

# KIC 007501194

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
007501194-01	OBS	No	0.892697	132.195610	4.6	4.262	13.5	14.0	1.65	7532	0.37	17321.51

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007501194-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED

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

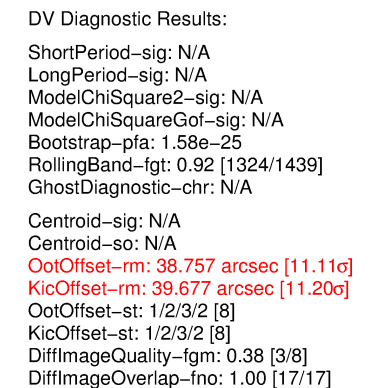
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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.

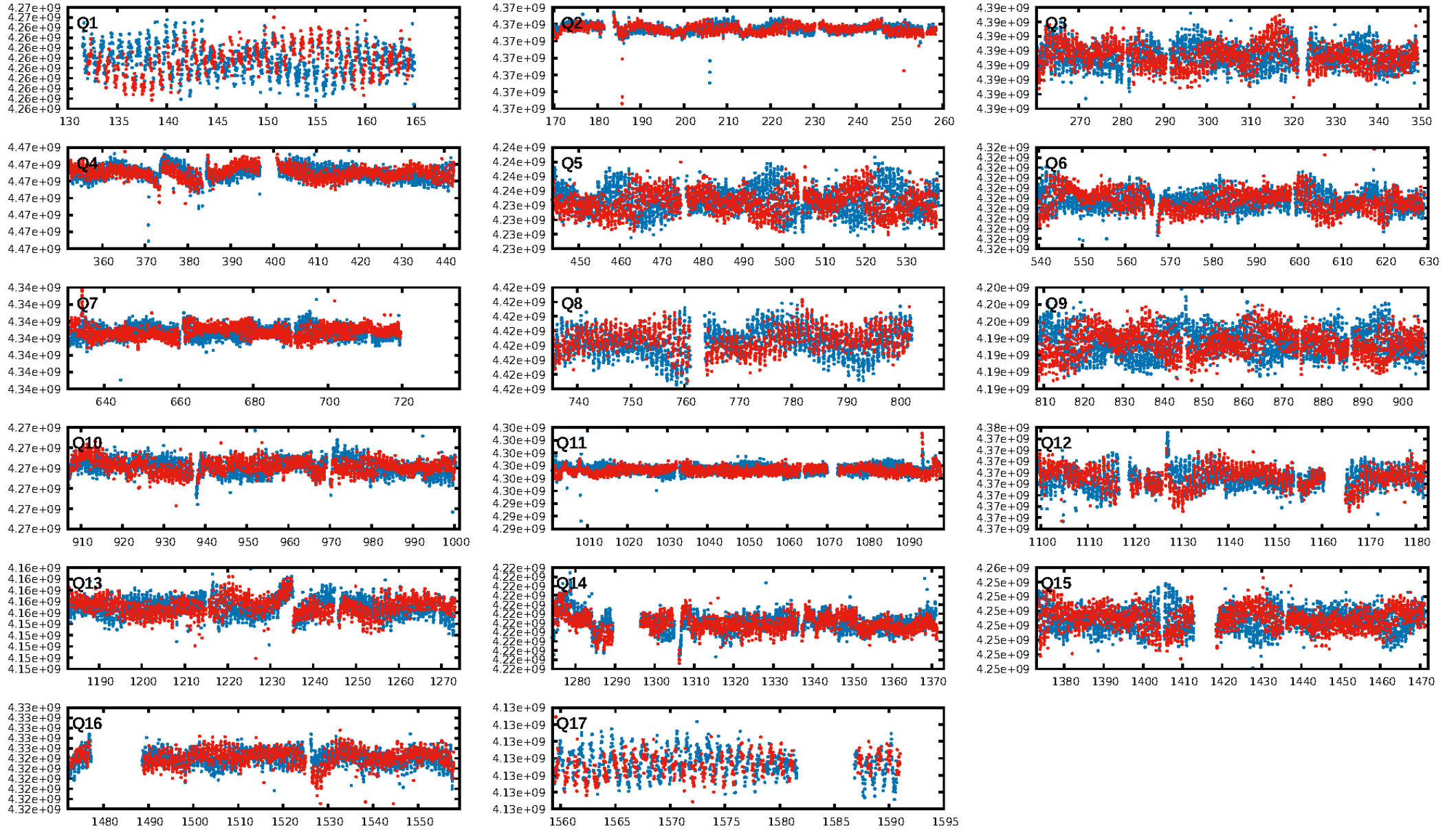
## Ephemeris Match Information For 007501194-01

No Significant Match Found

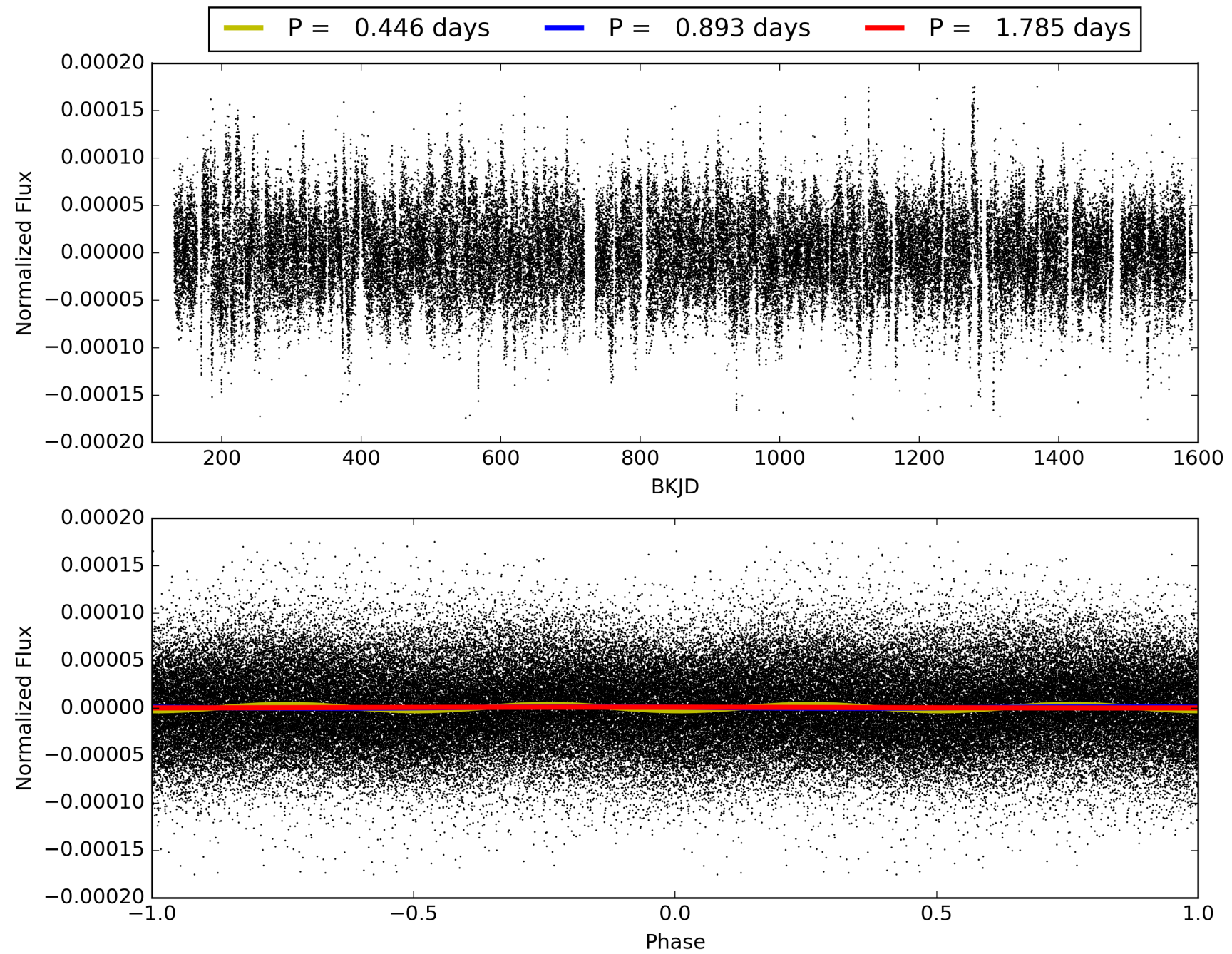
## KIC: 7501194    Candidate: 1 of 1    Period: 0.893 d



# TCE 007501194-01, PDC Light Curves

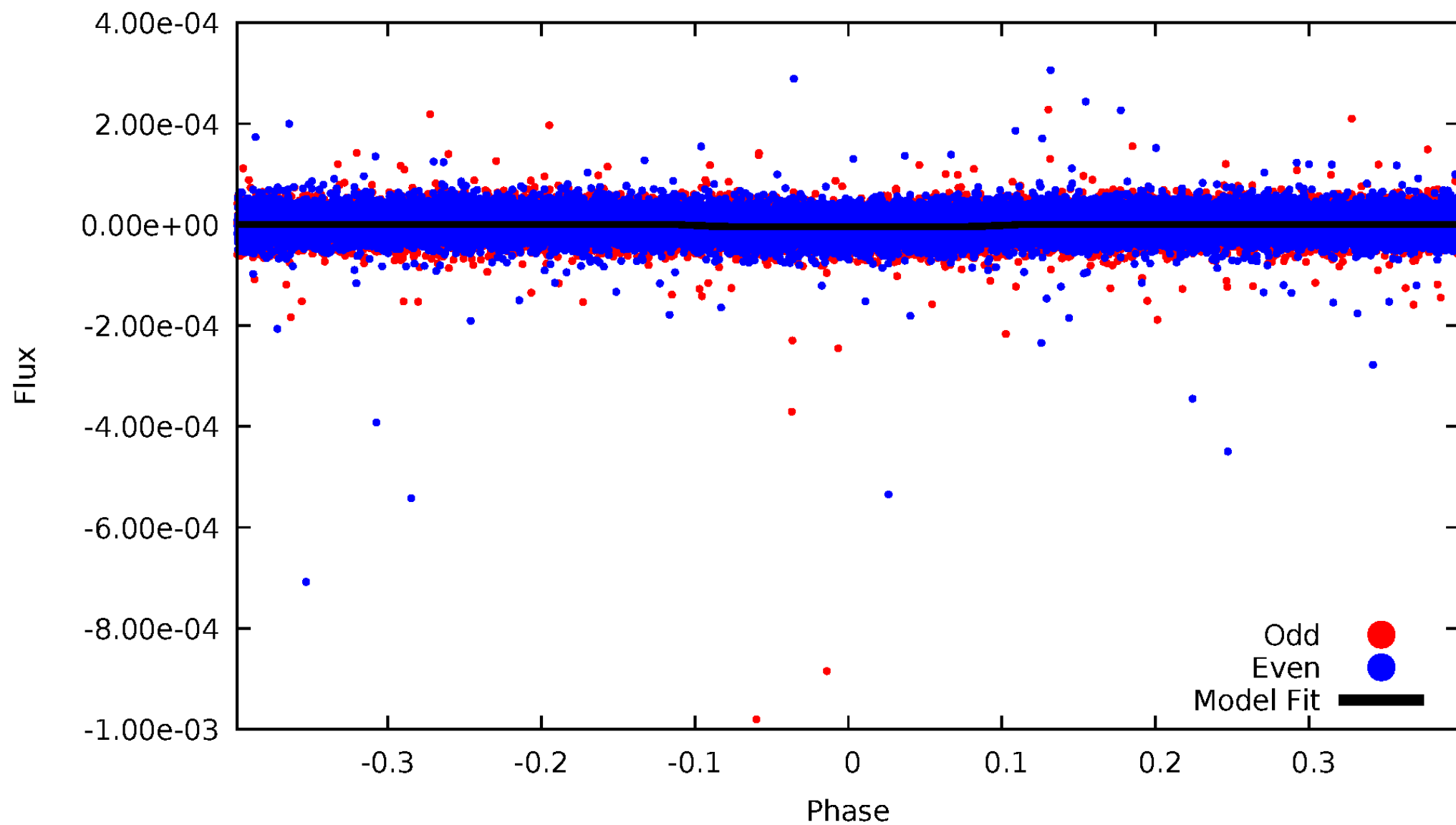


# TCE 007501194-01



# DV Odd/Even

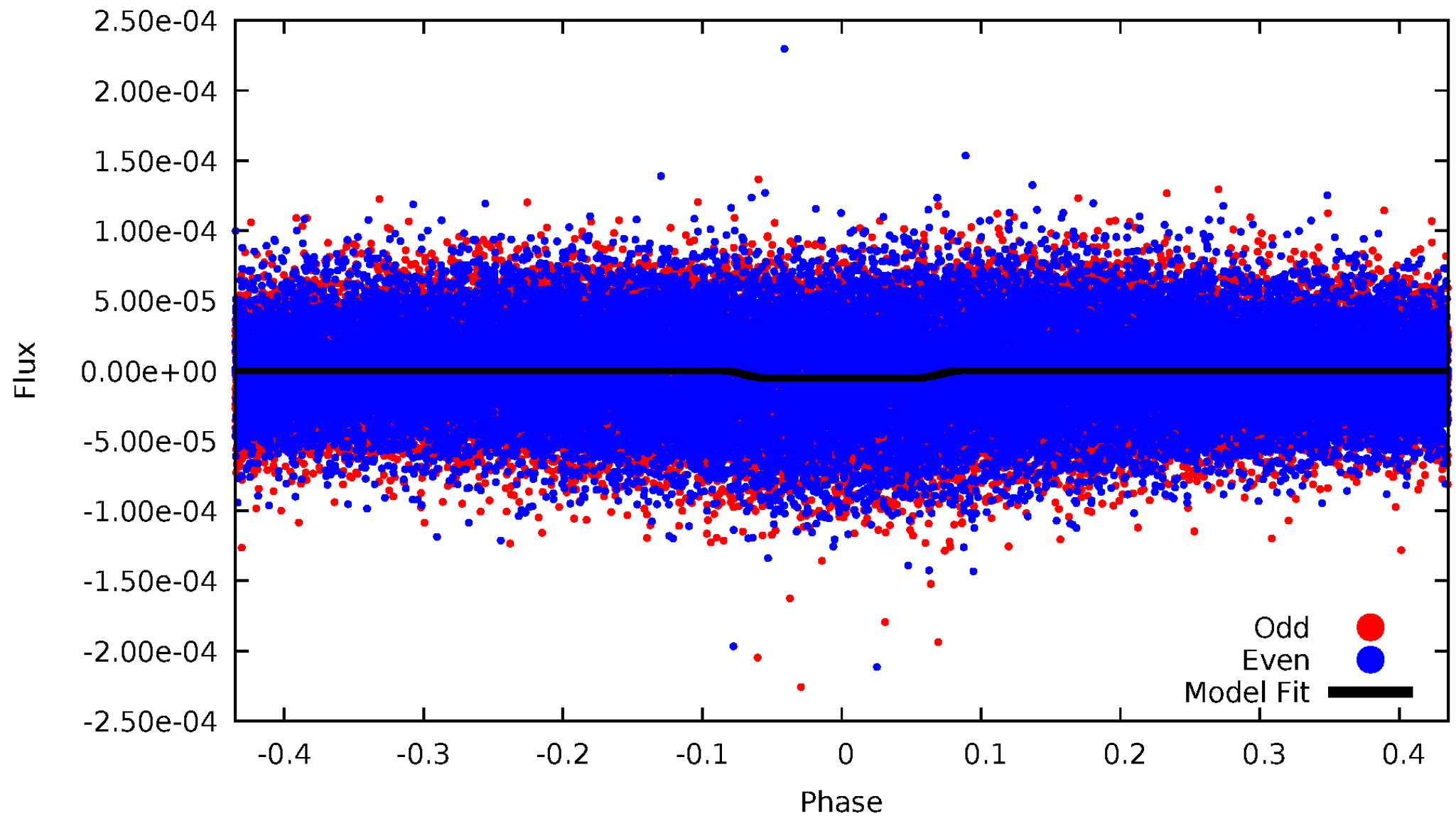
TCE 007501194-01





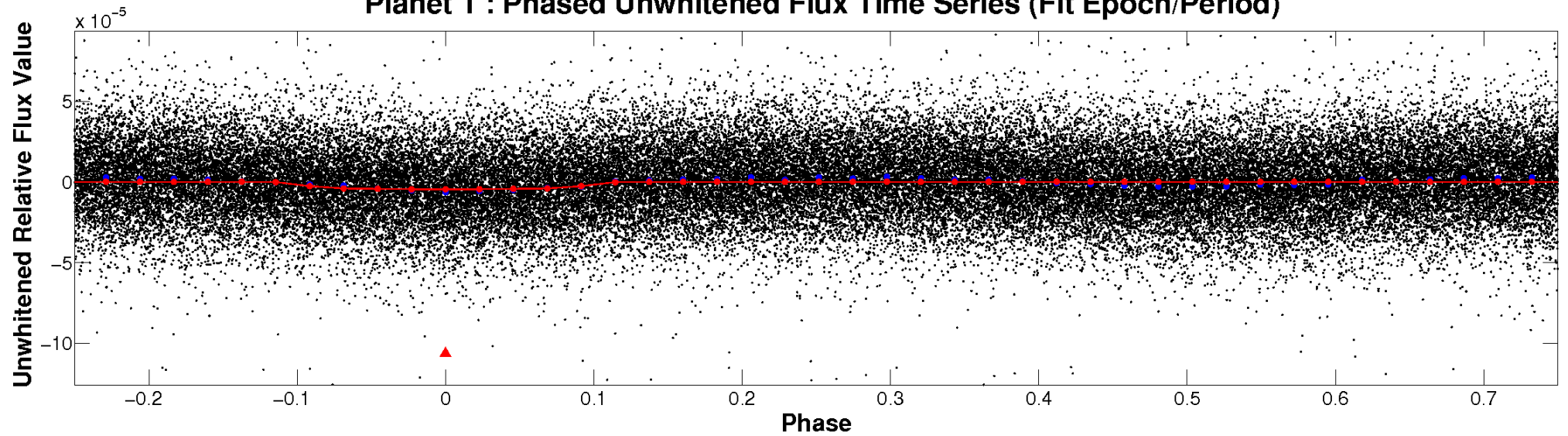
# ALT Odd/Even

TCE 007501194-01

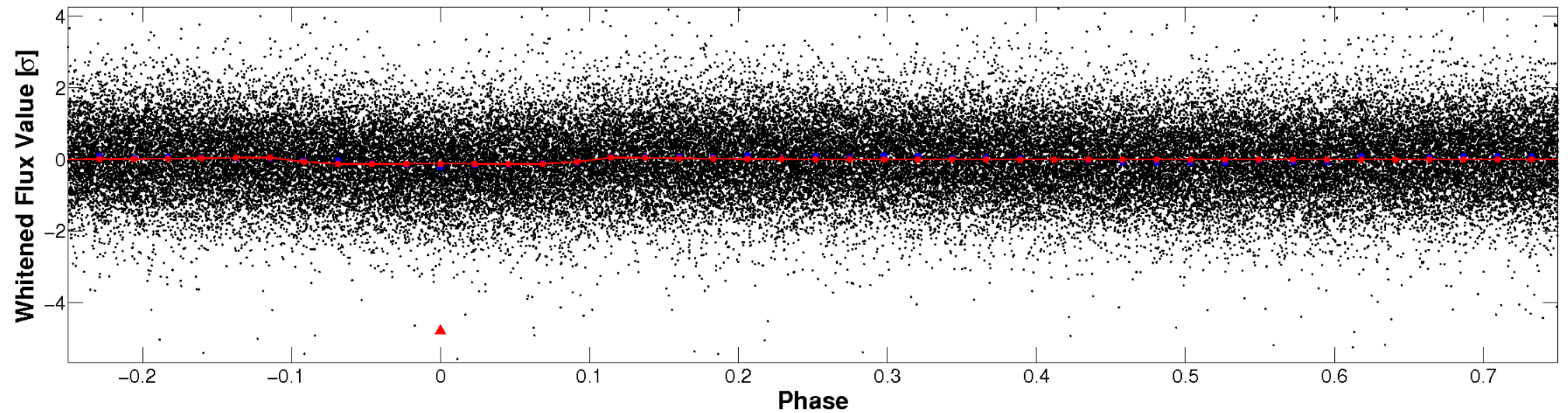


# Non-Whitened Vs. Whitened Light Curve

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

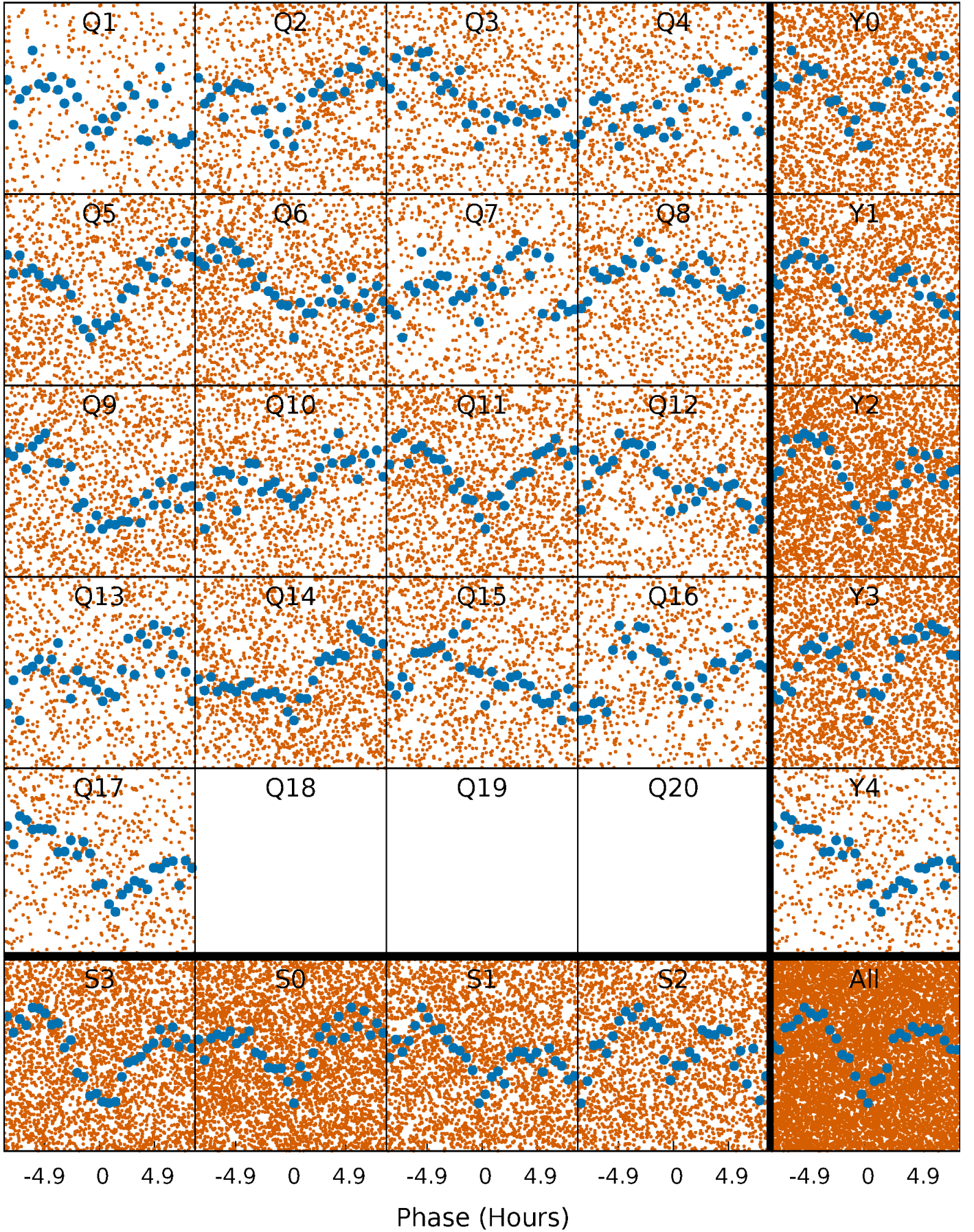


**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**



# PDC Quarter-Phased Transit Curves

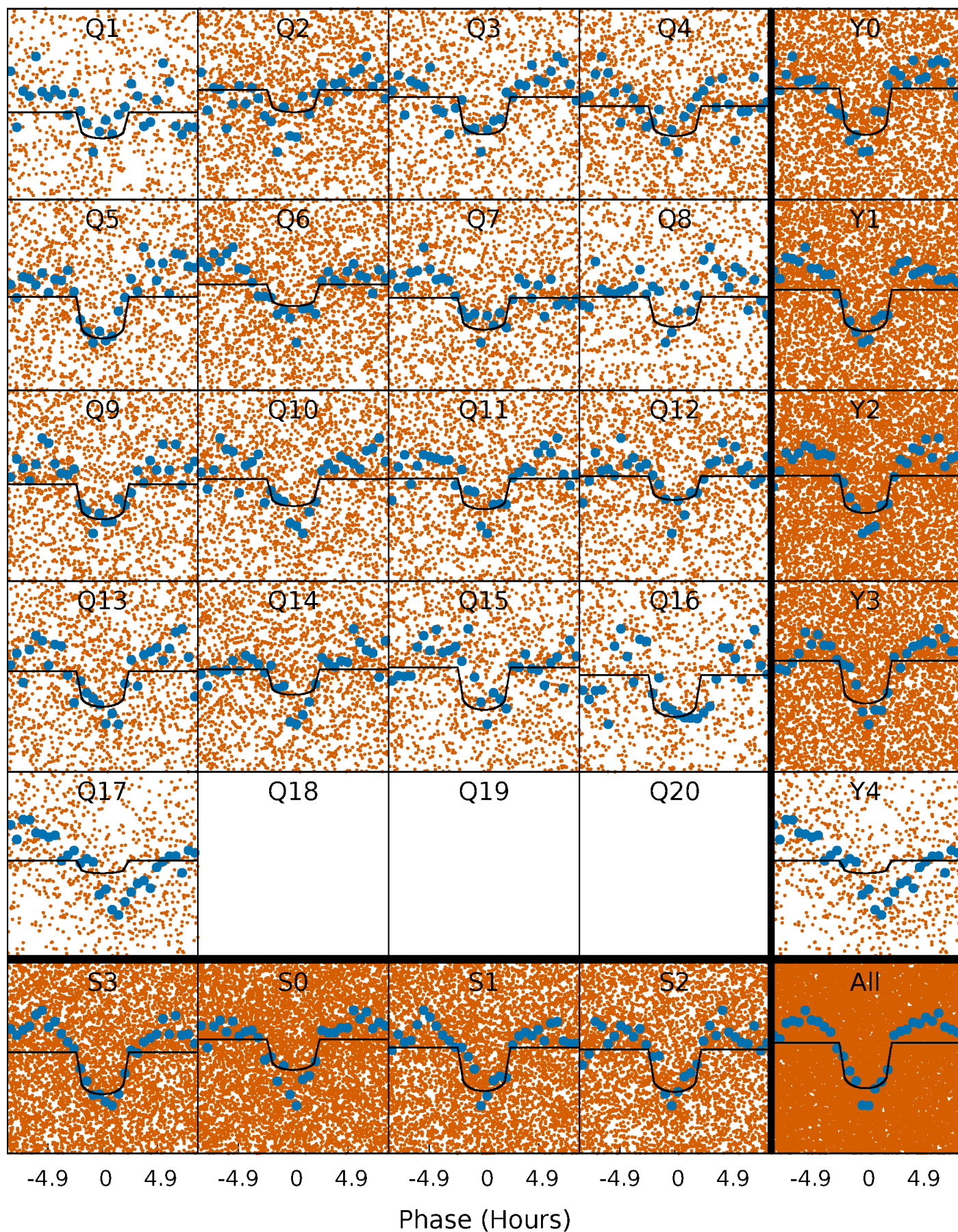
TCE 007501194-01 P= 0.892697 Days  $T_0=132.195610$  (BKJD)





# DV Quarter-Phased Transit Curves

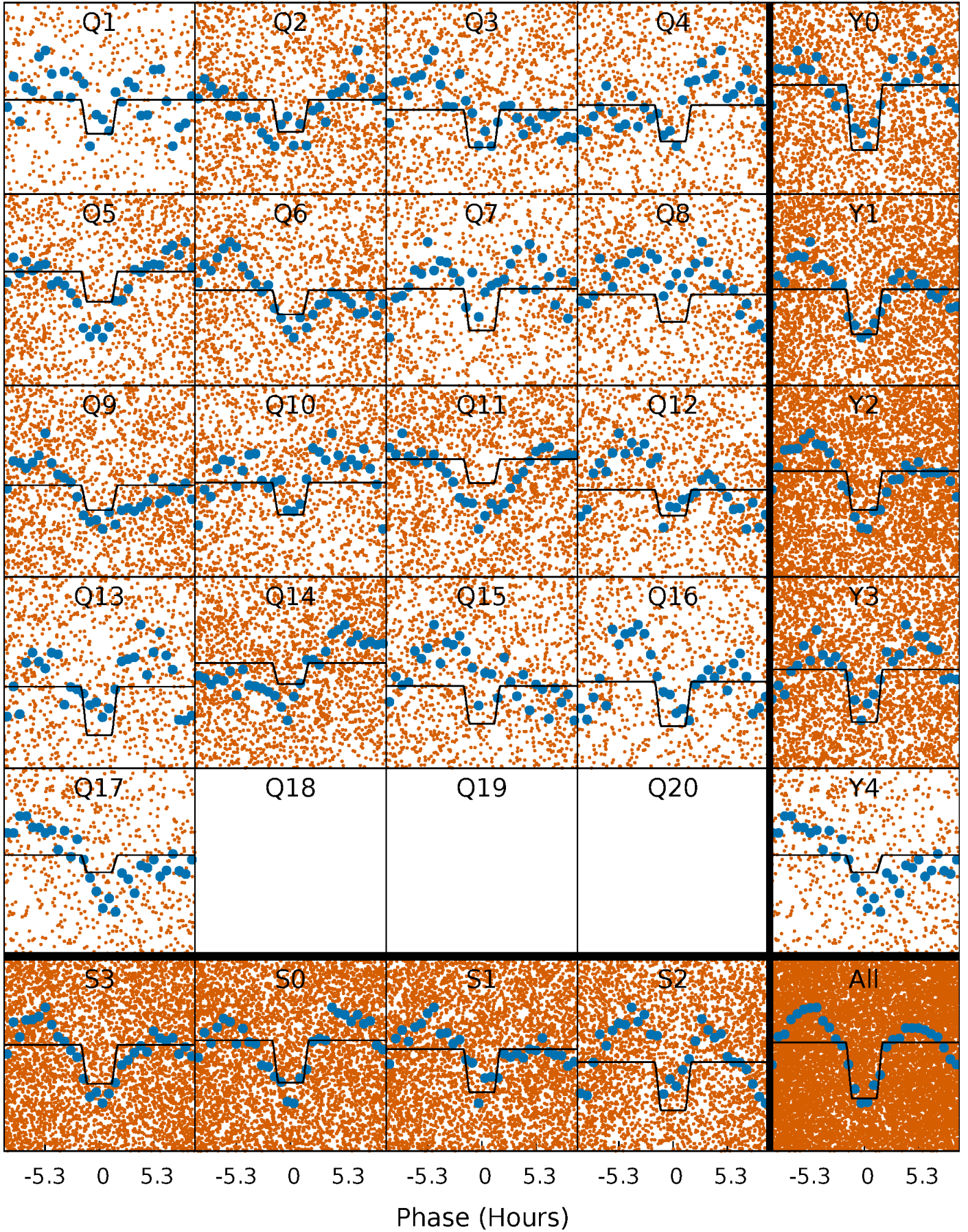
TCE 007501194-01 P= 0.892697 Days  $T_0=132.195610$  (BKJD)





# Alt. Detrend Quarter-Phased Transit Curves

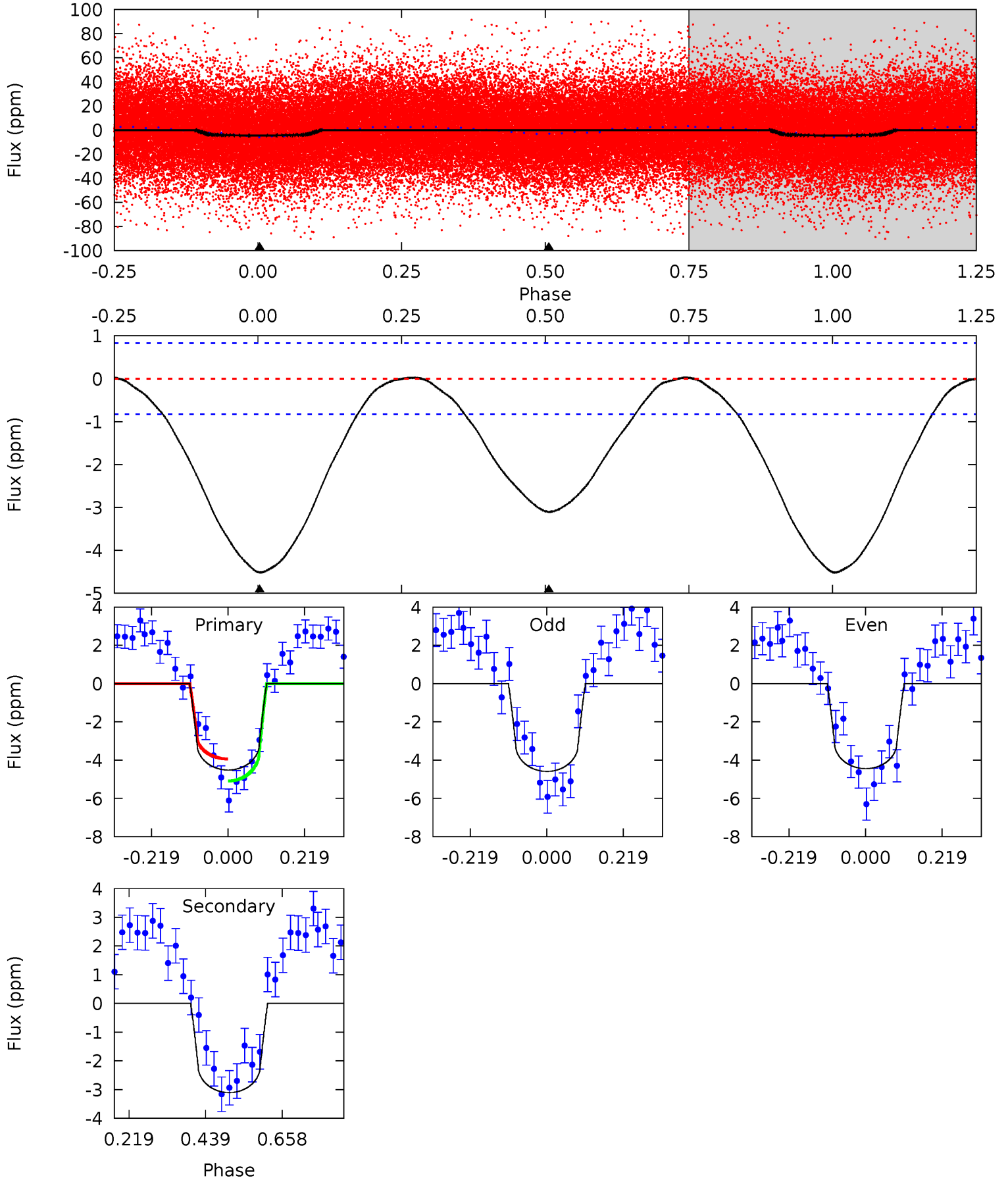
TCE 007501194-01 P= 0.892721 Days  $T_0=132.187893$  (BKJD)



# DV Model-Shift Uniqueness Test

007501194-01, P = 0.892697 Days, E = 131.302913 Days

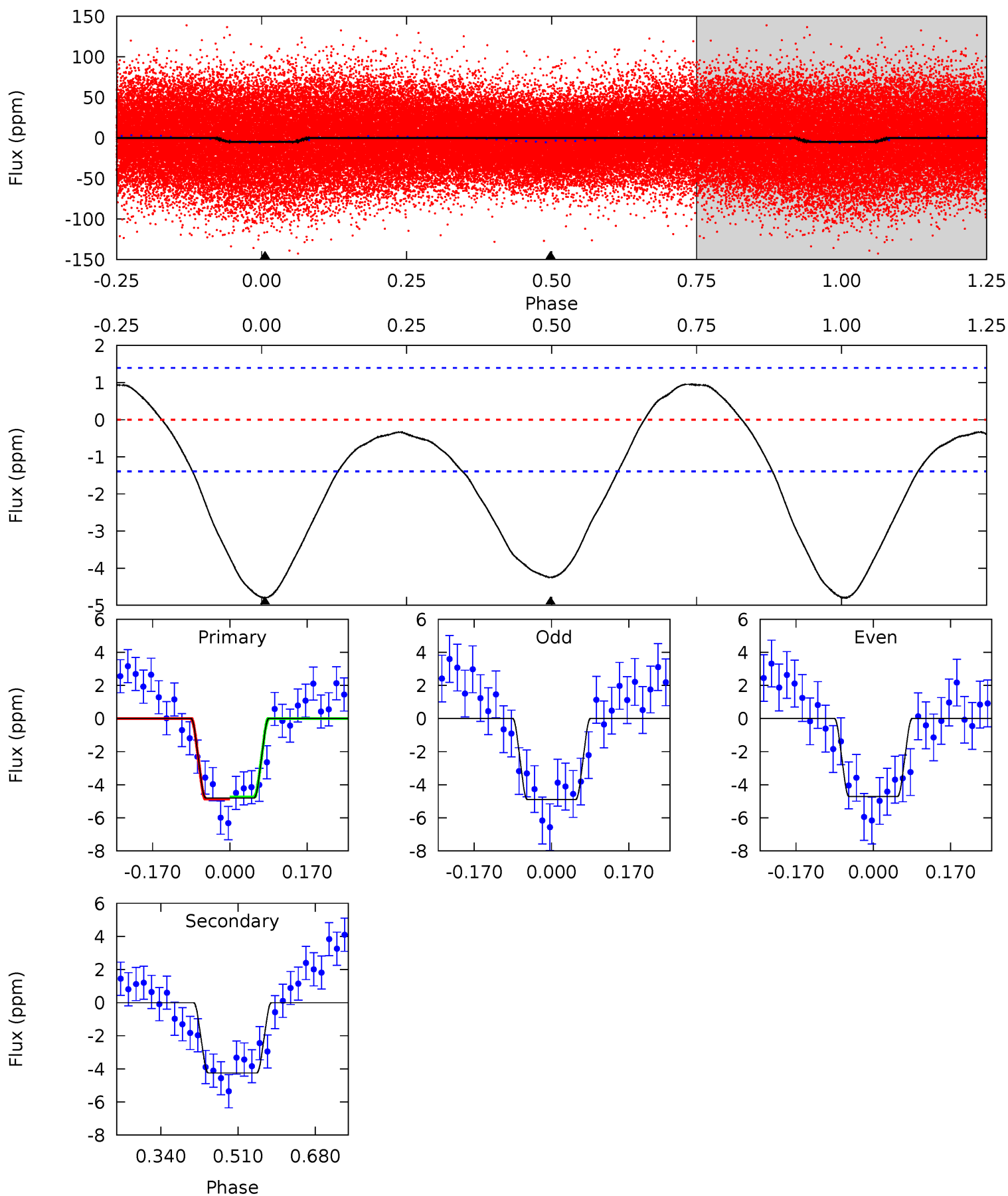
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.9	16.4	0	0	4.40	1.23	0.25	23.9	23.9	16.4	16.4	0.39	1.17	0.01	3.07



# Alt Model-Shift Uniqueness Test

007501194-01, P = 0.892721 Days, E = 131.295172 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
15.3	13.6	0	0	4.45	1.37	2.05	15.3	15.3	13.6	13.6	0.29	2.46	0.17	0.18





### Stellar Parameters For KIC 007501194

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$7532^{+210}_{-341}$	$4.211^{+0.070}_{-0.210}$	$0.070^{+0.200}_{-0.350}$	$1.650^{+0.572}_{-0.245}$	$1.612^{+0.205}_{-0.228}$	$0.506^{+0.198}_{-0.271}$
	+3%/-5%	+2%/-5%	+286%/-500%	+35%/-15%	+13%/-14%	+39%/-54%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology  
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

### Secondary Eclipse Parameters for KIC 007501194-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$-3 \pm 0$	$0.38^{+0.07}_{-0.05}$	$4145^{+286}_{-239}$	$6775^{+457}_{-384}$	$5.331^{+1.609}_{-1.384}$
Alt.	$-4 \pm 0$	$0.43^{+0.07}_{-0.05}$	$4132^{+306}_{-228}$	$6909^{+398}_{-410}$	$5.630^{+1.663}_{-1.432}$

$T_{\text{max}}$  = Theoretical Maximum Planetary Temperature

$T_{\text{obs}}$  = Observed Planetary Temperature (Assuming A=0.3)

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

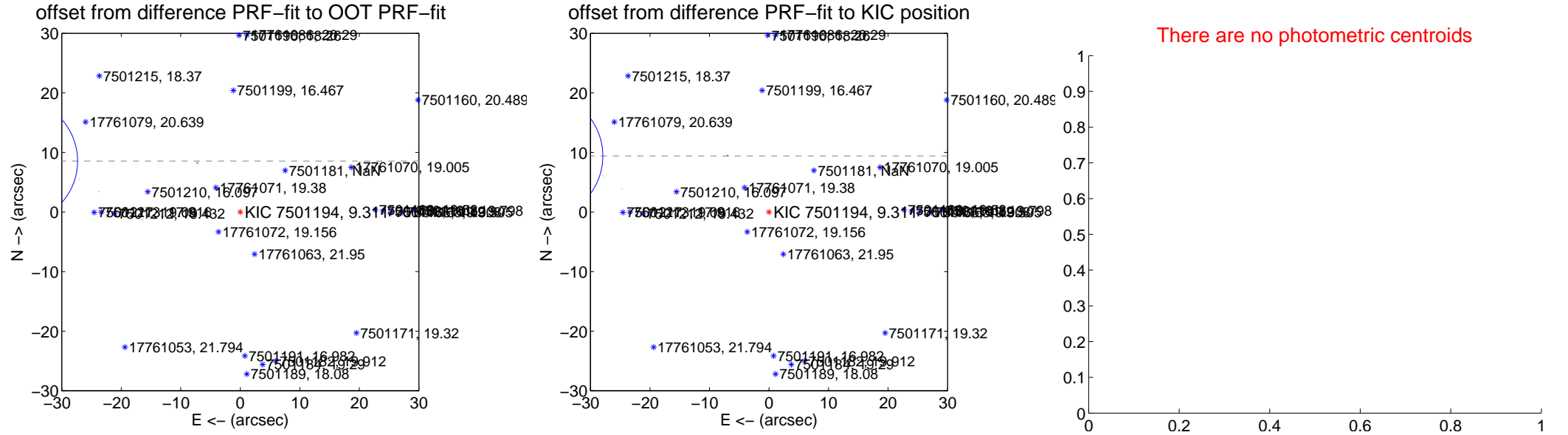
## DV Centroid Data

Supplemental centroid analysis for 007501194-01. **Kepler magnitude: 9.31.** Transit SNR 13.97

**There are 3 quarters with good PRF difference image offsets**

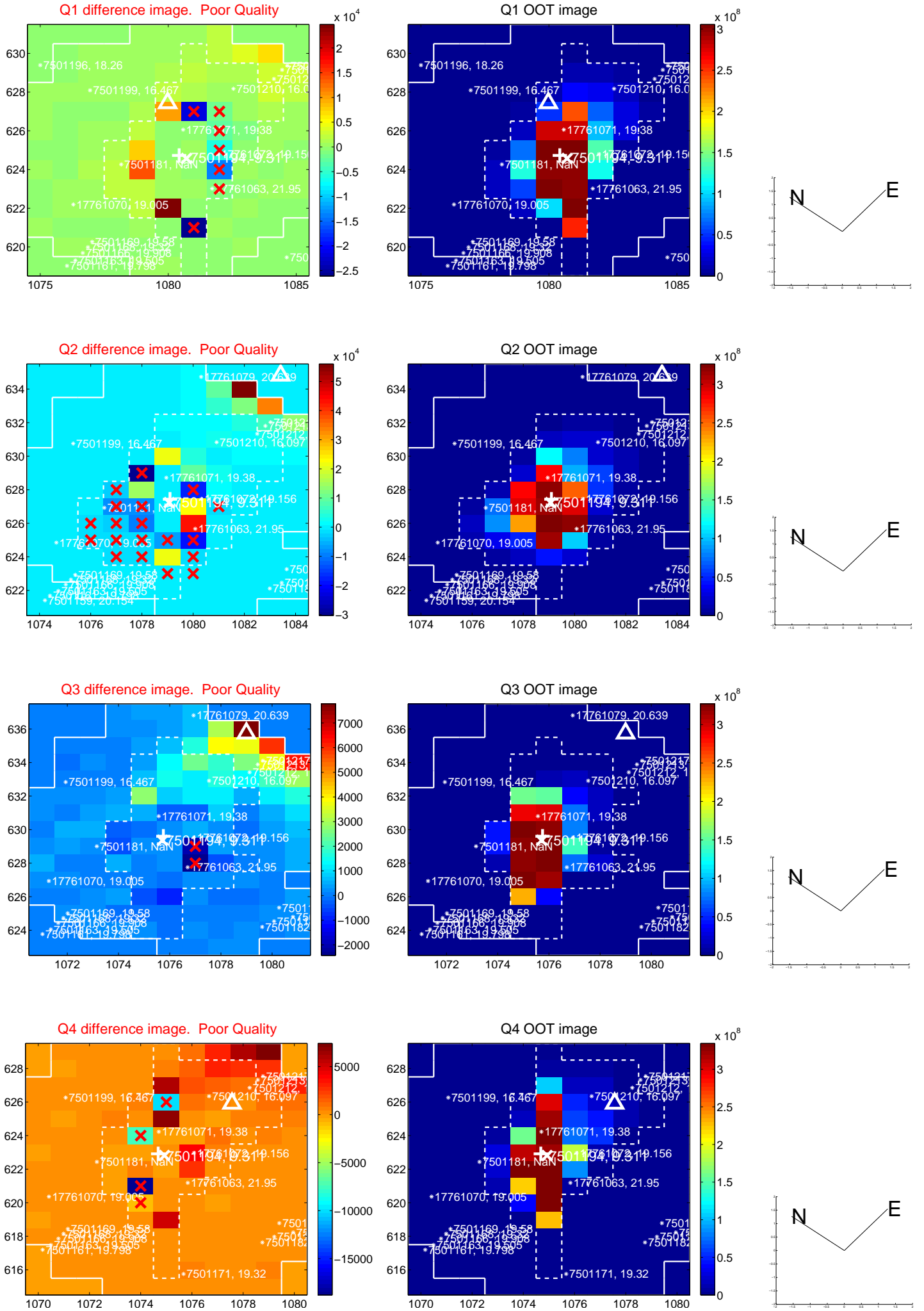
The direct PRF centroid is offset from the target star catalog position by about 0.84 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	<b><math>38.757 \pm 3.489</math></b>	<b>11.11</b>	$37.800 \pm 3.468$	$8.560 \pm 1.147$
PRF-fit source offset from KIC position	<b><math>39.677 \pm 3.543</math></b>	<b>11.20</b>	$38.546 \pm 3.647$	$9.405 \pm 1.238$
photometric centroid source offset	—	—	—	—

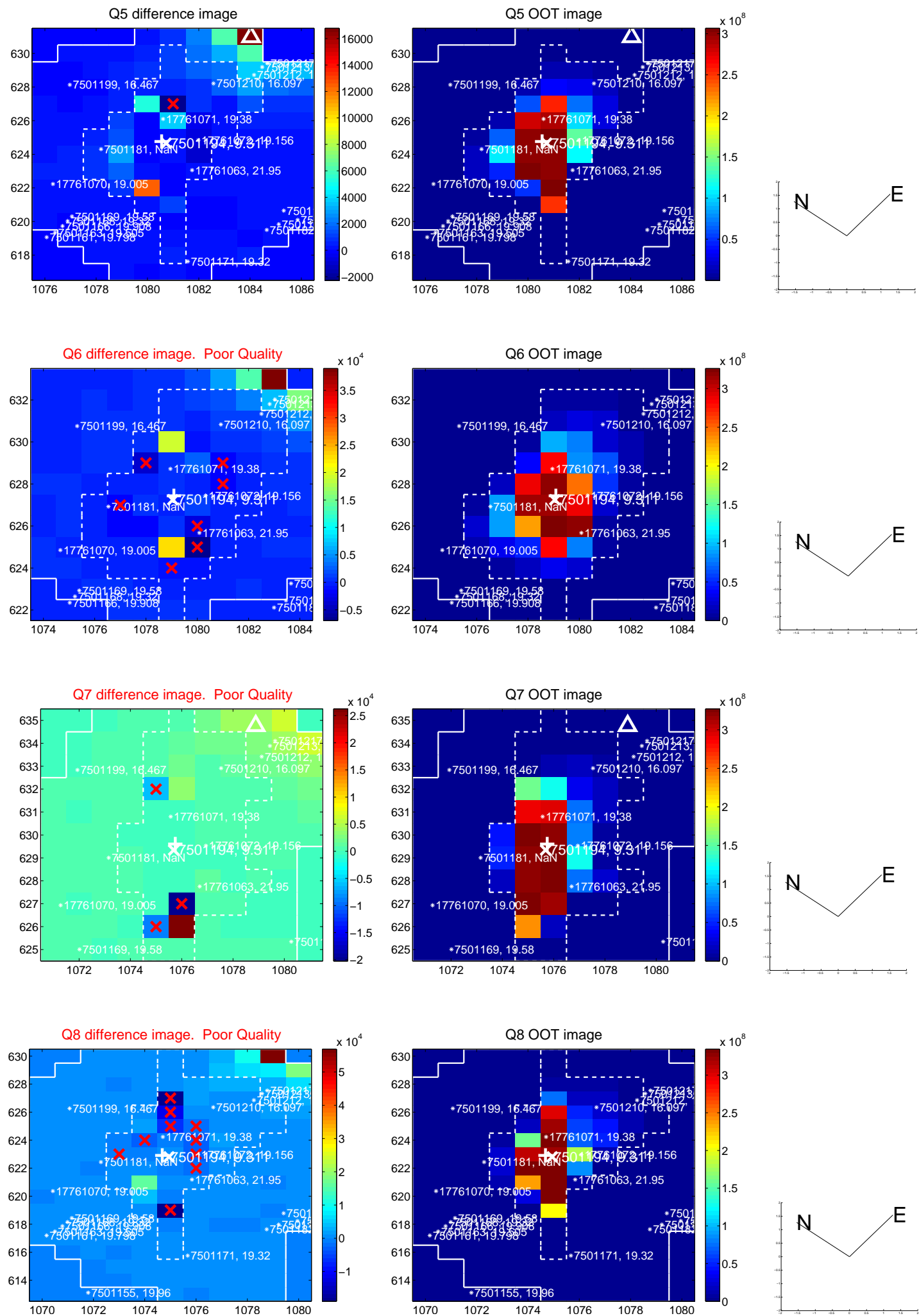


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

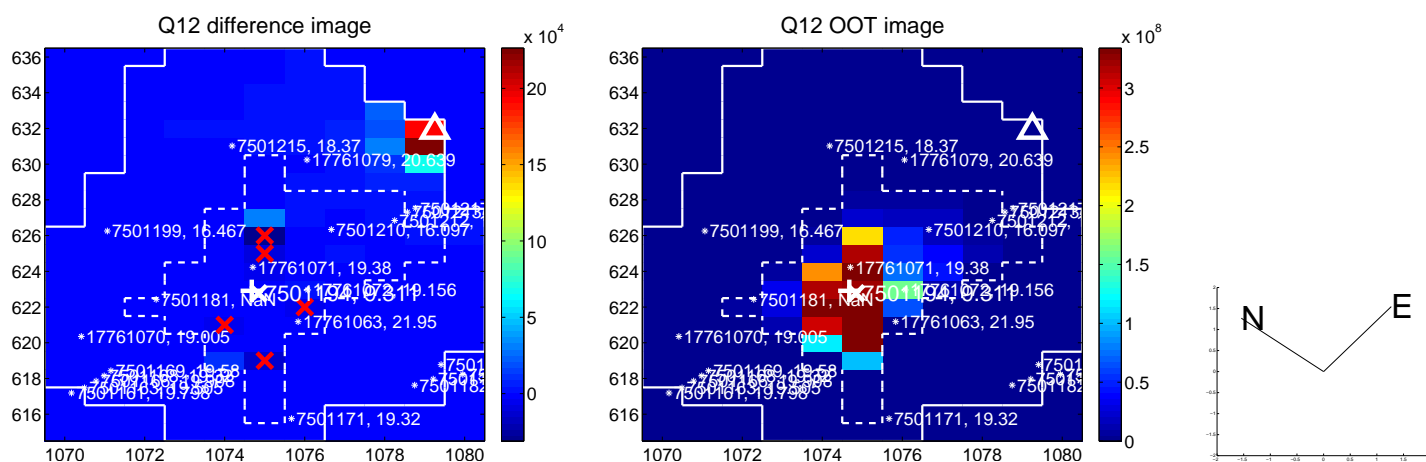
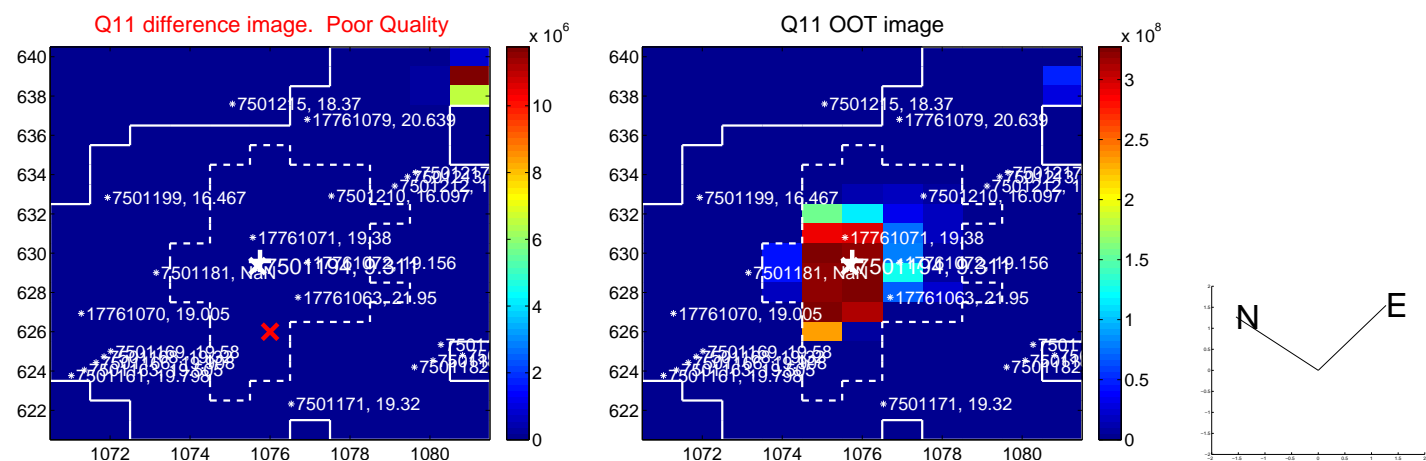
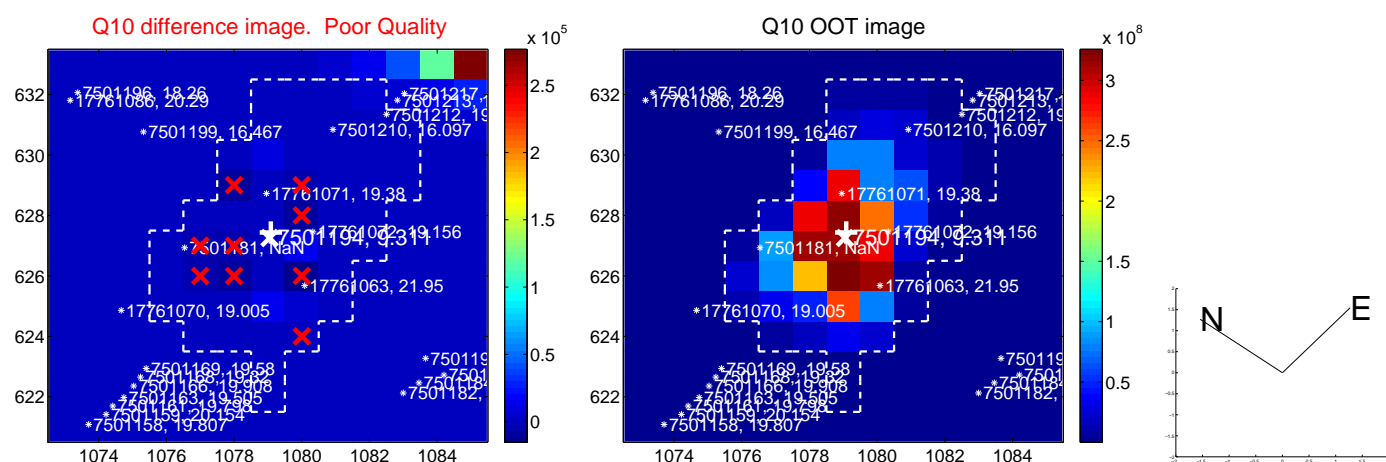
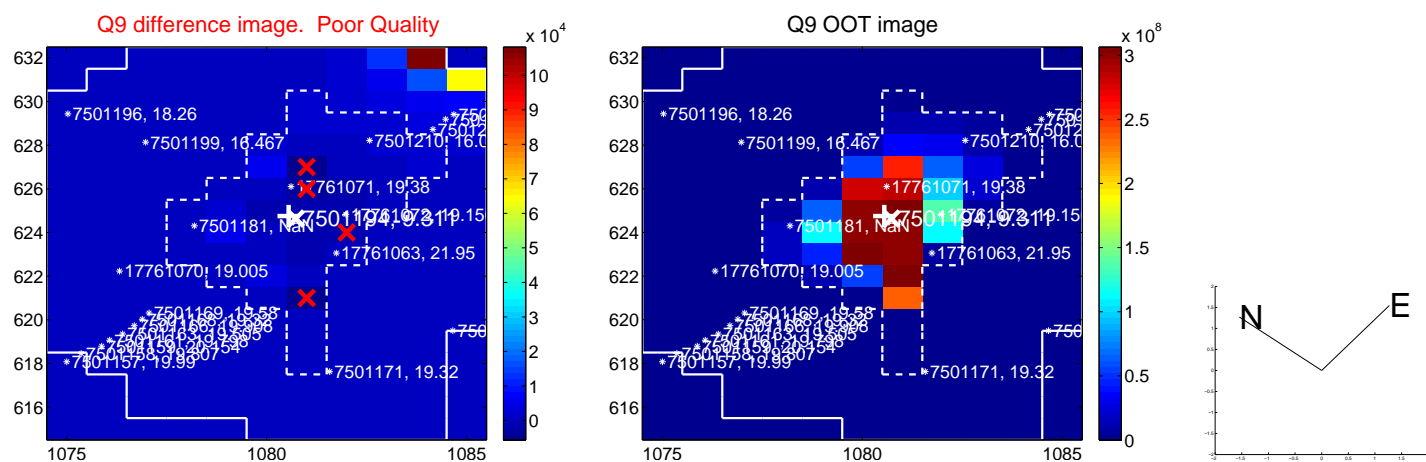


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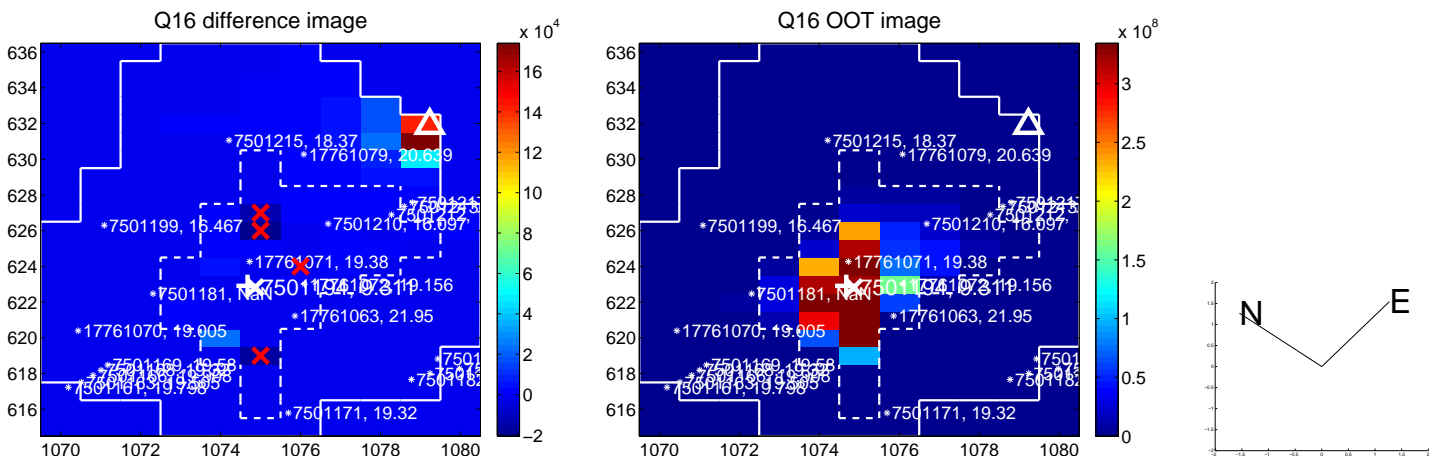
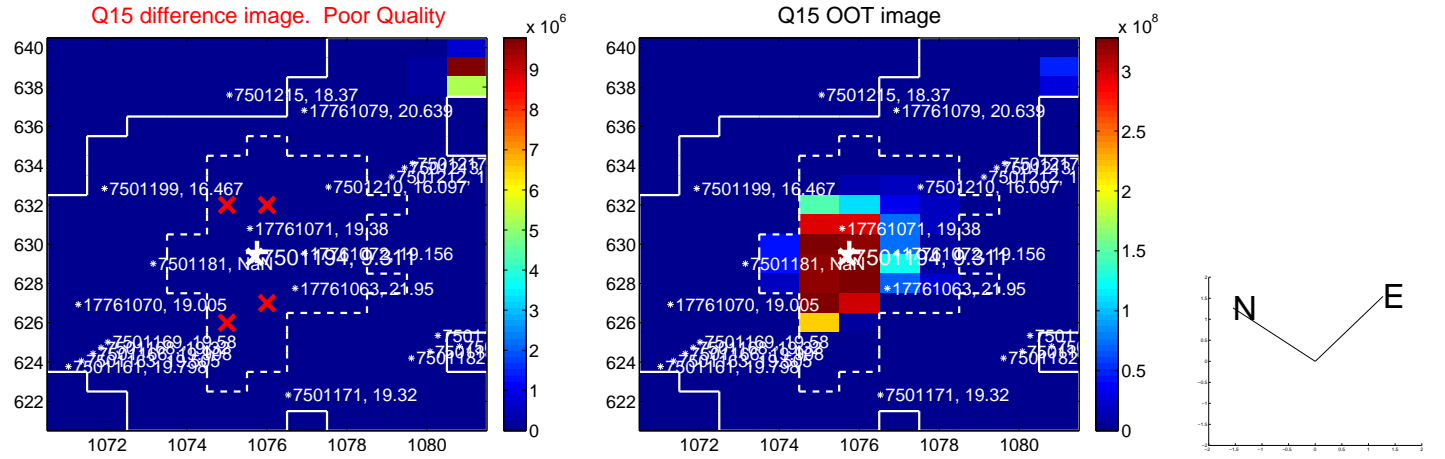
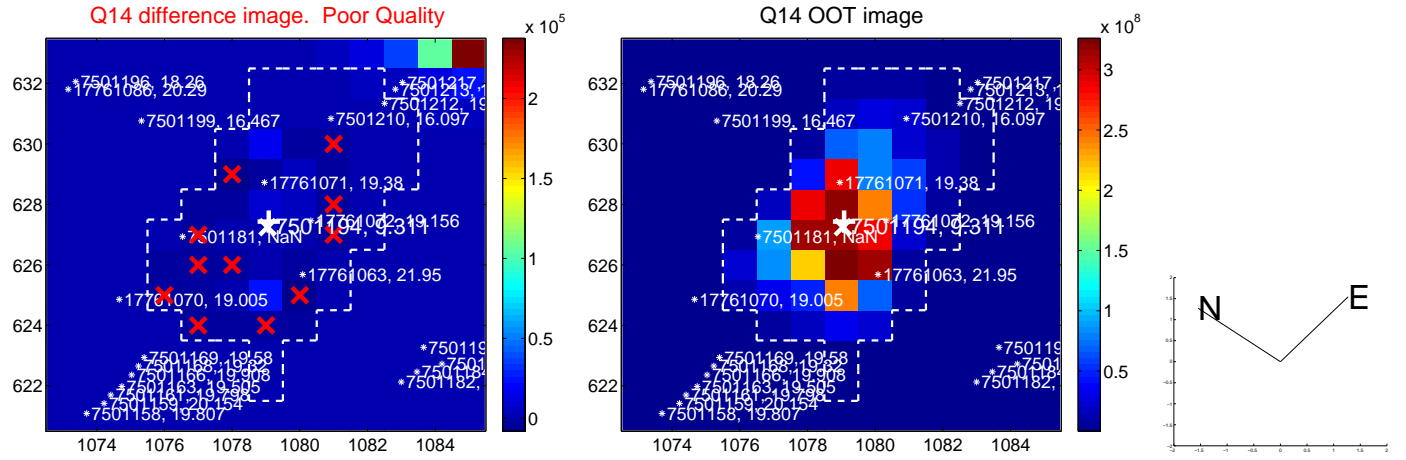
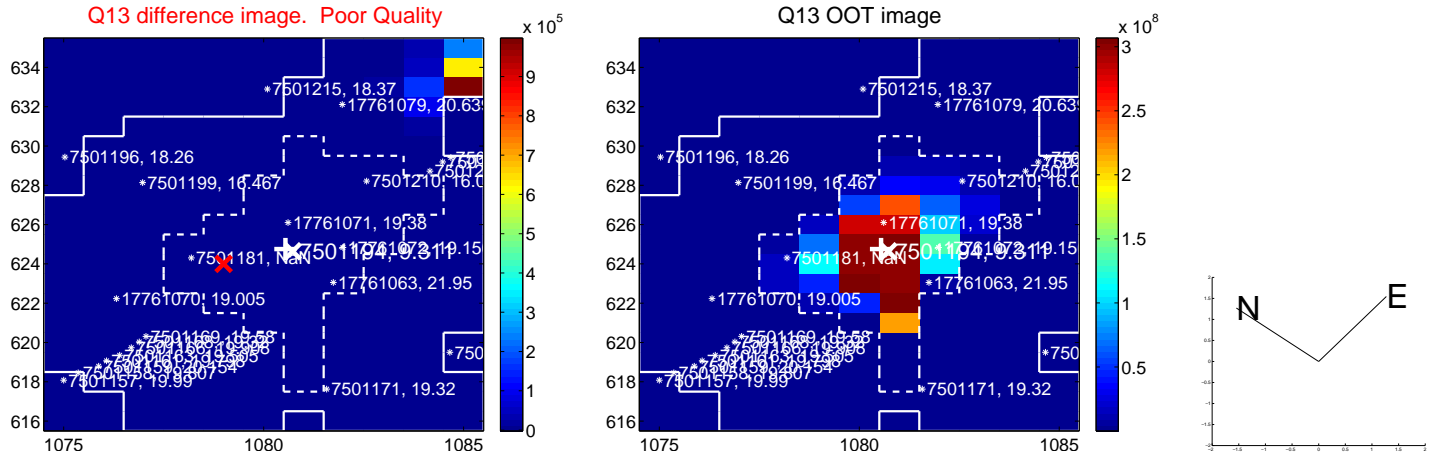




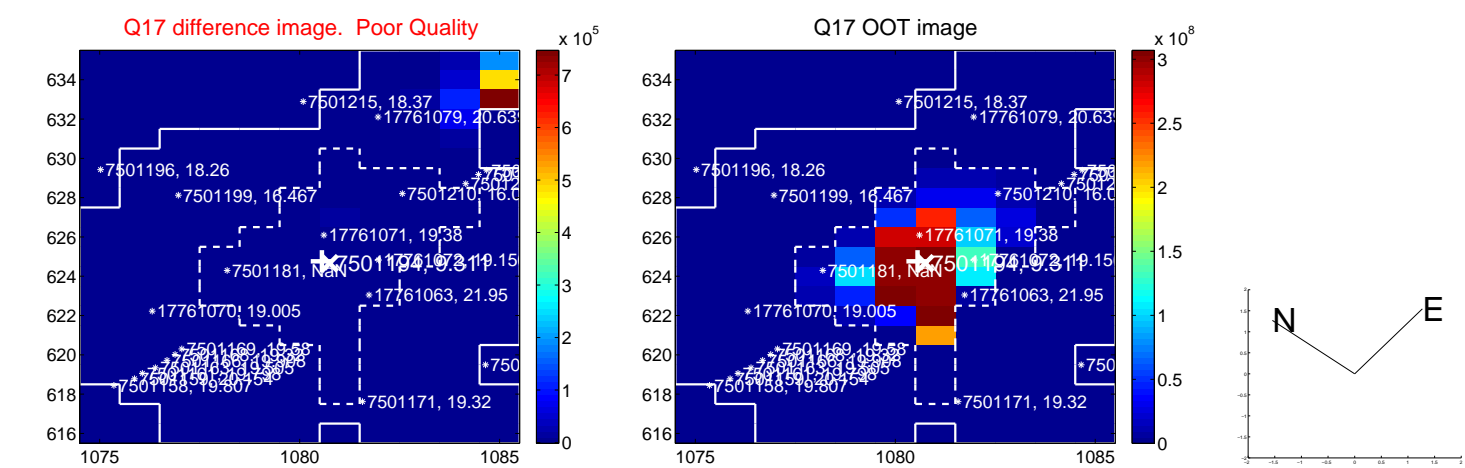
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folded centroid time series figure for this object.

UKIRT Image

