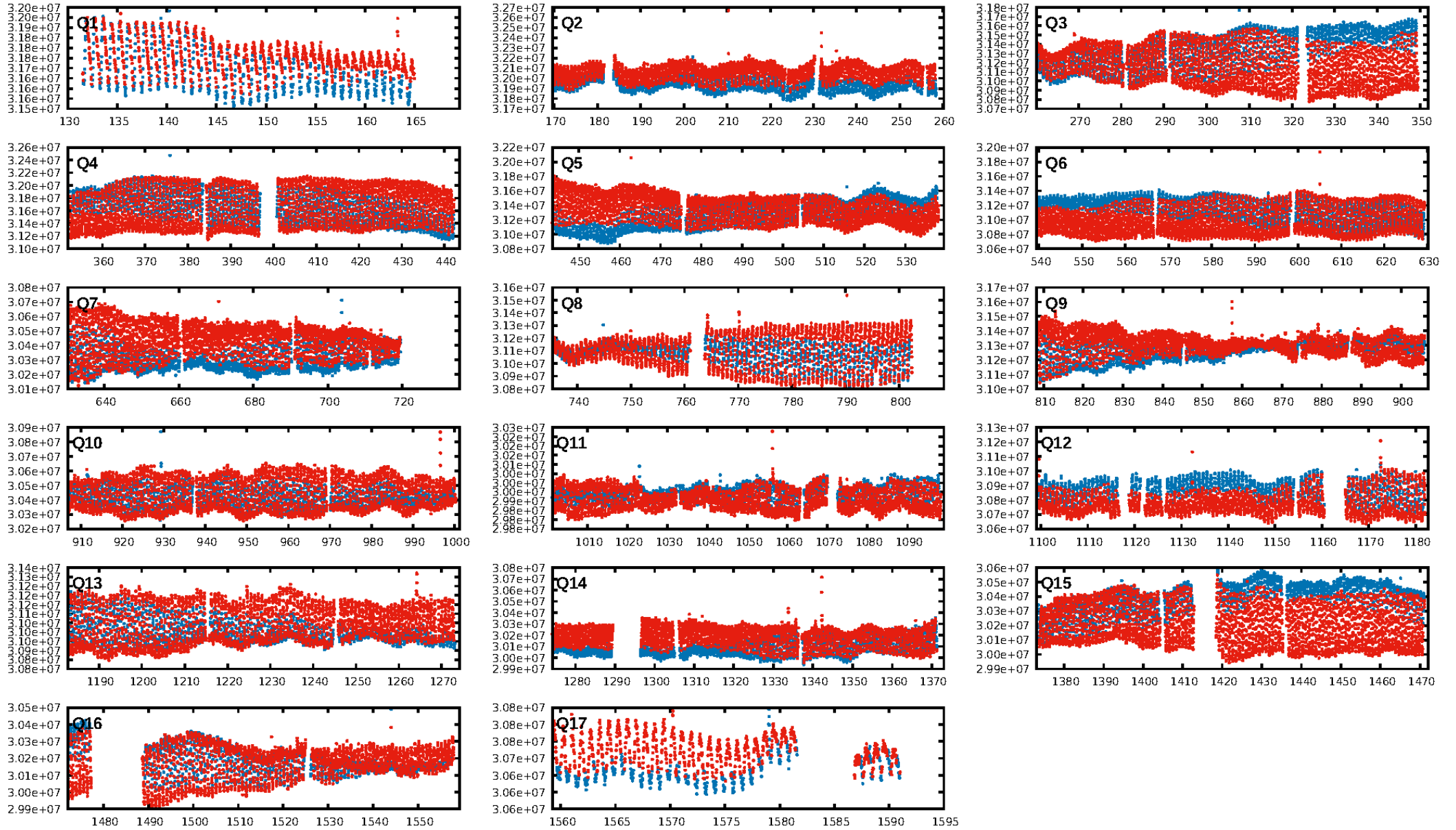
## Ephemeris Match Information For 008326663-01

No Significant Match Found

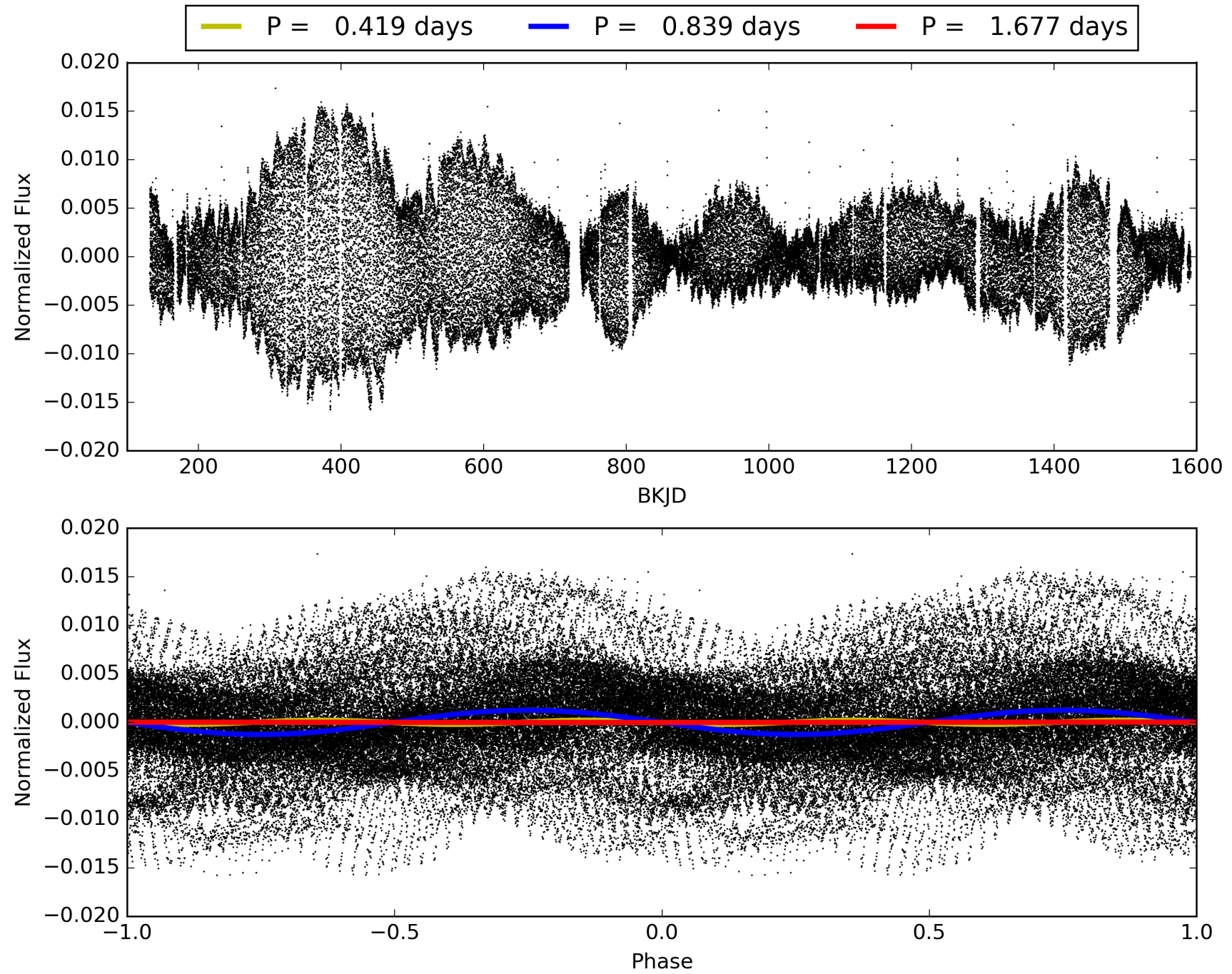
## KIC: 8326663    Candidate: 1 of 1    Period: 0.839 d



# TCE 008326663-01, PDC Light Curves



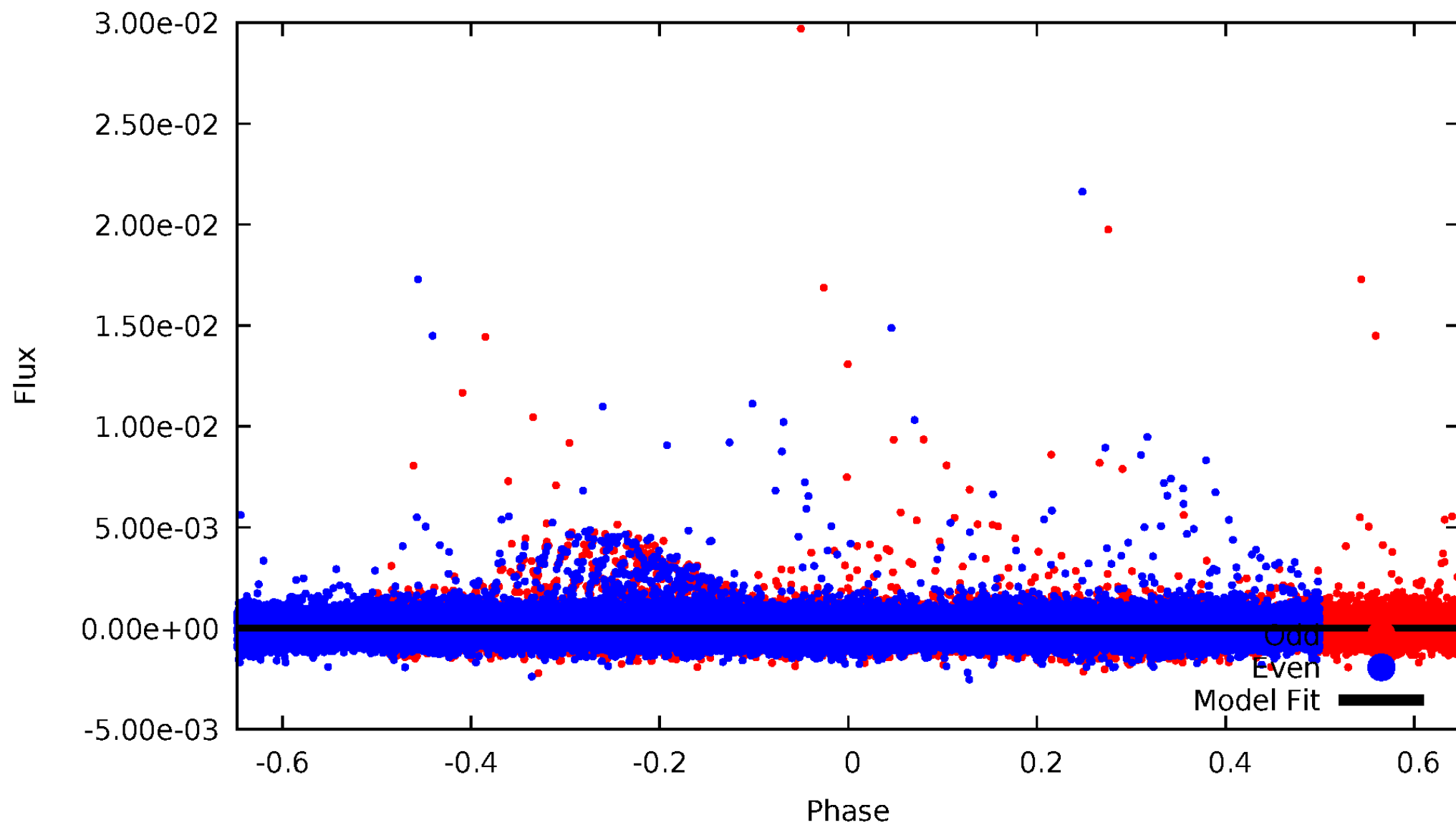
TCE 008326663-01





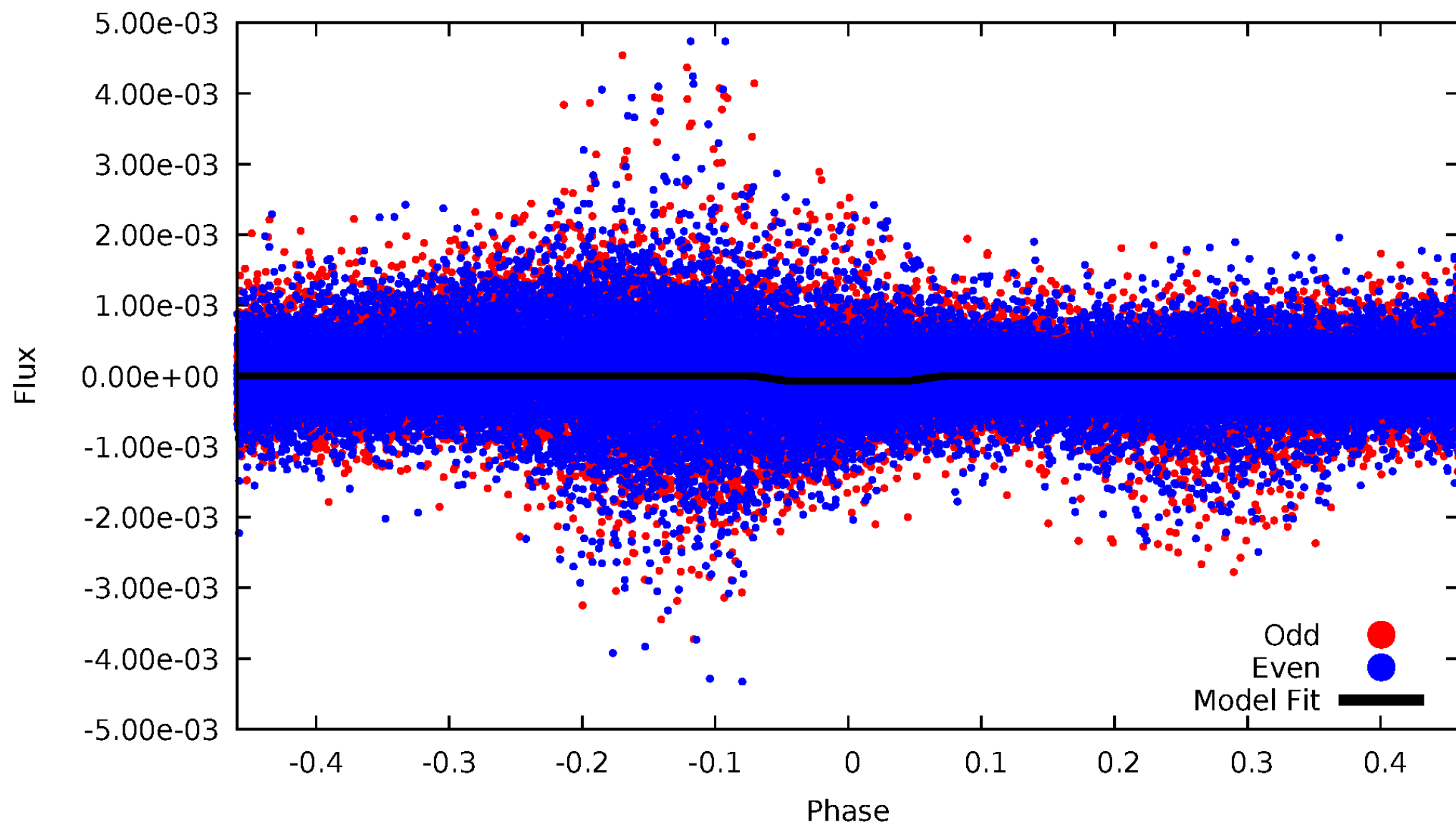
# DV Odd/Even

TCE 008326663-01



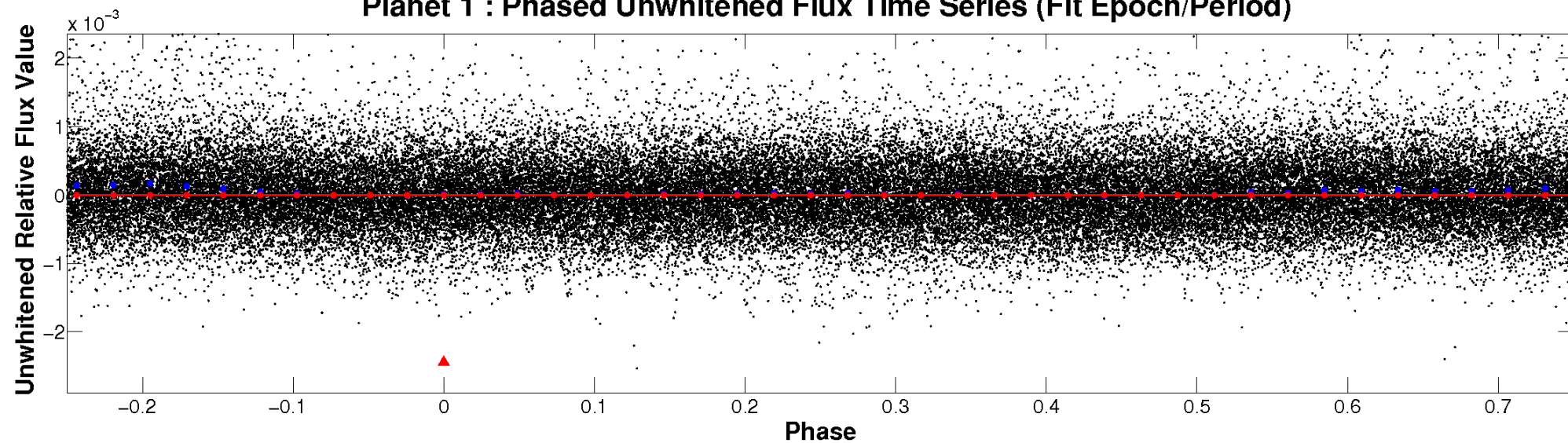
# ALT Odd/Even

TCE 008326663-01

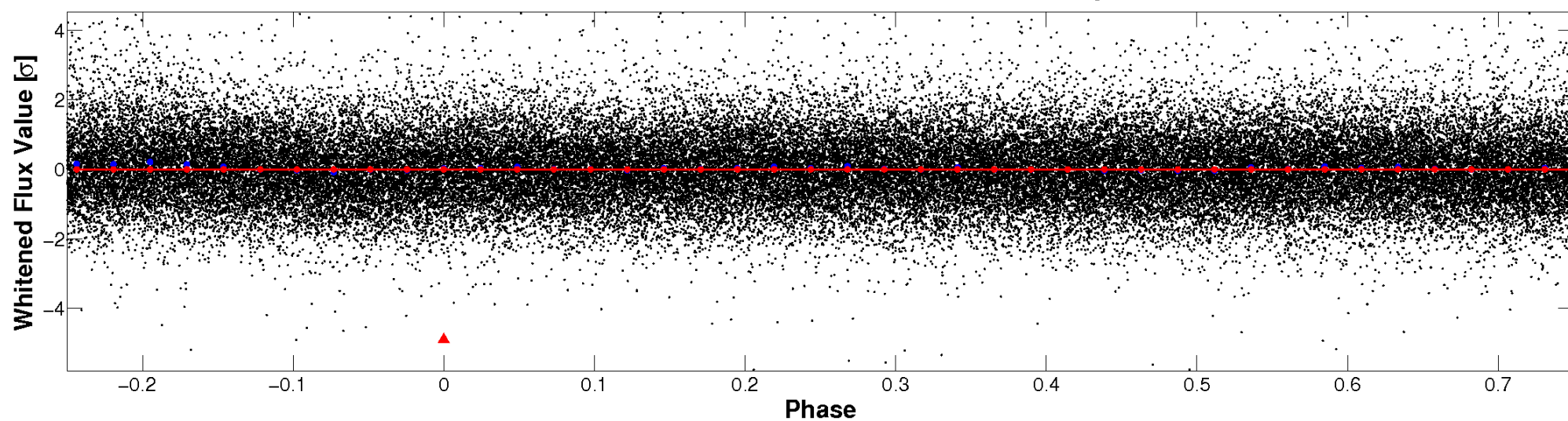


# Non-Whitened Vs. Whitened Light Curve

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

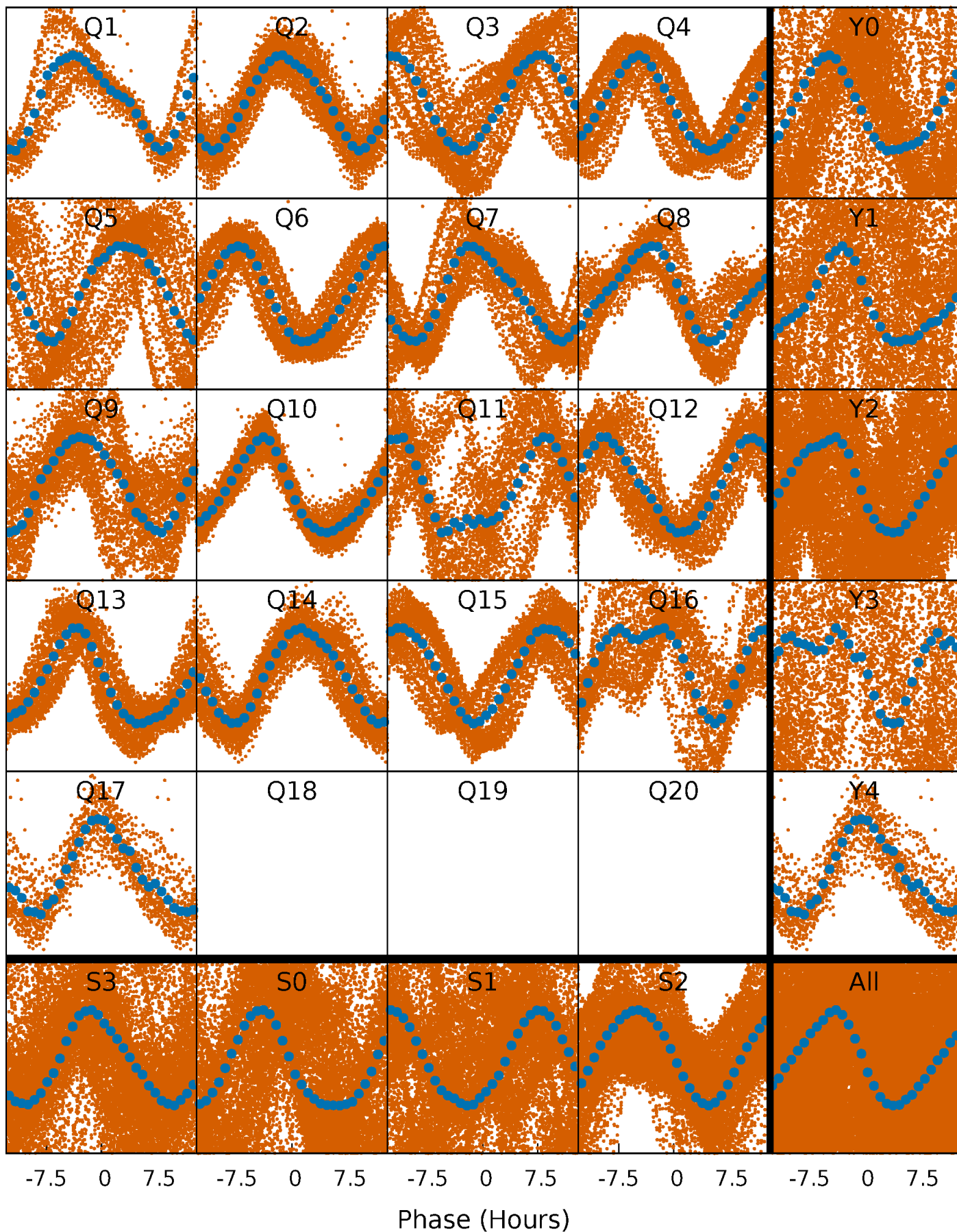


**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**



# PDC Quarter-Phased Transit Curves

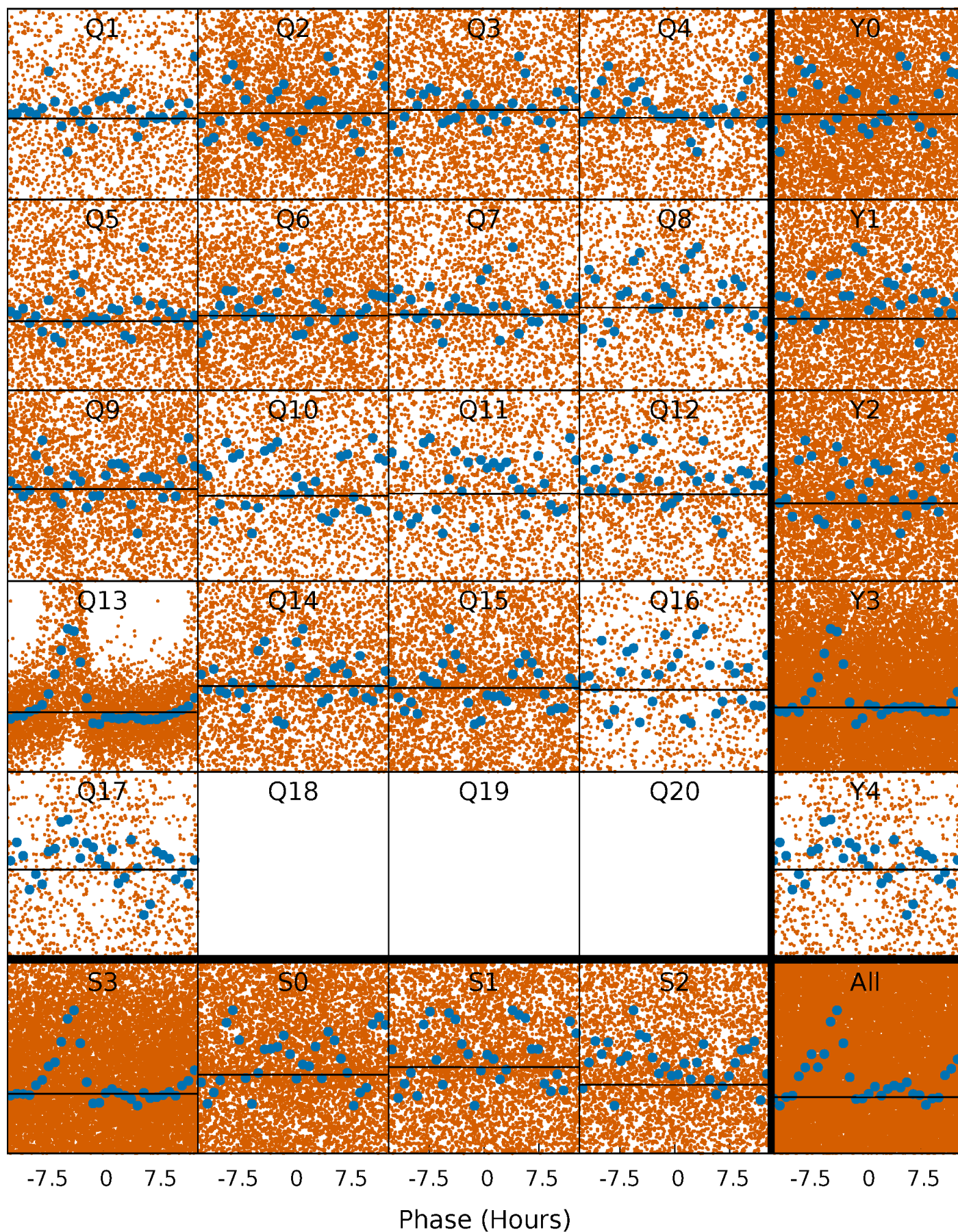
TCE 008326663-01   P= 0.838569 Days    $T_0=132.131716$  (BKJD)





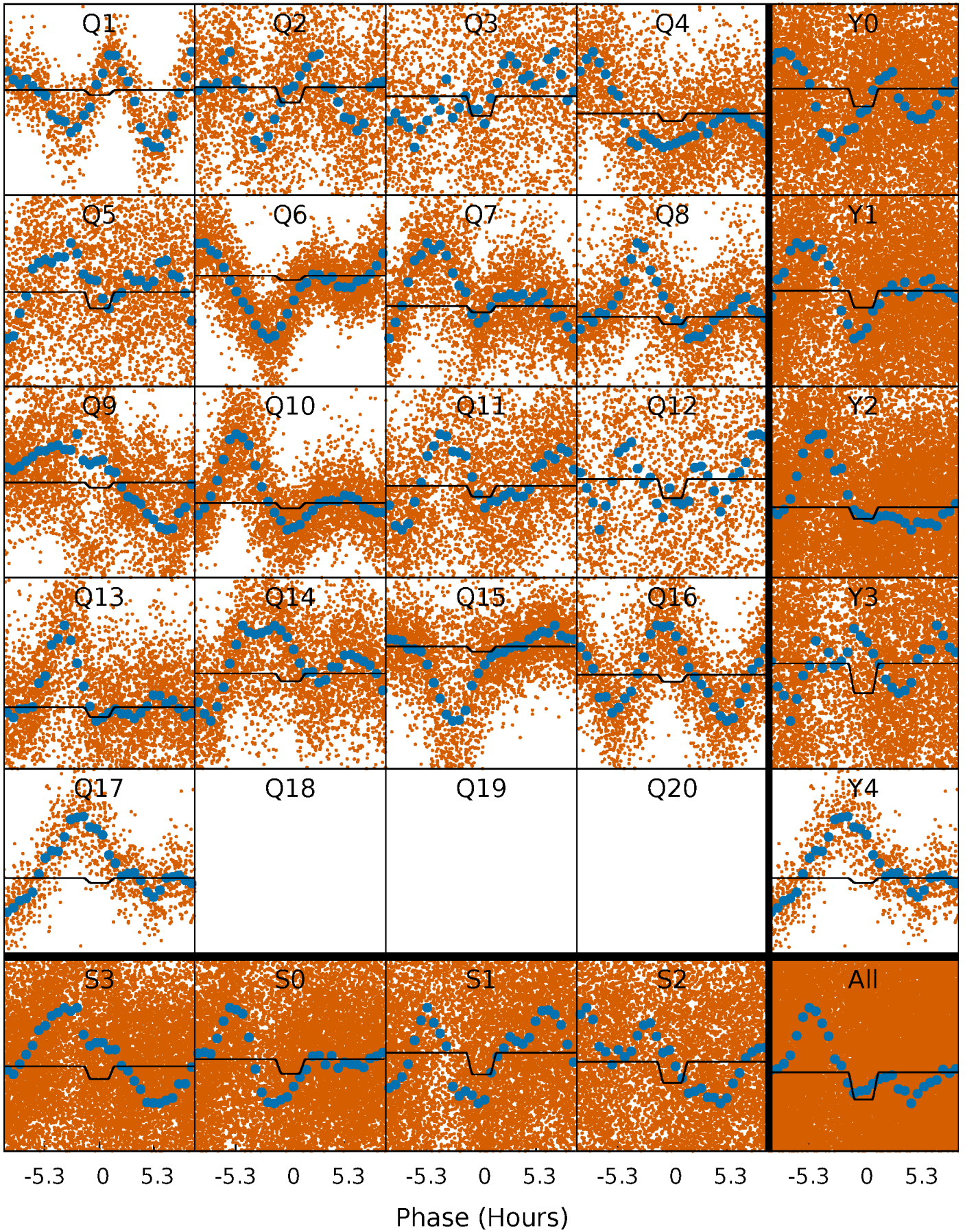
# DV Quarter-Phased Transit Curves

TCE 008326663-01 P= 0.838569 Days  $T_0=132.131716$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

TCE 008326663-01 P= 0.838505 Days  $T_0=132.266548$  (BKJD)

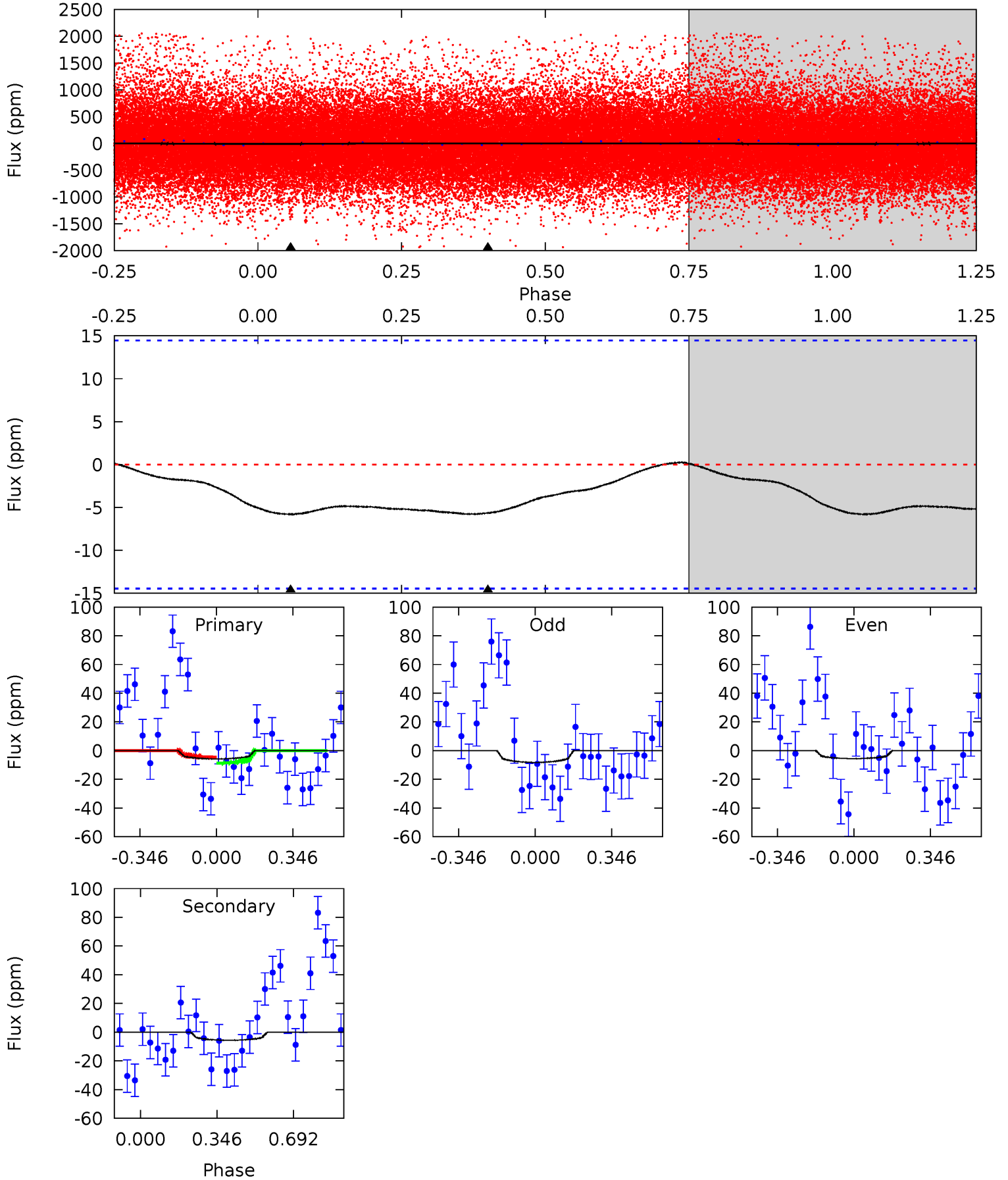




# DV Model-Shift Uniqueness Test

008326663-01, P = 0.838569 Days, E = 131.293147 Days

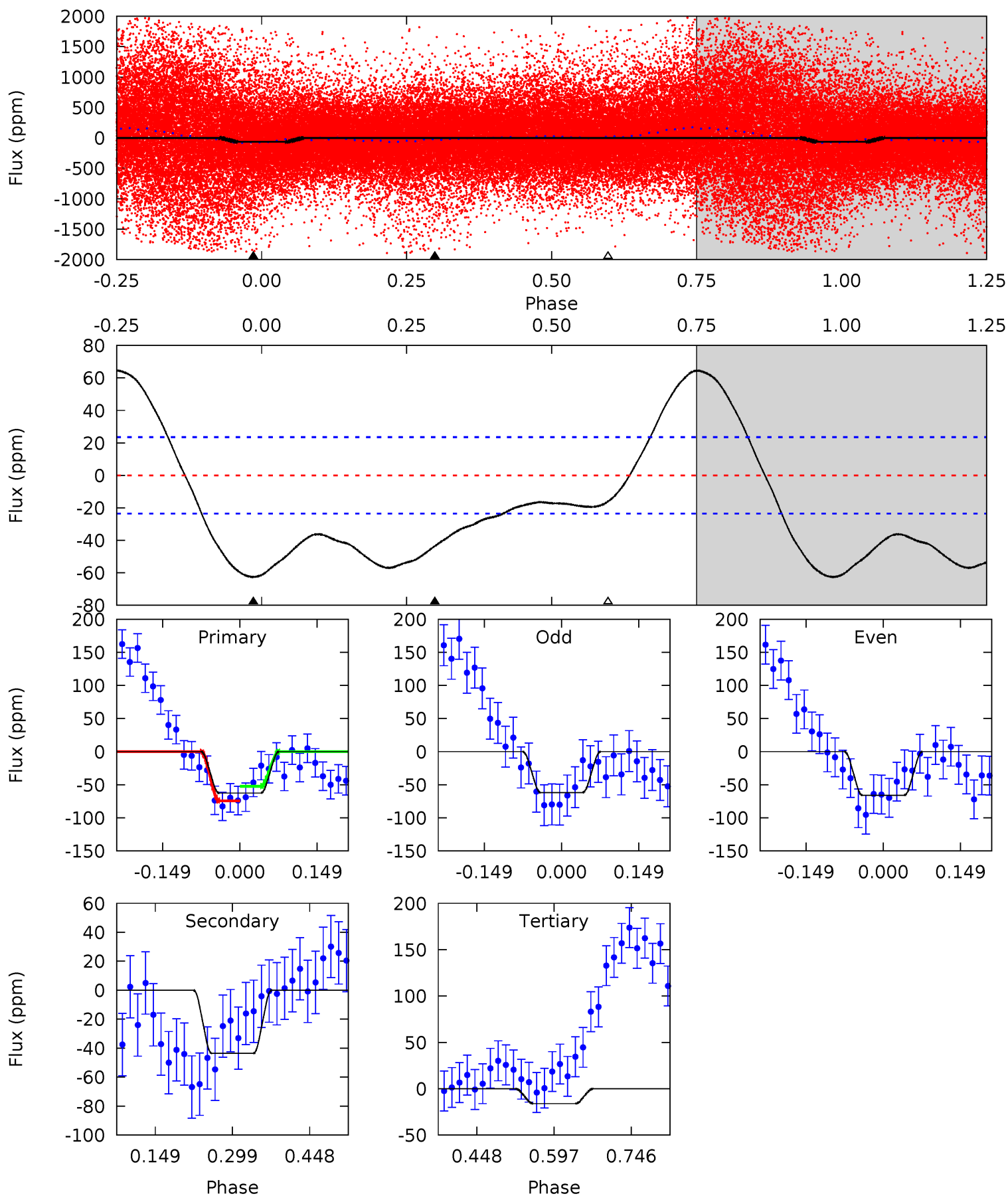
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.72	1.68	0	0	4.30	0.94	0.07	1.72	1.72	1.68	1.68	0.40	1.20	0.04	0.67



# Alt Model-Shift Uniqueness Test

008326663-01, P = 0.838505 Days, E = 131.428043 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
11.9	8.29	3.06	0	4.48	1.44	6.41	8.85	11.9	5.23	8.29	0.38	0.81	0.51	1.99





### Stellar Parameters For KIC 008326663

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$5465^{+179}_{-162}$	$4.478^{+0.121}_{-0.148}$	$-0.440^{+0.350}_{-0.300}$	$0.820^{+0.151}_{-0.110}$	$0.737^{+0.117}_{-0.042}$	$1.883^{+0.988}_{-0.765}$
	+3%/-3%	+3%/-3%	+80%/-68%	+18%/-13%	+16%/-6%	+52%/-41%
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 008326663-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	$A_{obs}$
DV	$-6 \pm 3$	$0.98^{+0.94}_{-0.67}$	$2440^{+145}_{-119}$	$2862^{+1890}_{-5431}$	$0.702^{+7.879}_{-0.575}$
Alt.	$-44 \pm 5$	$1.30^{+1.09}_{-0.88}$	$2446^{+157}_{-133}$	$3941^{+2429}_{-833}$	$3.490^{+28.734}_{-2.461}$

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

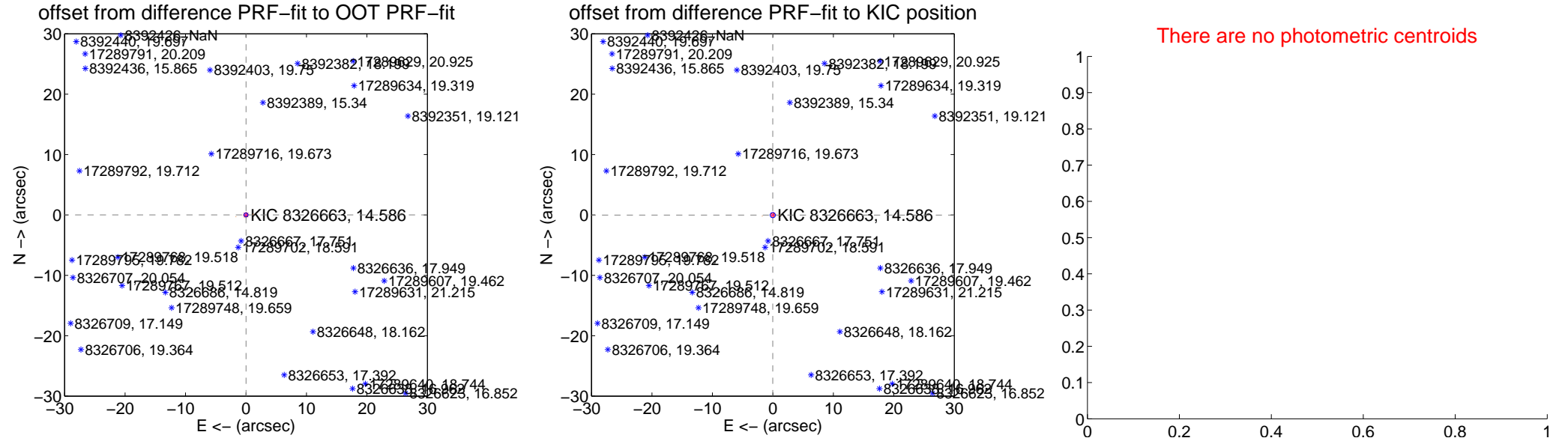
# DV Centroid Data

Supplemental centroid analysis for 008326663-01. Kepler magnitude: 14.59. Transit SNR 0.02

There are 5 quarters with good PRF difference image offsets

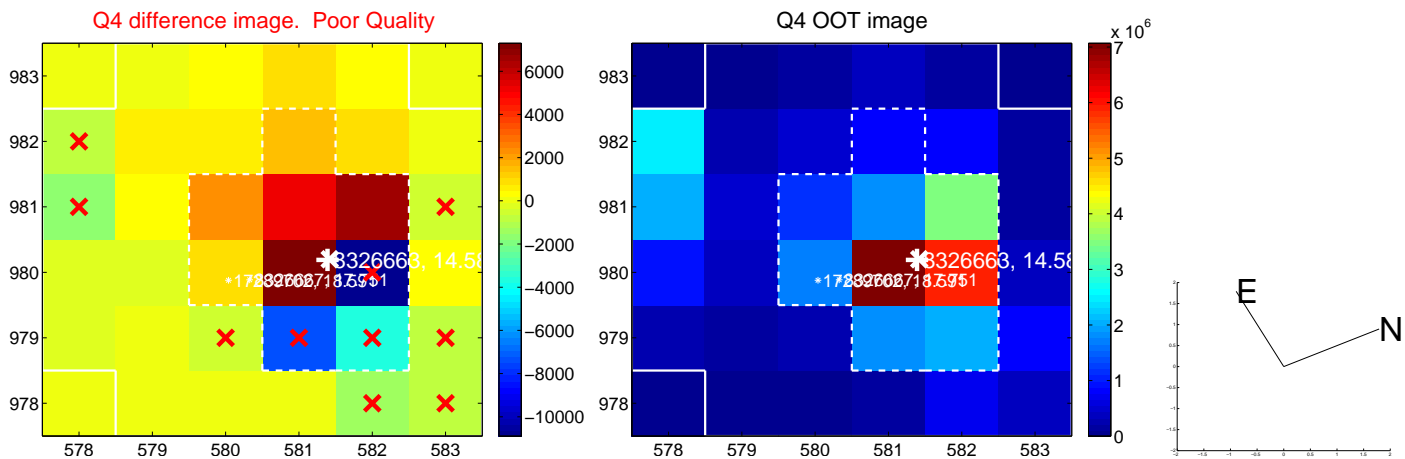
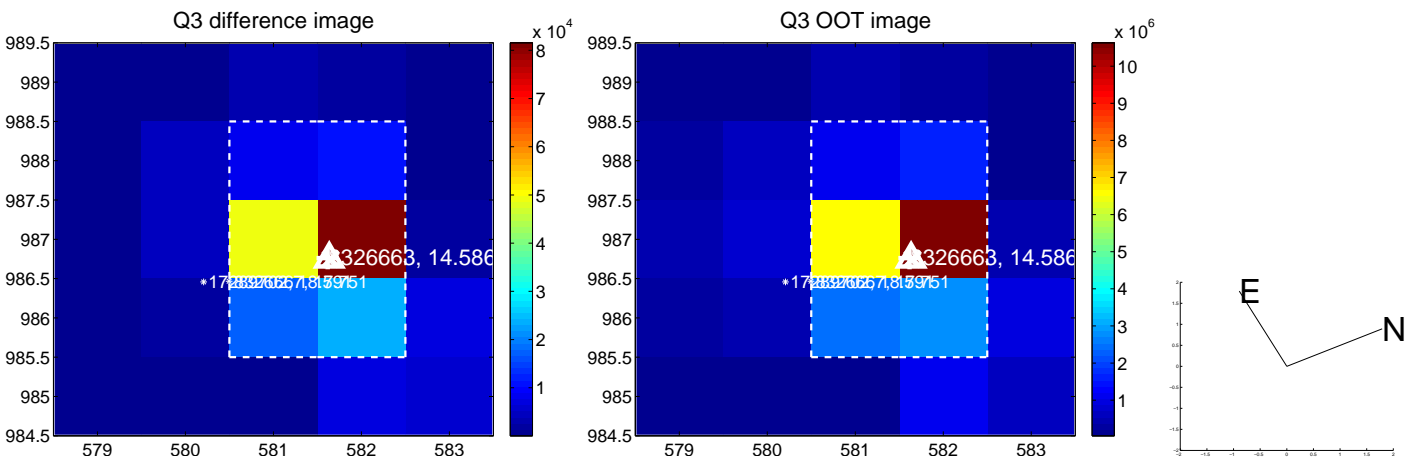
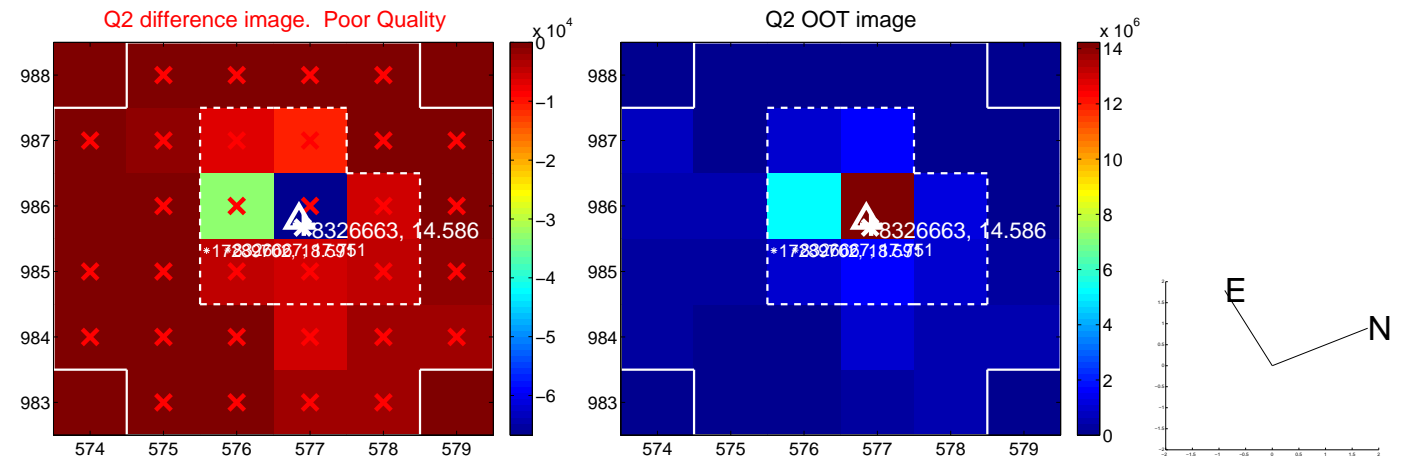
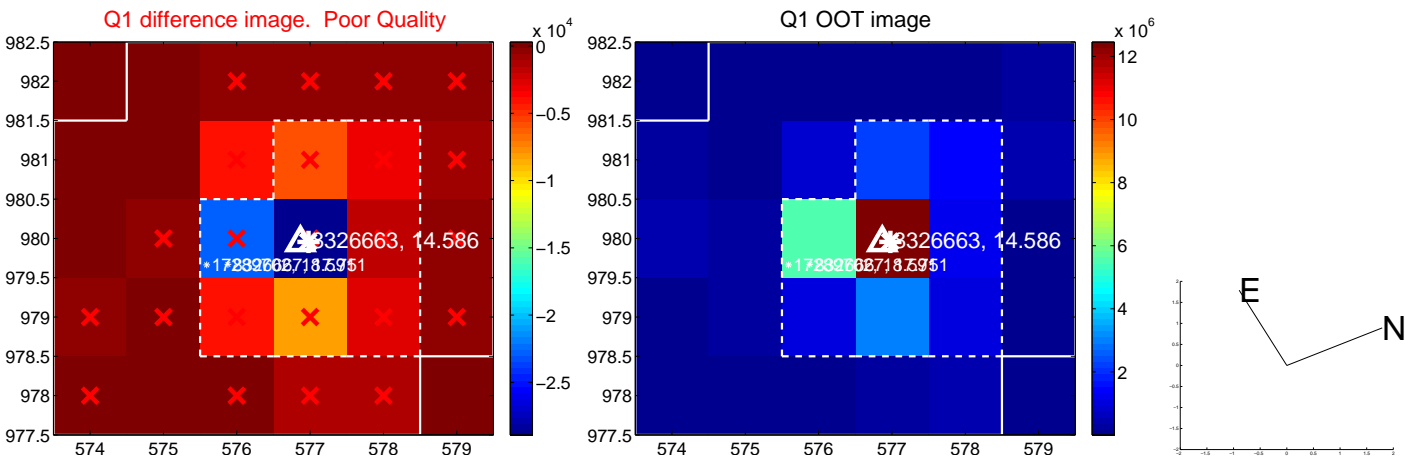
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.011 \pm 0.110$	0.10	$-0.004 \pm 0.182$	$0.010 \pm 0.076$
PRF-fit source offset from KIC position	$0.037 \pm 0.142$	0.26	$0.026 \pm 0.178$	$-0.026 \pm 0.074$
photometric centroid source offset	—	—	—	—

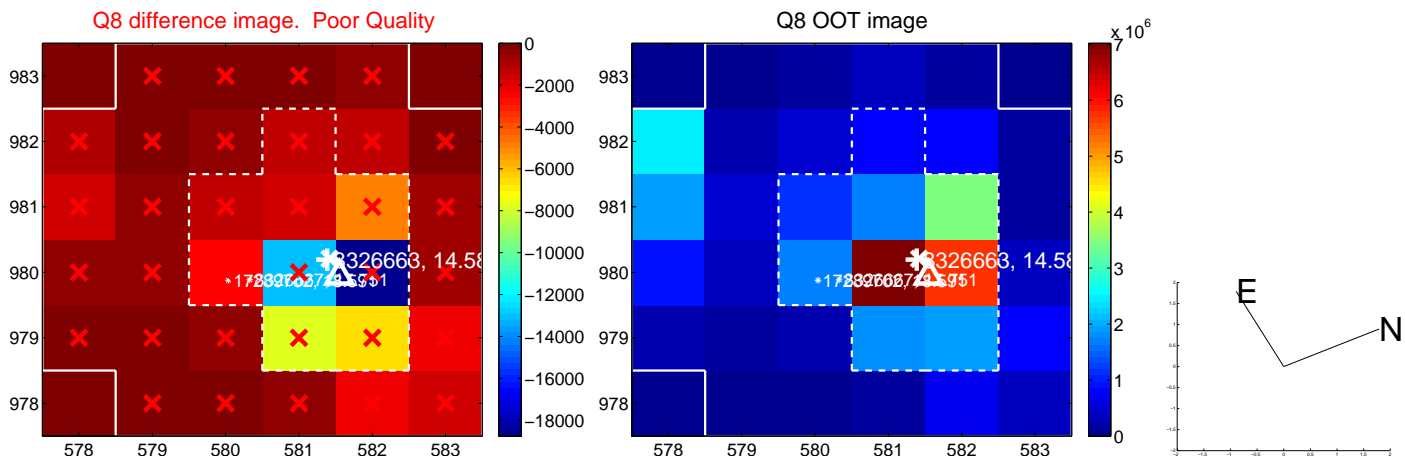
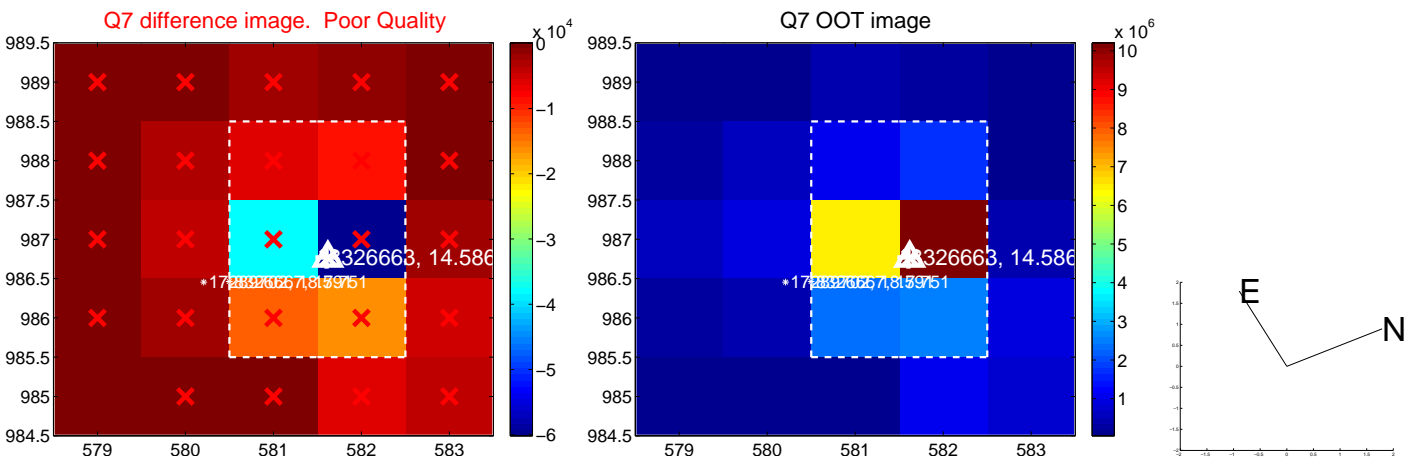
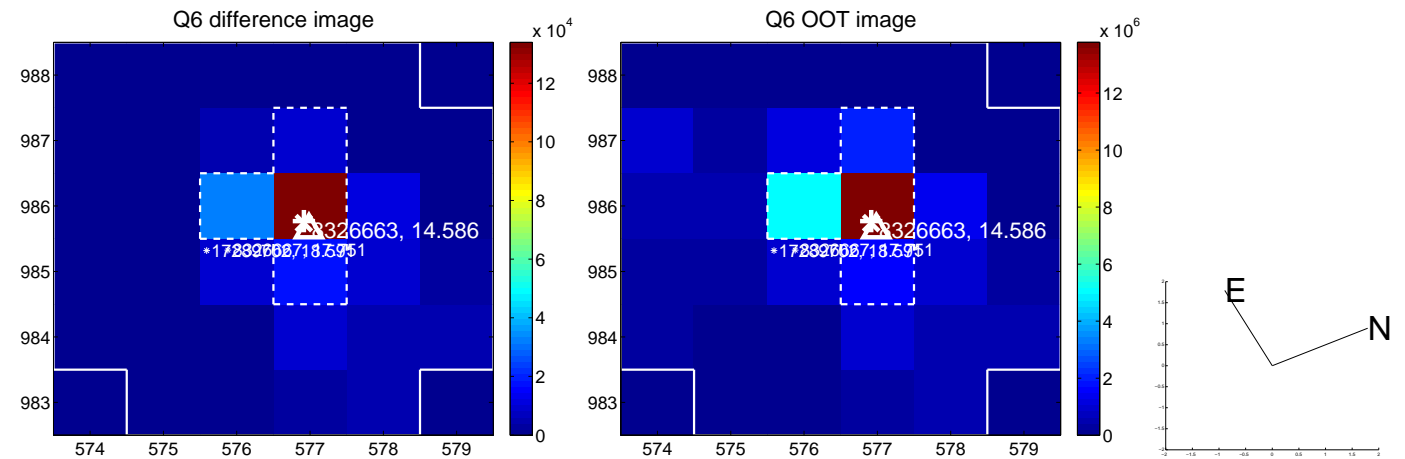
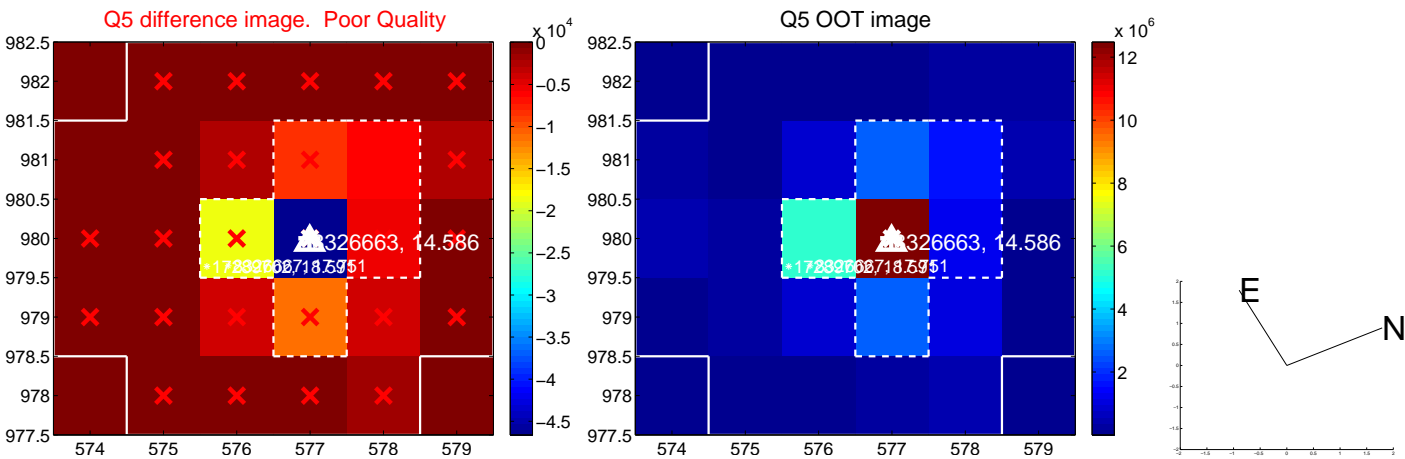


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

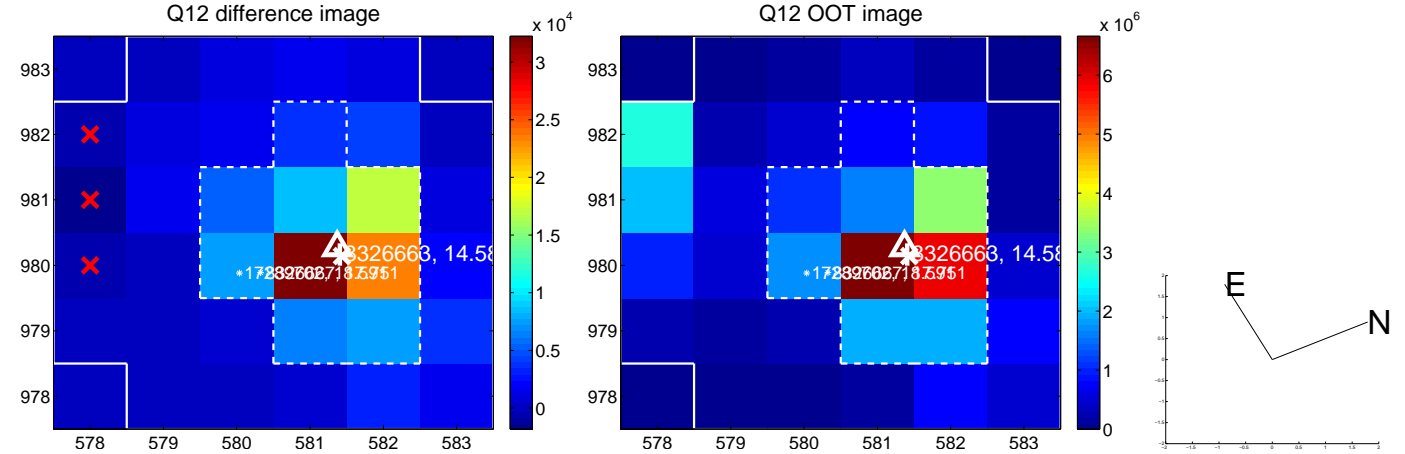
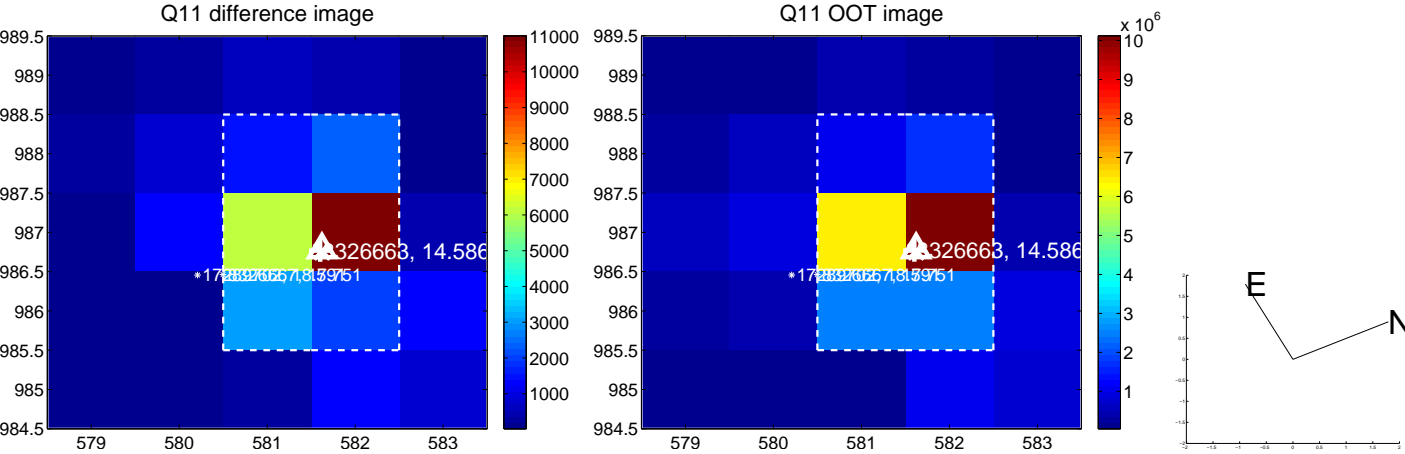
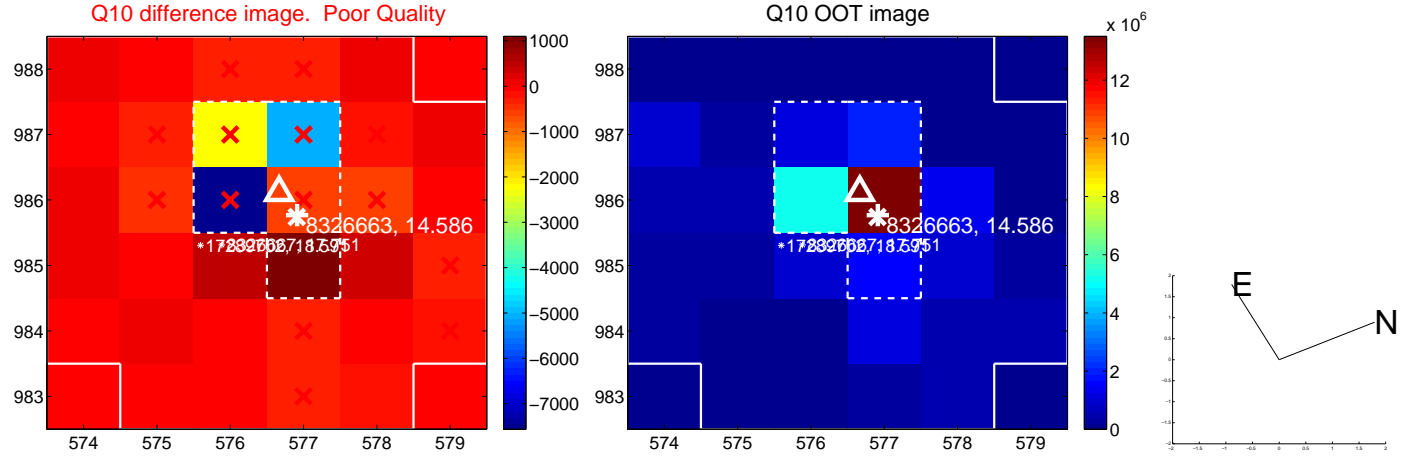
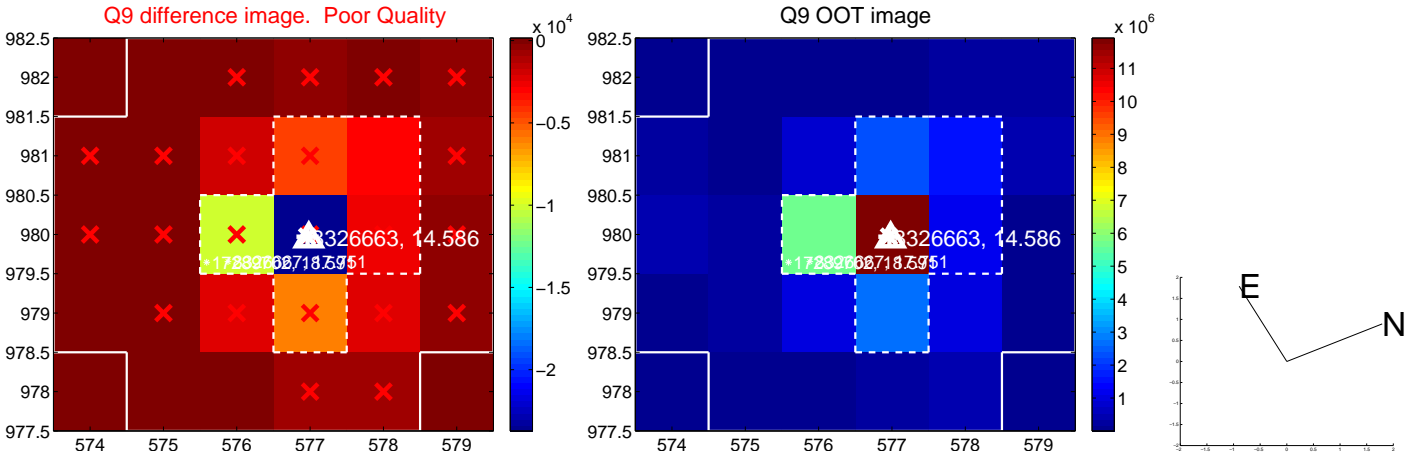


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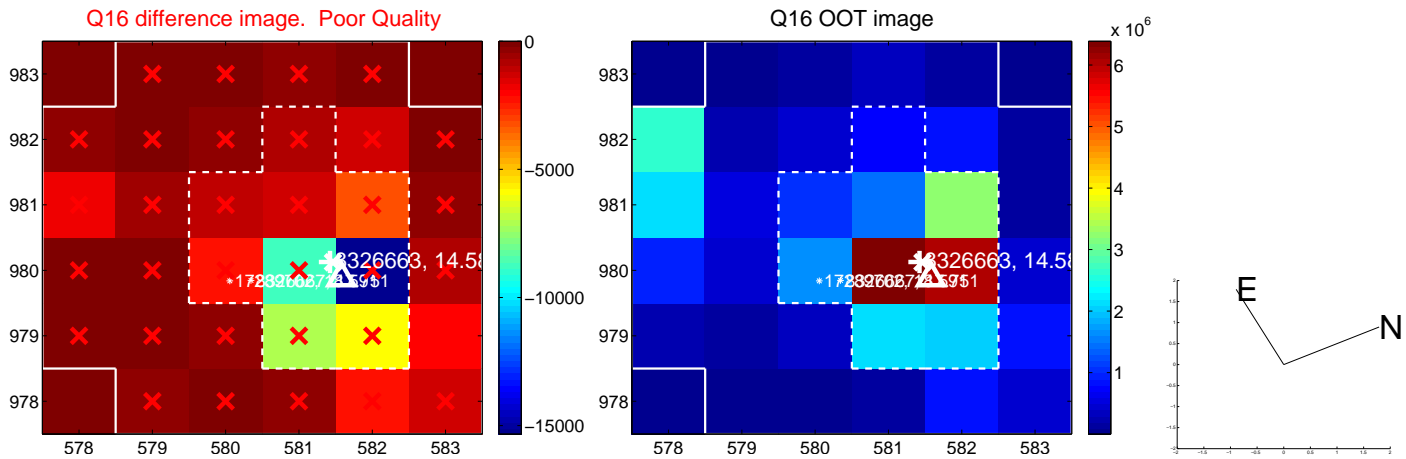
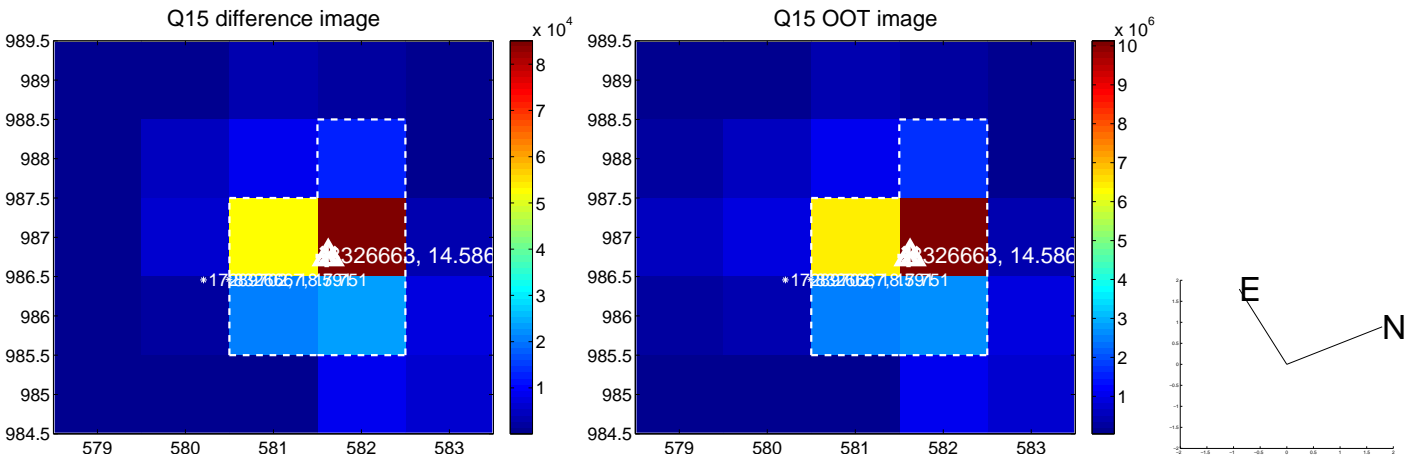
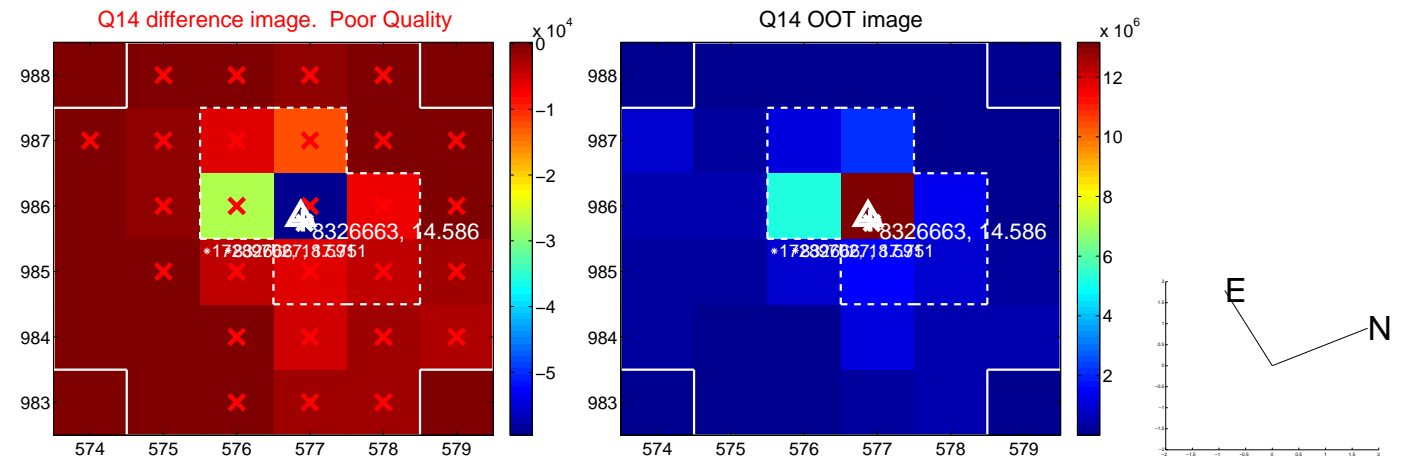
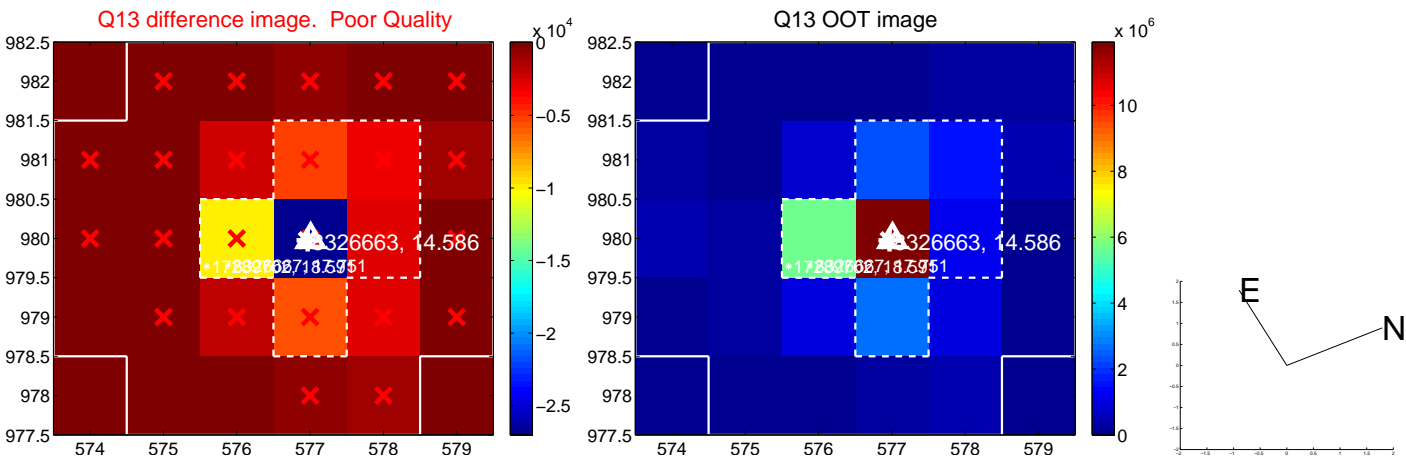




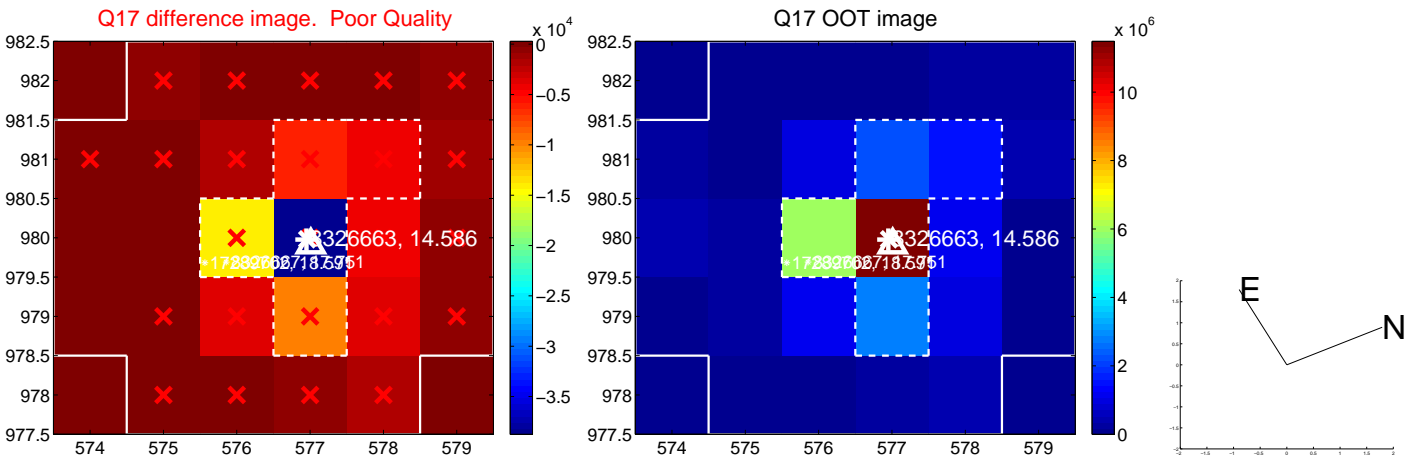
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folded centroid time series figure for this object.

UKIRT Image

Declination

