

# KIC 011395206

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
011395206-01	OBS	No	0.702799	132.023494	1130.1	1.500	11.8	-1.0	0.56	3838	1.86	376.46

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011395206-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS

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

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

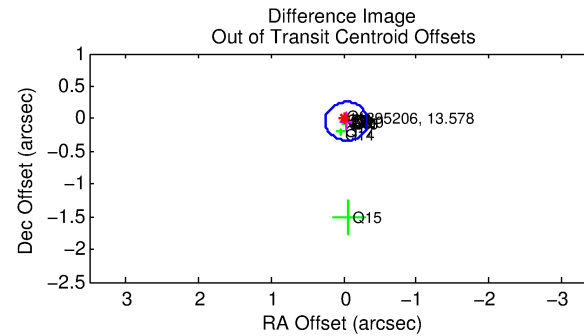
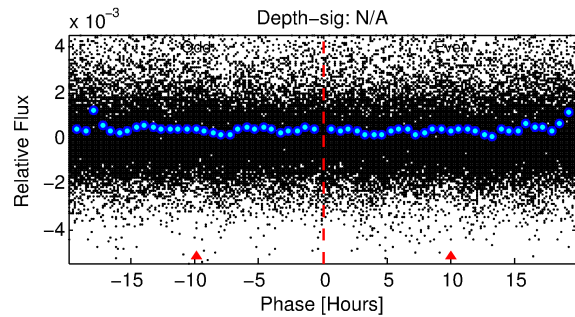
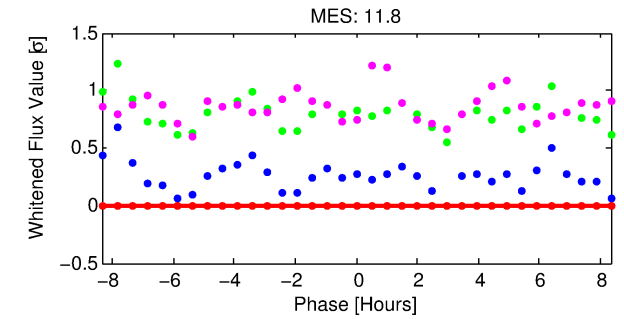
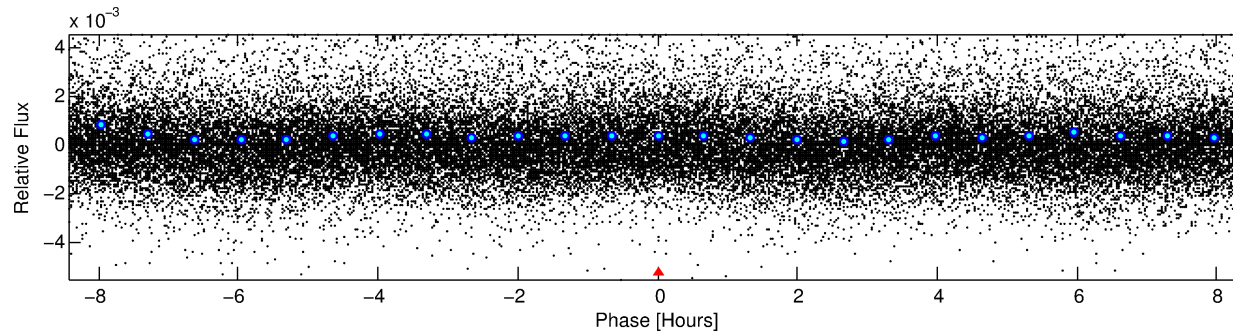
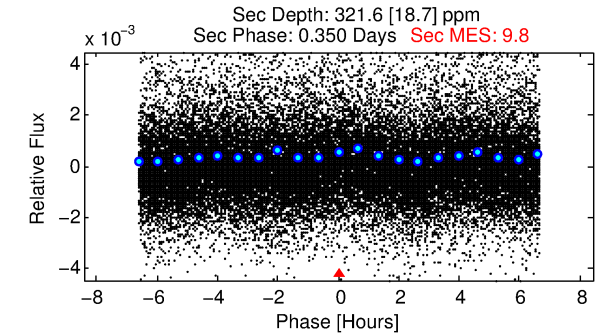
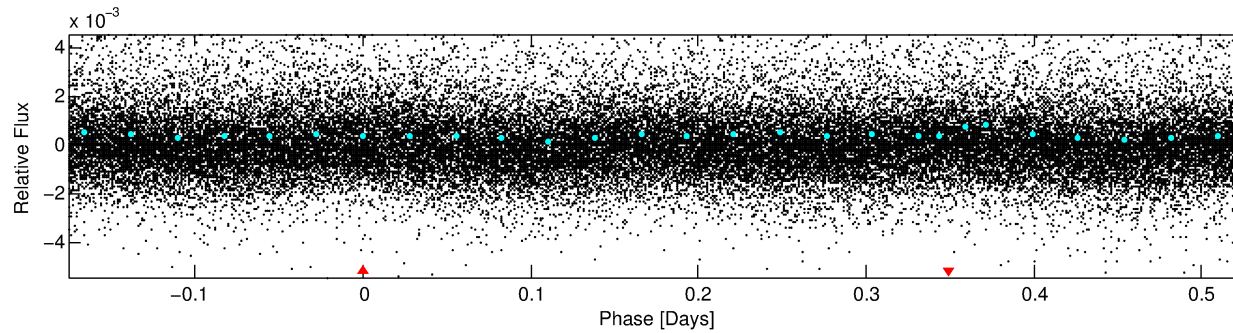
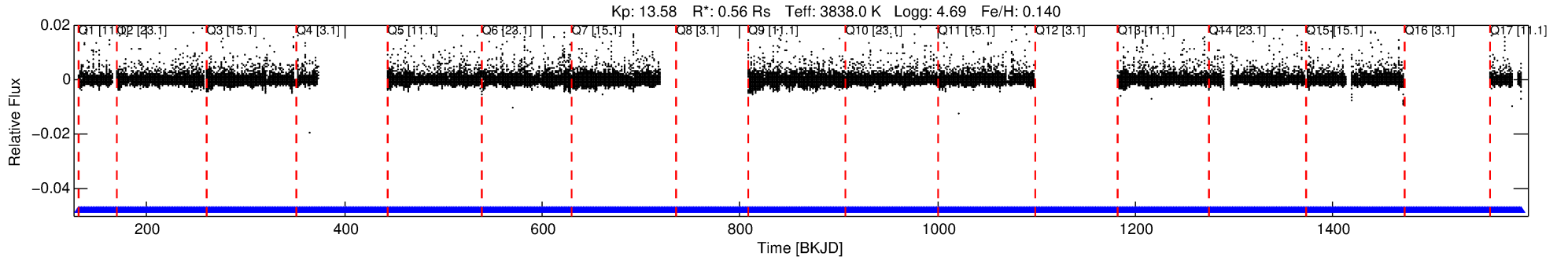
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 011395206-01

No Significant Match Found

# DV One-Page Summary

KIC: 11395206 Candidate: 1 of 1 Period: 0.703 d



## TPS TCE Results:

Period = 0.70280 d  
Epoch = 132.0235 BKJD

**DV fit results are unavailable**

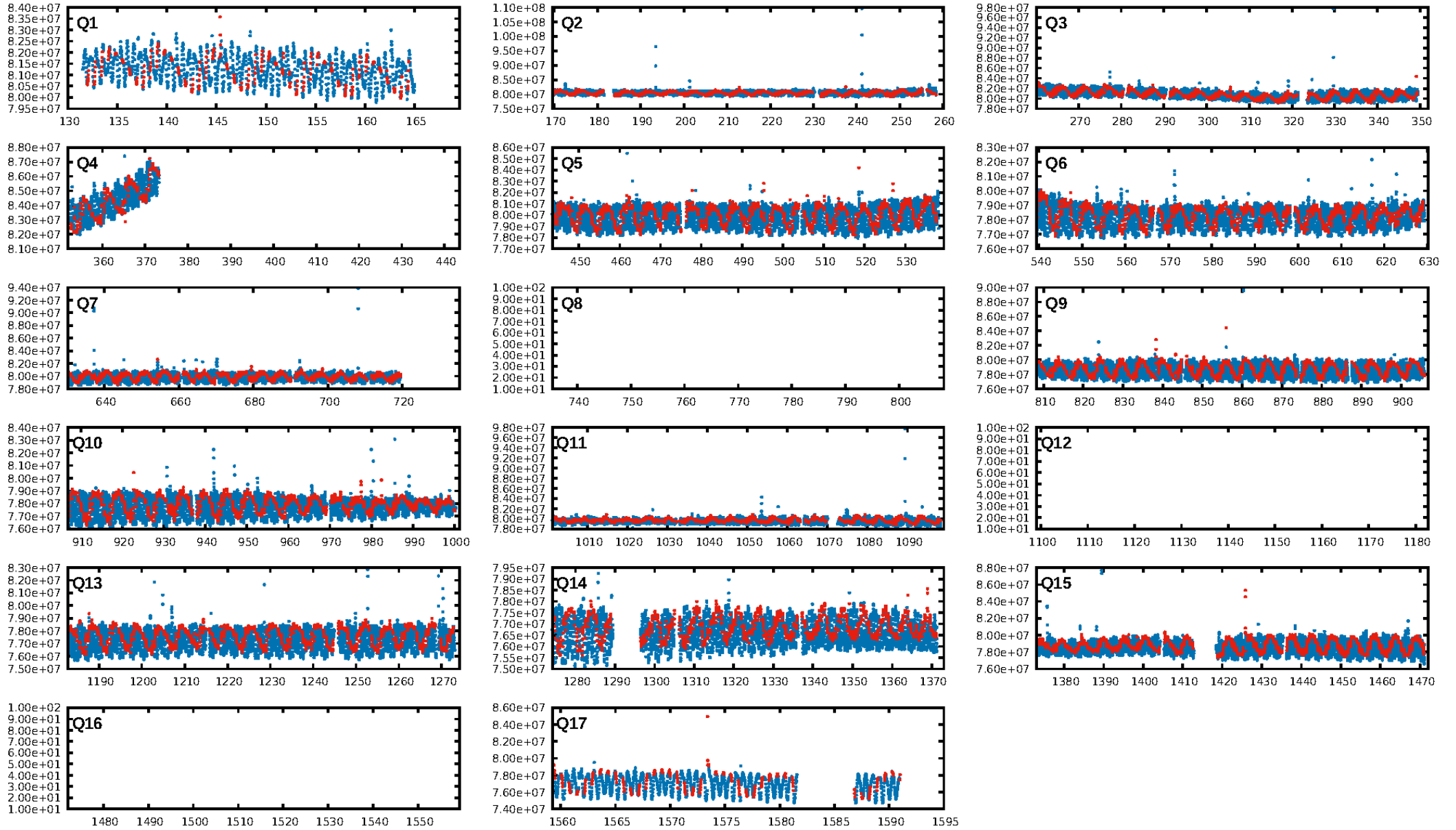
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: 1.21e-18  
RollingBand-fgt: 1.00 [1409/1409]  
**GhostDiagnostic-chr: 1.007**  
**Centroid-sig: 0.0%**  
**Centroid-so: 0.473 arcsec [13.09σ]**  
OotOffset-rm: 0.053 arcsec [0.54σ]  
KicOffset-rm: 0.212 arcsec [1.97σ]  
OotOffset-st: 4/4/1/5 [14]  
KicOffset-st: 4/4/1/5 [14]  
DiffImageQuality-fgm: 0.86 [12/14]  
DiffImageOverlap-fno: 1.00 [14/14]

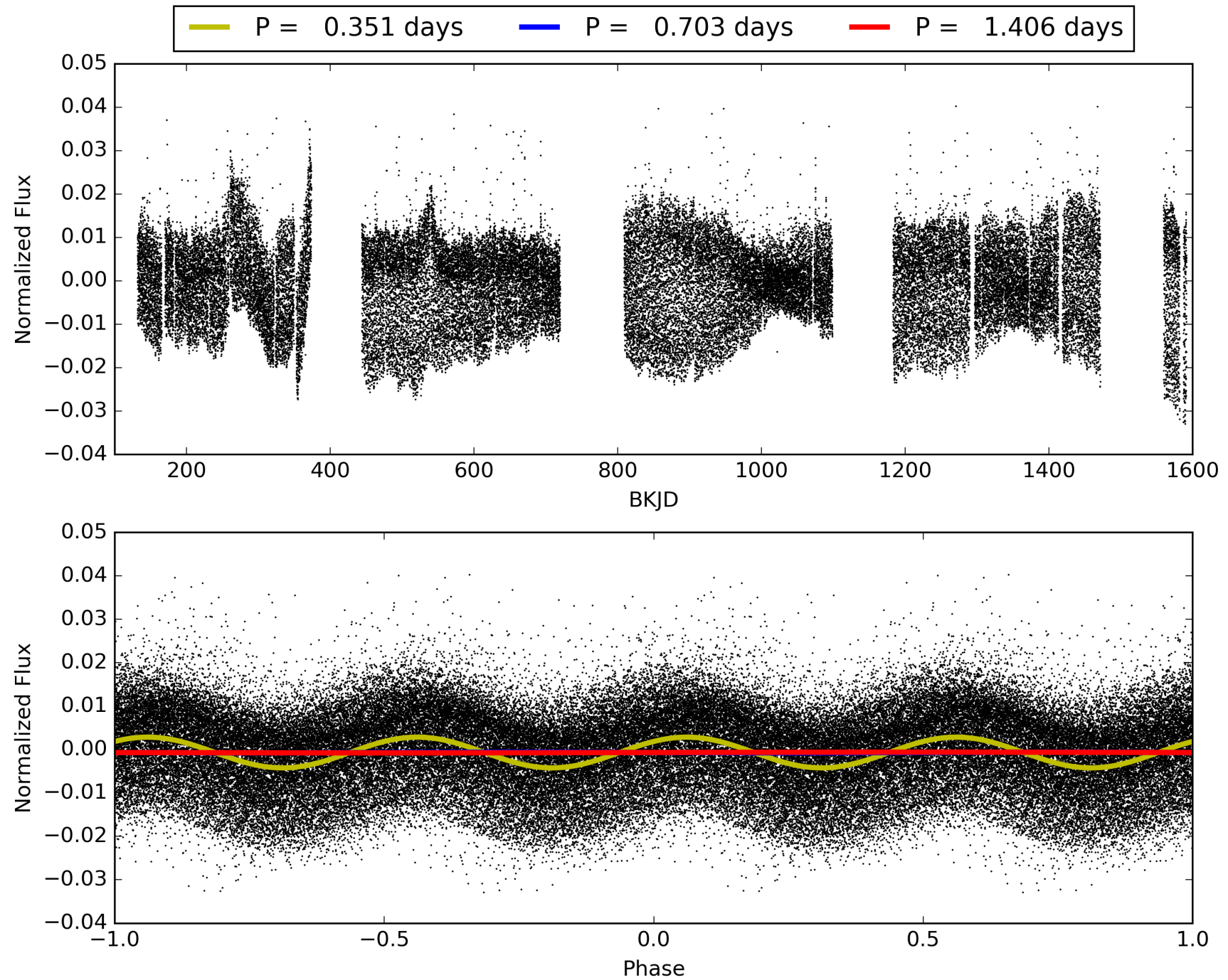
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:21:54 Z

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

# TCE 011395206-01, PDC Light Curves

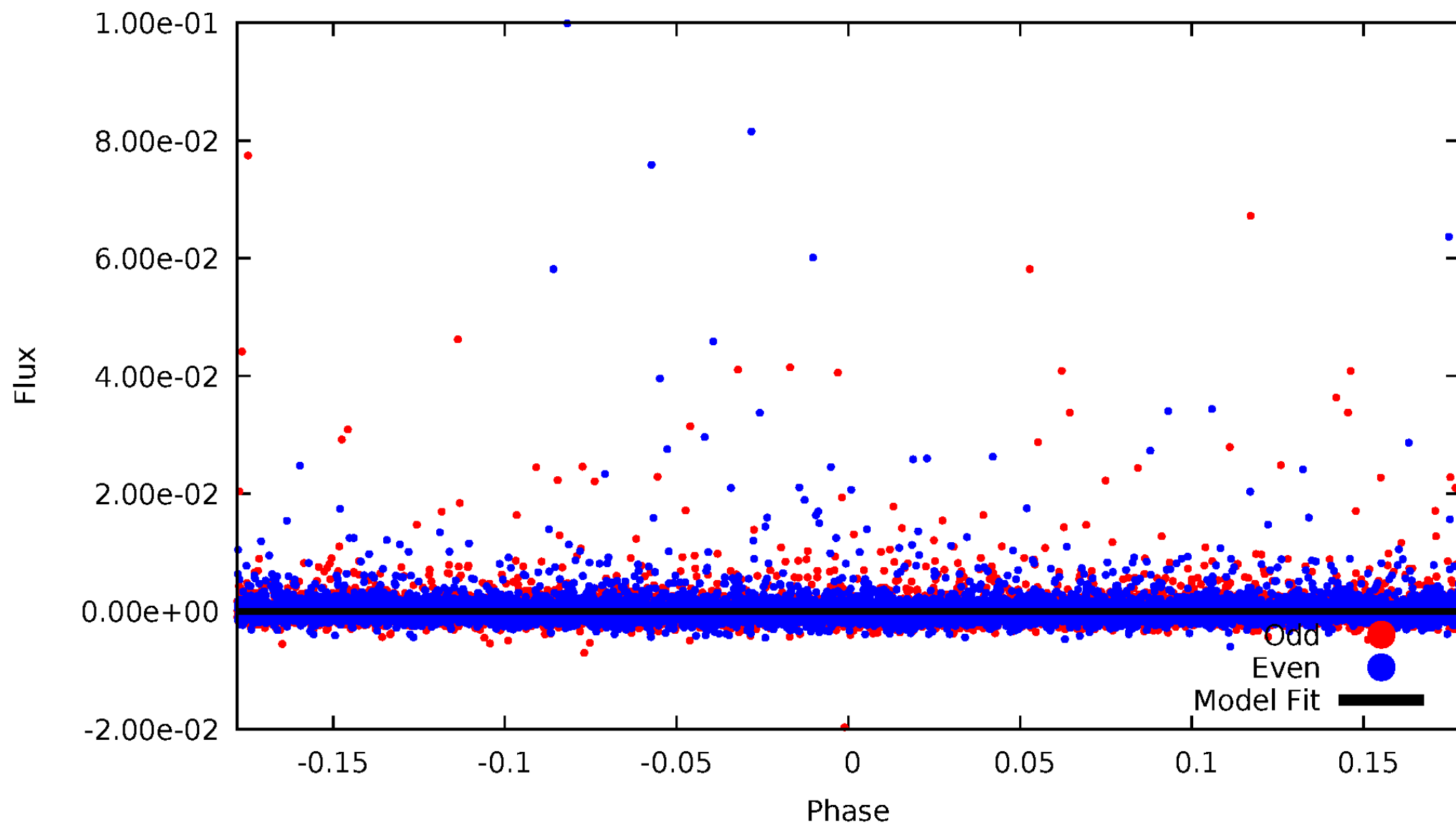


TCE 011395206-01



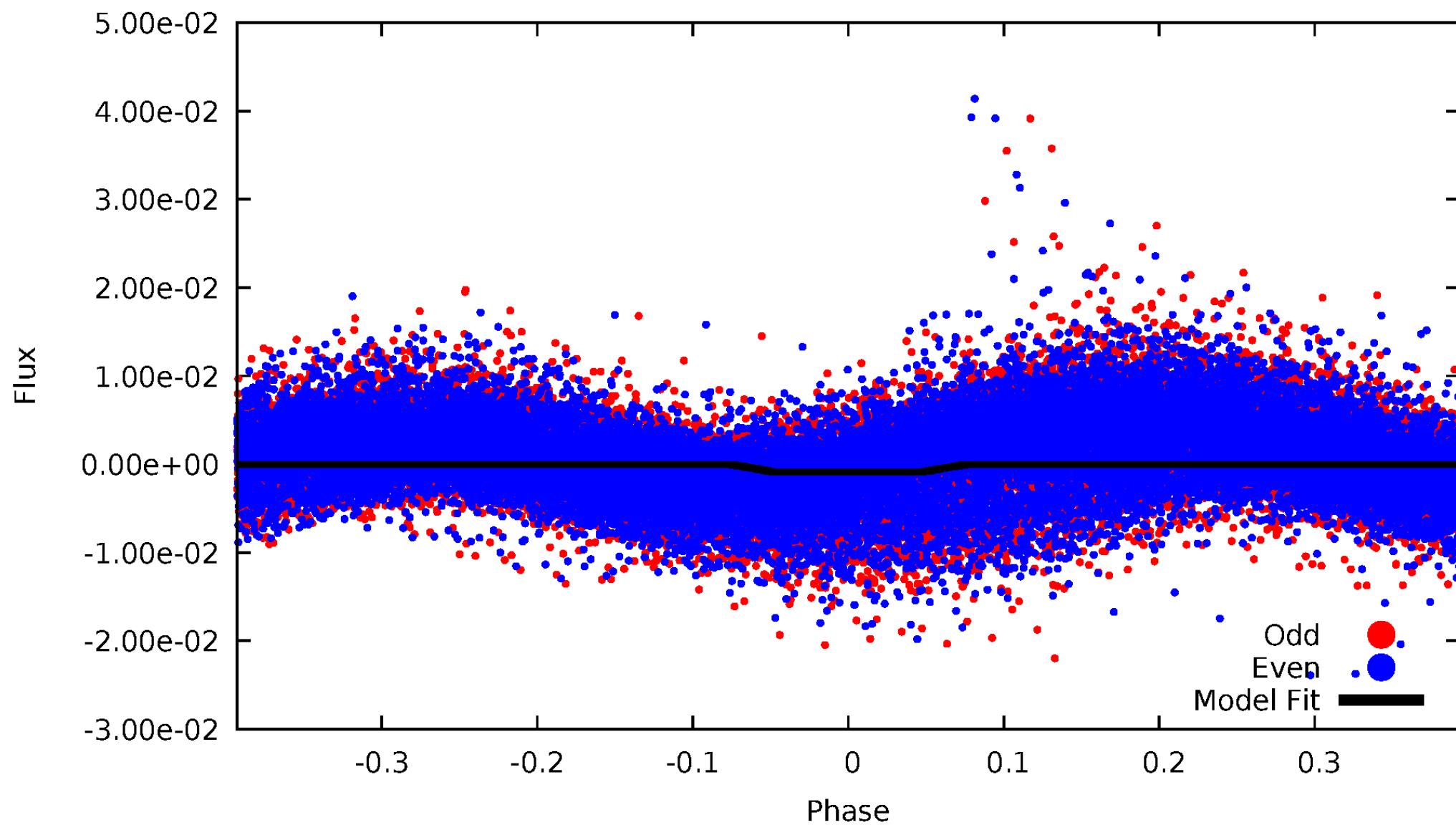
# DV Odd/Even

TCE 011395206-01



# ALT Odd/Even

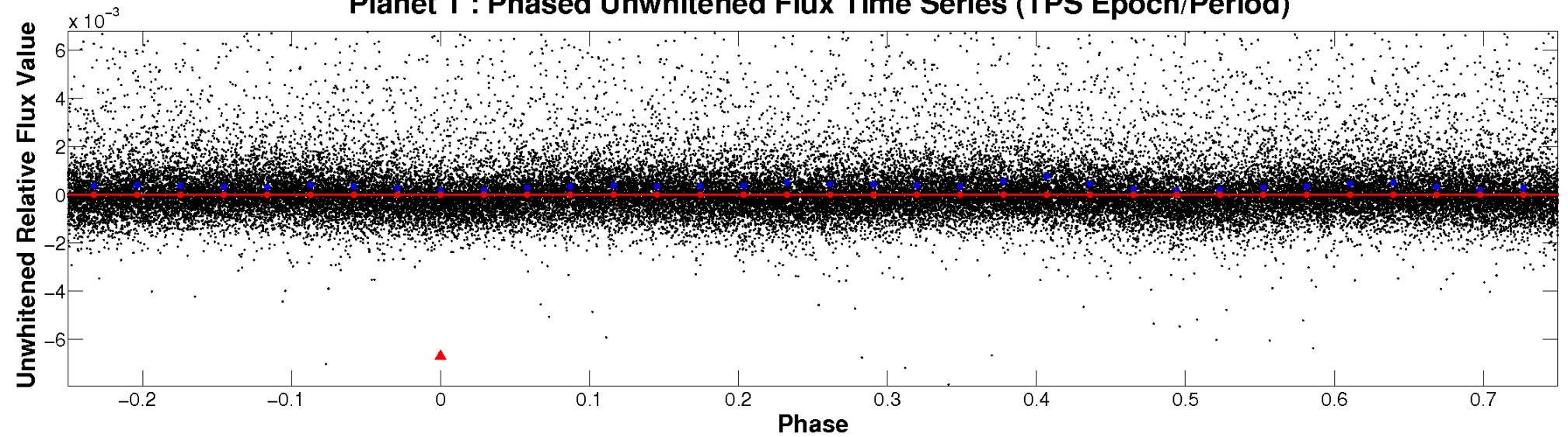
TCE 011395206-01



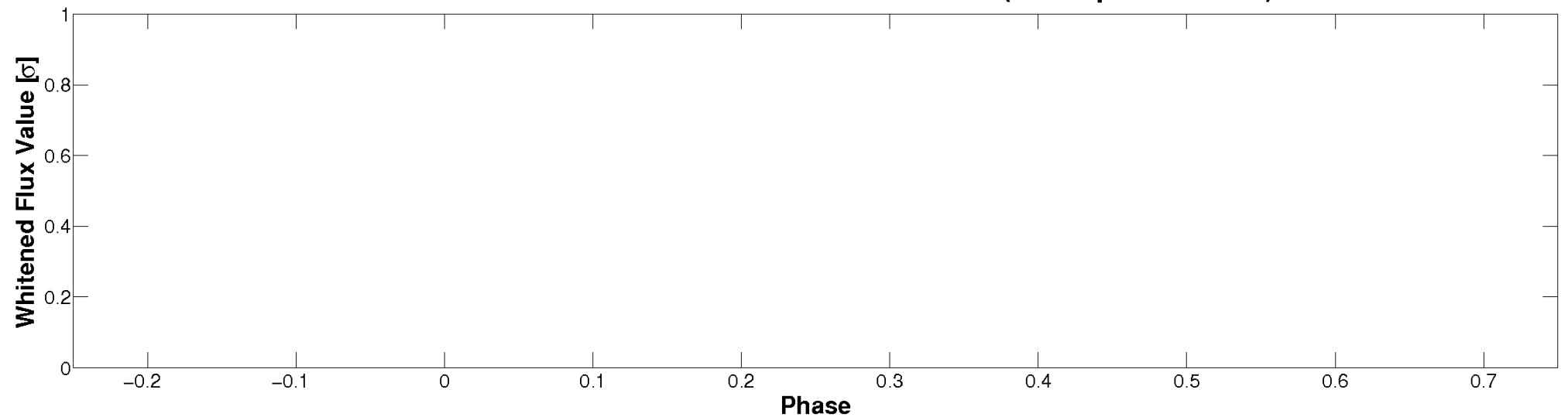


# Non-Whitened Vs. Whitened Light Curve

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

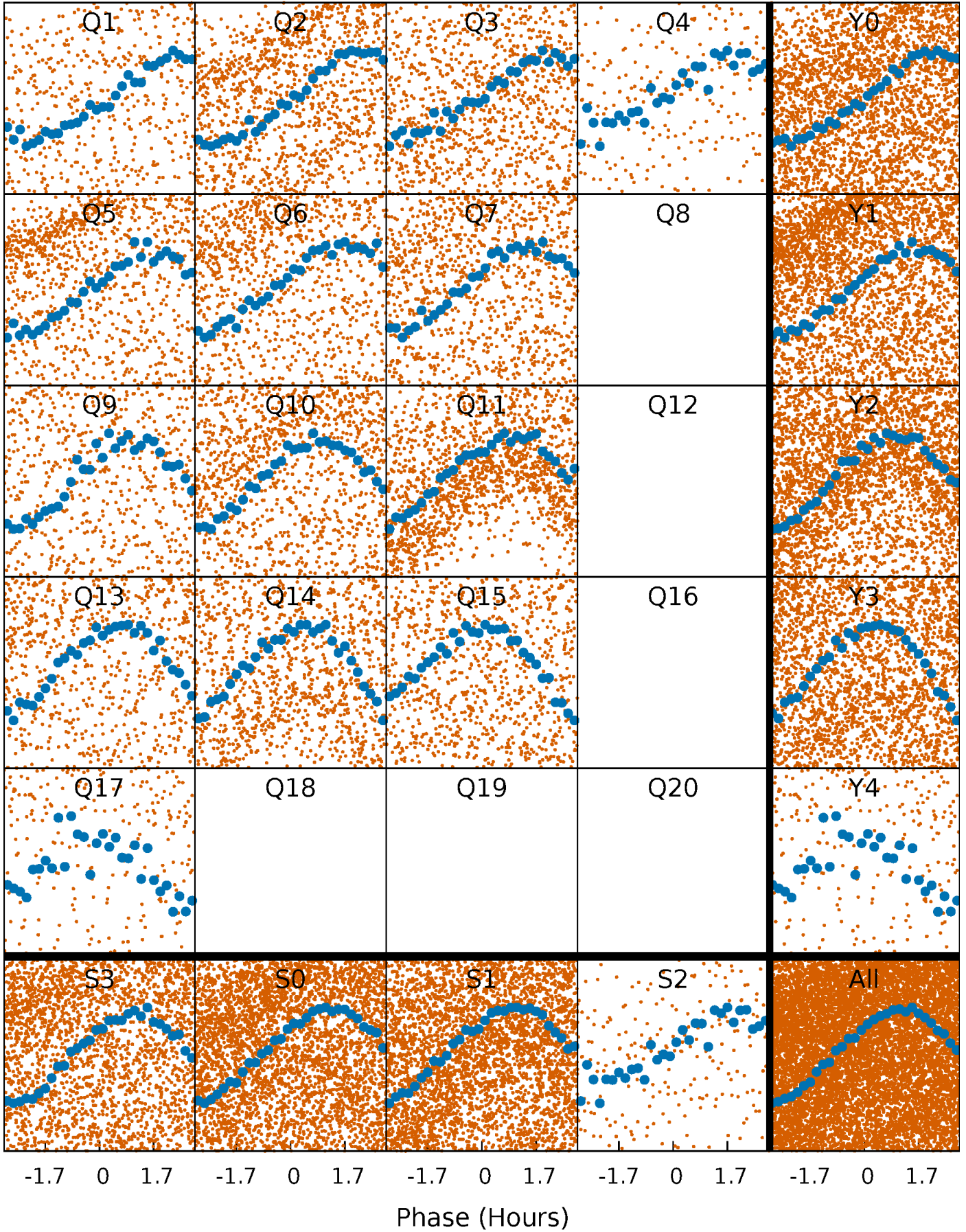


**Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)**



# PDC Quarter-Phased Transit Curves

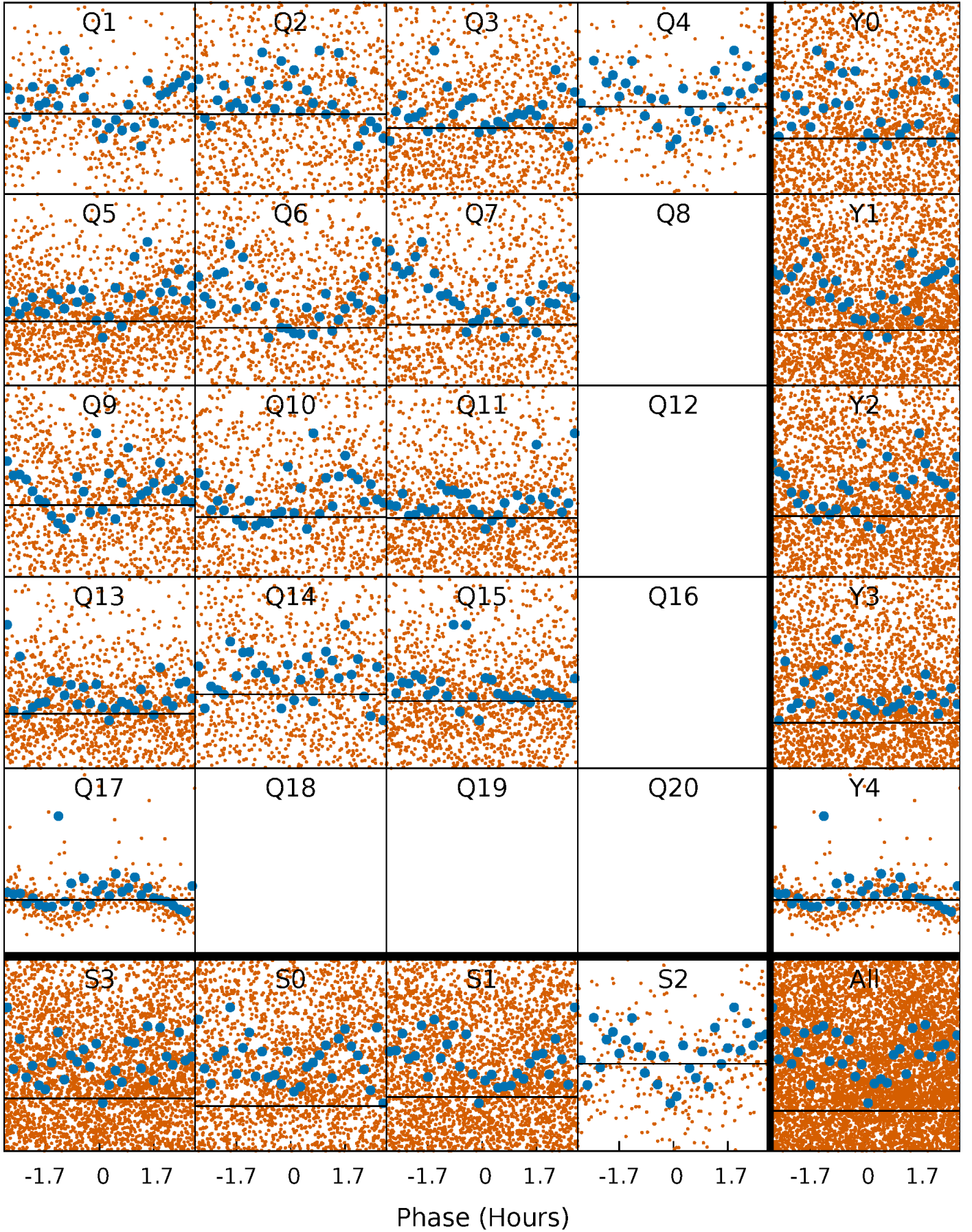
TCE 011395206-01   P= 0.702799 Days    $T_0=132.023494$  (BKJD)





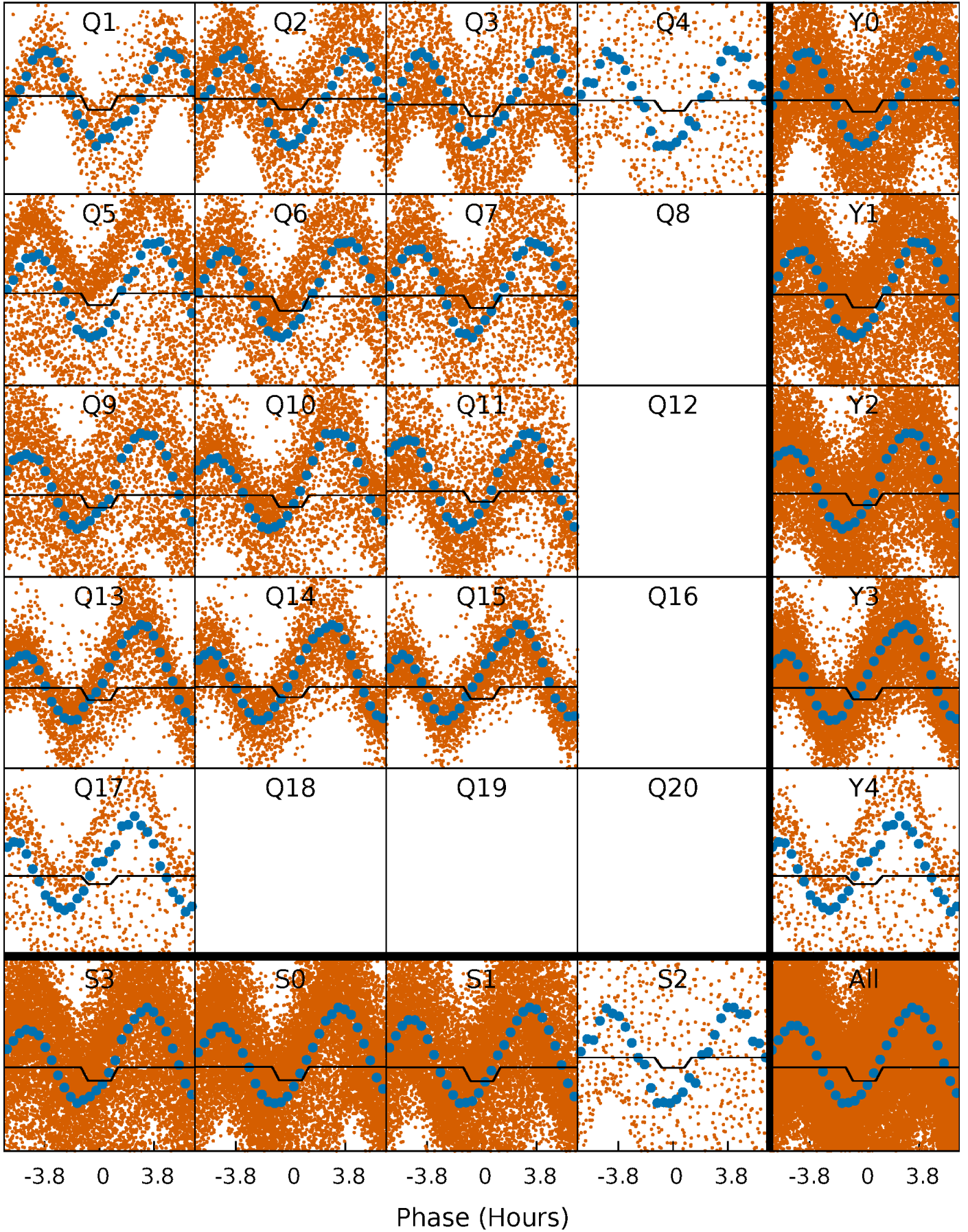
# DV Quarter-Phased Transit Curves

TCE 011395206-01   P= 0.702799 Days    $T_0=132.023494$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

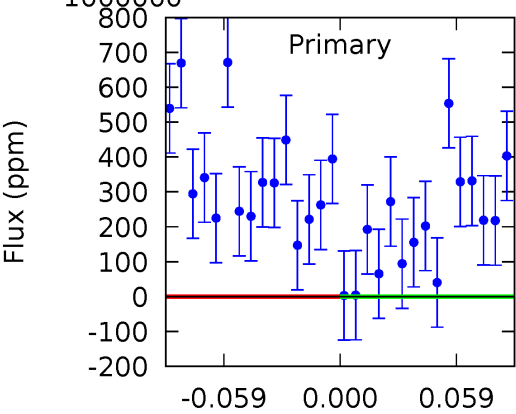
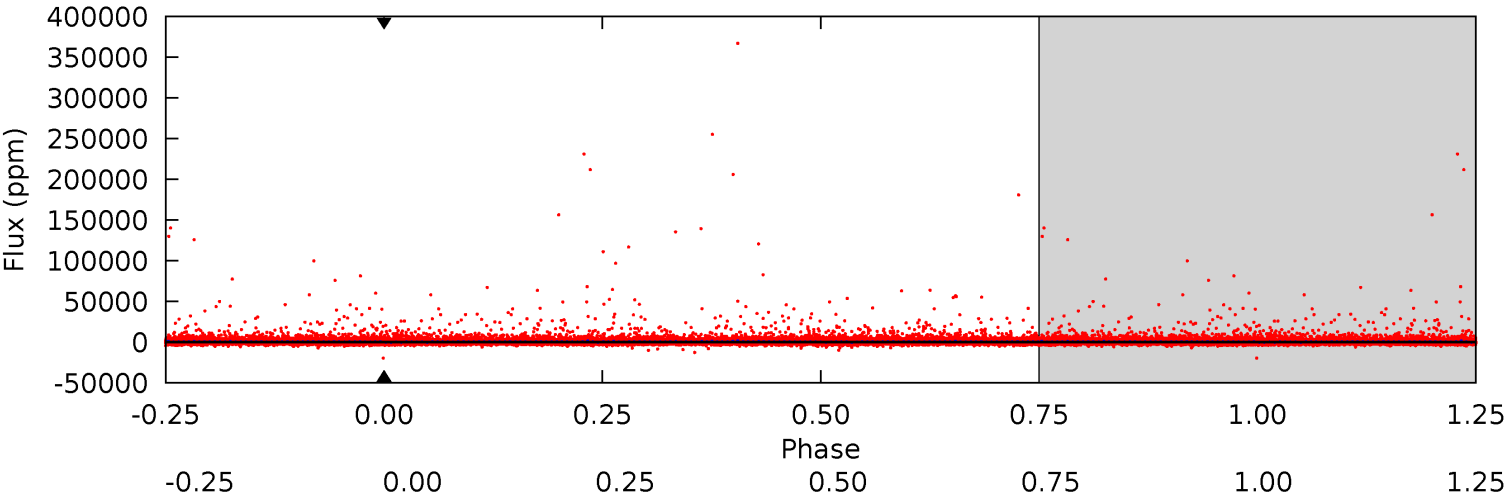
TCE 011395206-01 P= 0.702799 Days  $T_0=131.929376$  (BKJD)



# DV Model-Shift Uniqueness Test

011395206-01, P = 0.702799 Days, E = 131.320695 Days

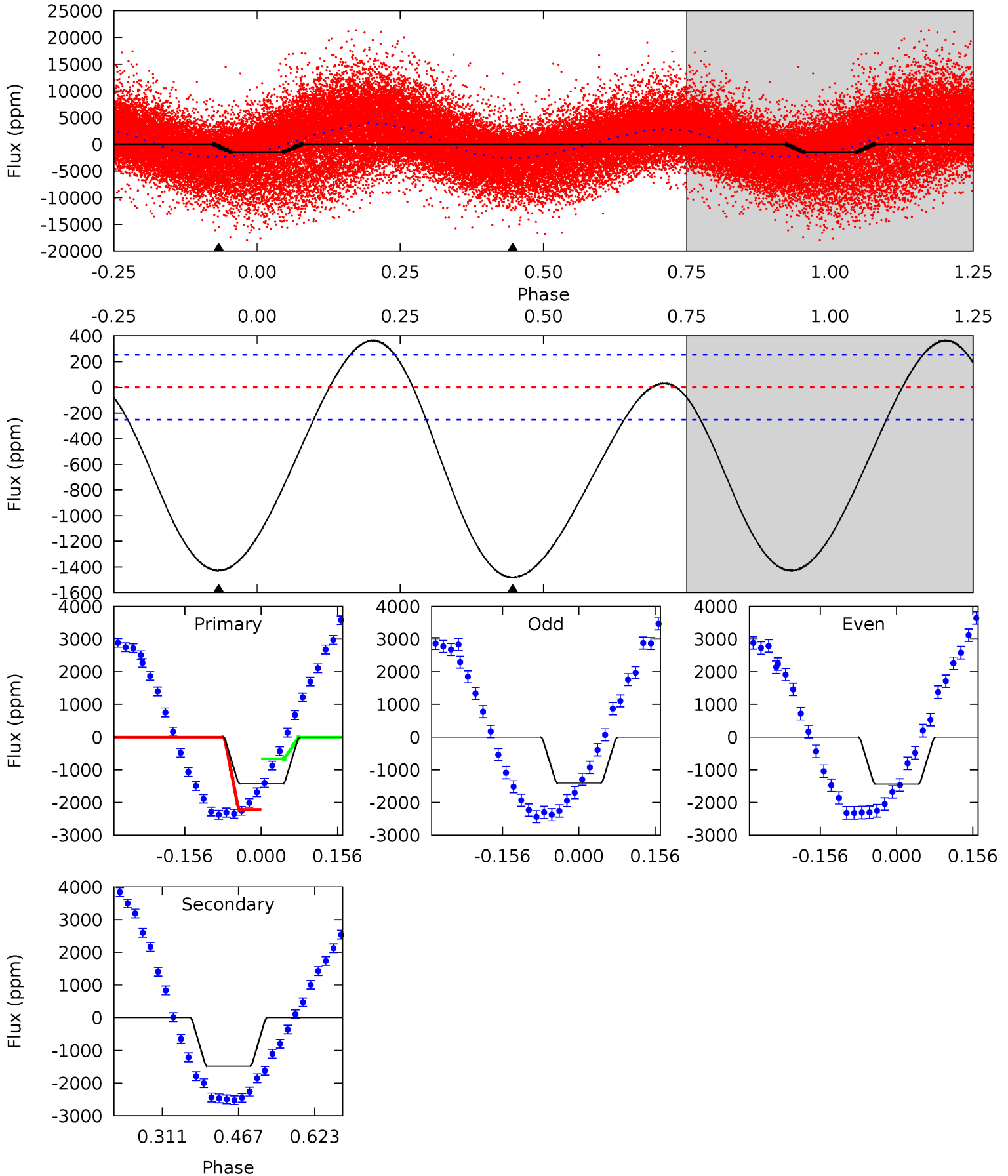
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



# Alt Model-Shift Uniqueness Test

011395206-01, P = 0.702799 Days, E = 131.226577 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
25.2	26.2	0	0	4.47	1.42	4.08	25.2	25.2	26.2	26.2	0.26	4.68	0.20	13.4



### Stellar Parameters For KIC 011395206

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$3838^{+120}_{-147}$	$4.690^{+0.070}_{-0.025}$	$0.140^{+0.250}_{-0.300}$	$0.564^{+0.041}_{-0.076}$	$0.568^{+0.050}_{-0.068}$	$4.459^{+1.608}_{-0.552}$
	+3%/-4%	+1%/-1%	+179%/-214%	+7%/-13%	+9%/-12%	+36%/-12%
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 011395206-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$0 \pm 1000000$	$5.14^{+4.59}_{-3.62}$	$1550^{+60}_{-63}$	$-3411^{+11280}_{-4901}$	$-13.504^{+678.622}_{-694.276}$
Alt.	$-1482 \pm 57$	$4.69^{+5.00}_{-3.35}$	$1553^{+58}_{-68}$	$3053^{+1718}_{-582}$	$6.274^{+70.324}_{-4.825}$

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



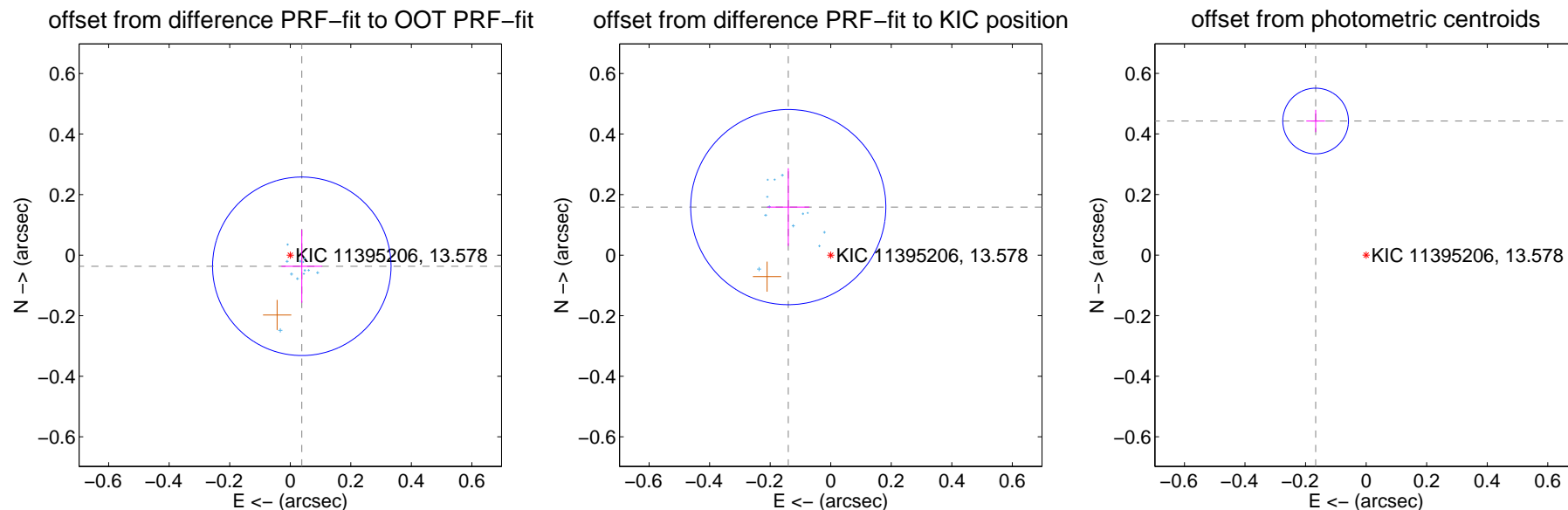
## DV Centroid Data

Supplemental centroid analysis for 011395206-01. Kepler magnitude: 13.58. Transit SNR -1.00

There are 12 quarters with good PRF difference image offsets

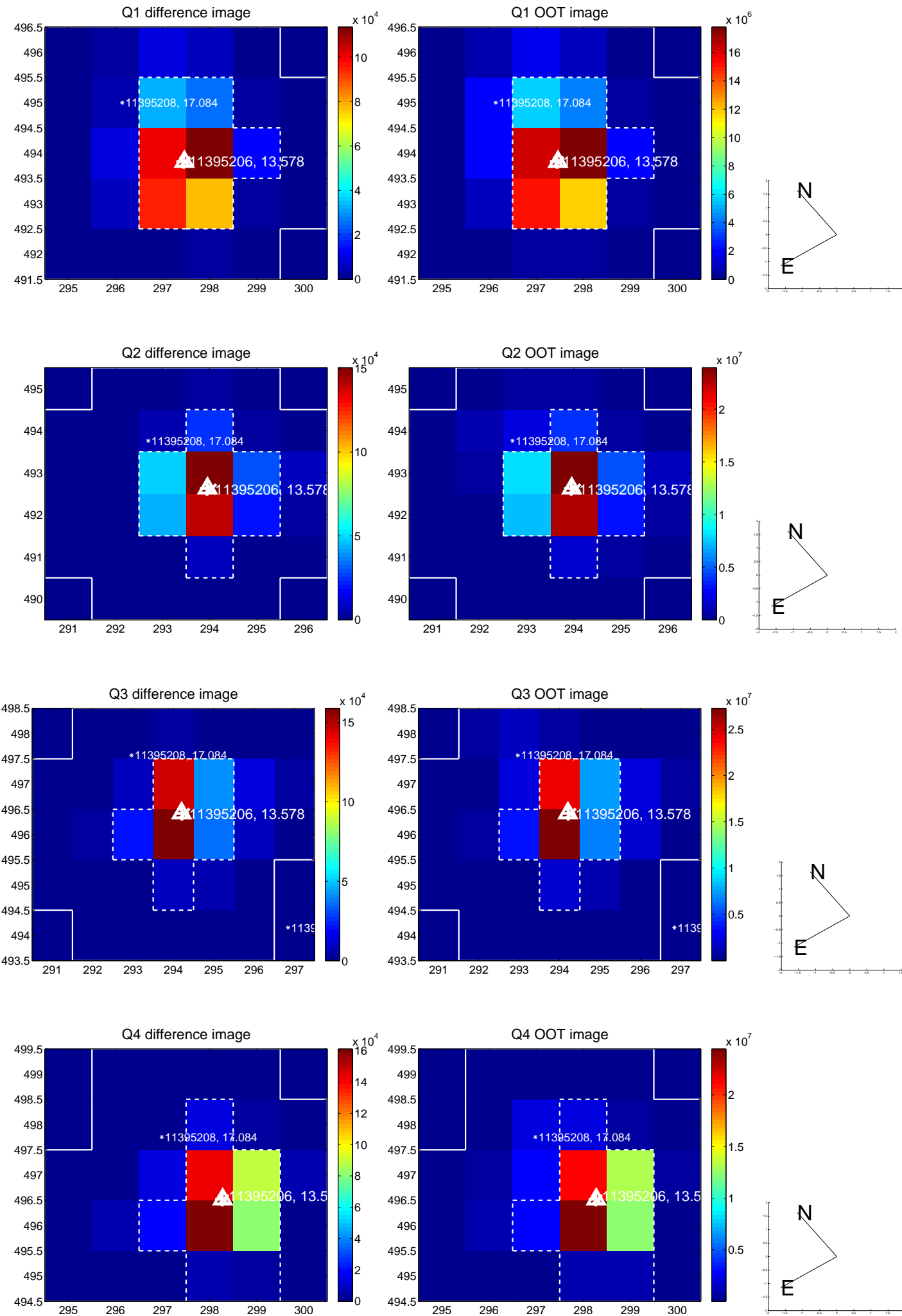
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.053 \pm 0.098$	0.54	$-0.038 \pm 0.067$	$-0.037 \pm 0.120$
PRF-fit source offset from KIC position	$0.212 \pm 0.107$	1.97	$0.140 \pm 0.070$	$0.159 \pm 0.128$
photometric centroid source offset	$0.47 \pm 0.04$	13.09	$0.17 \pm 0.03$	$0.44 \pm 0.04$

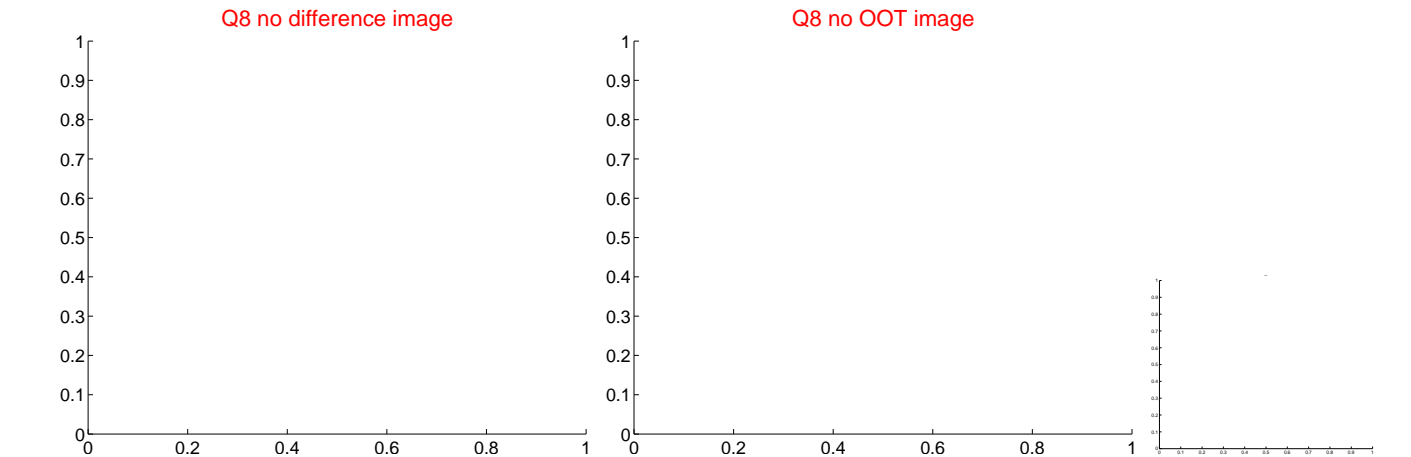
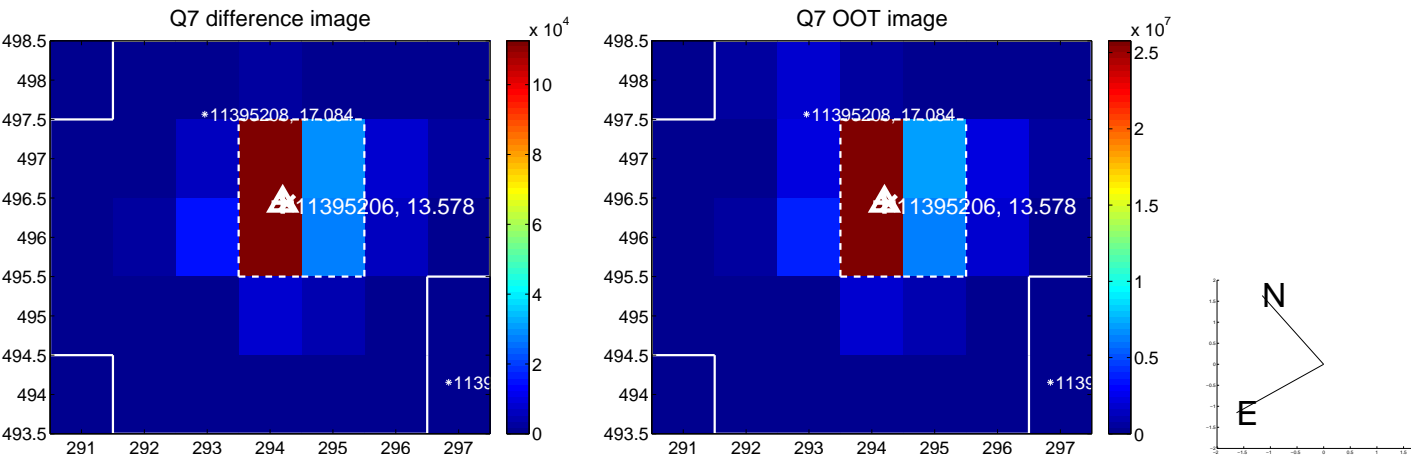
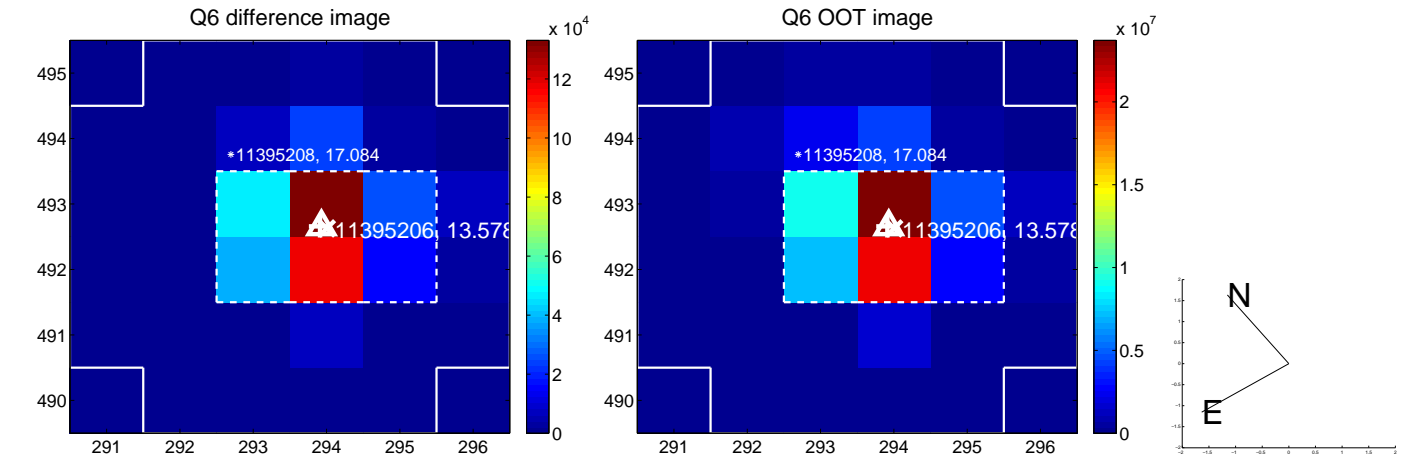
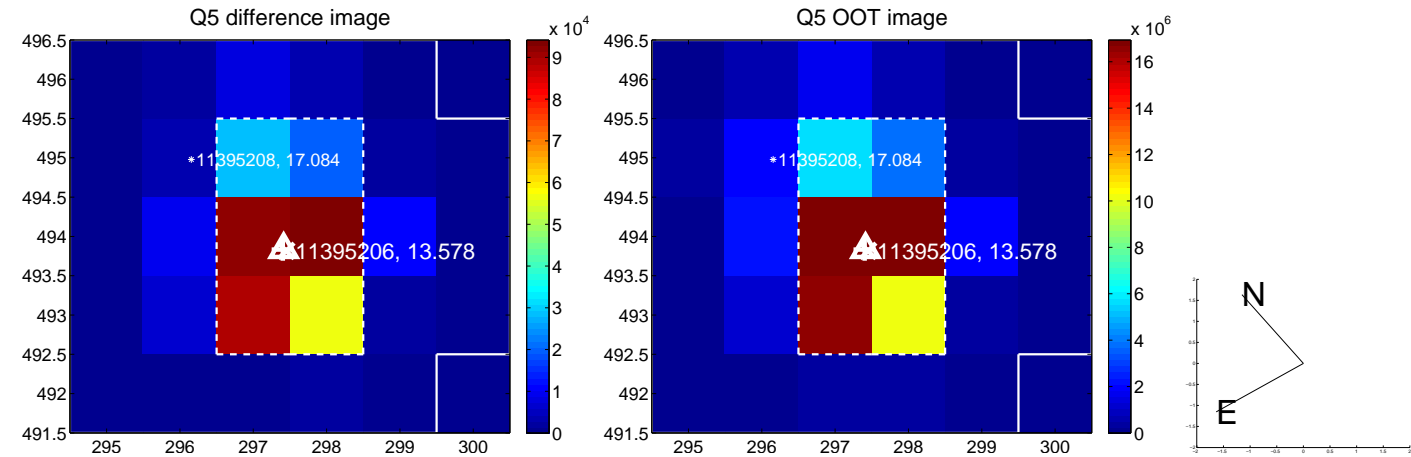


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

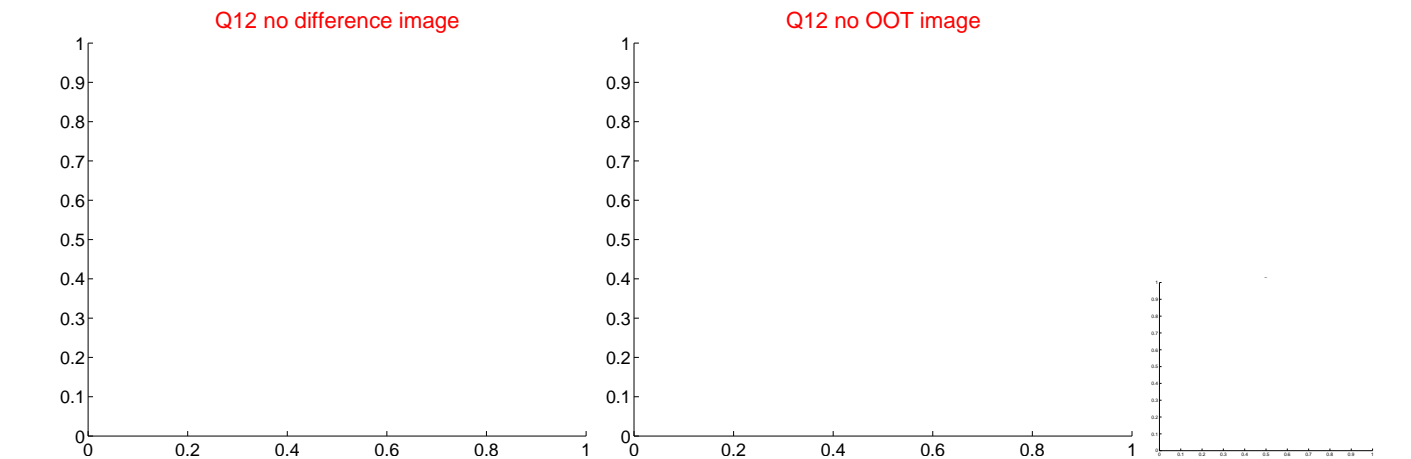
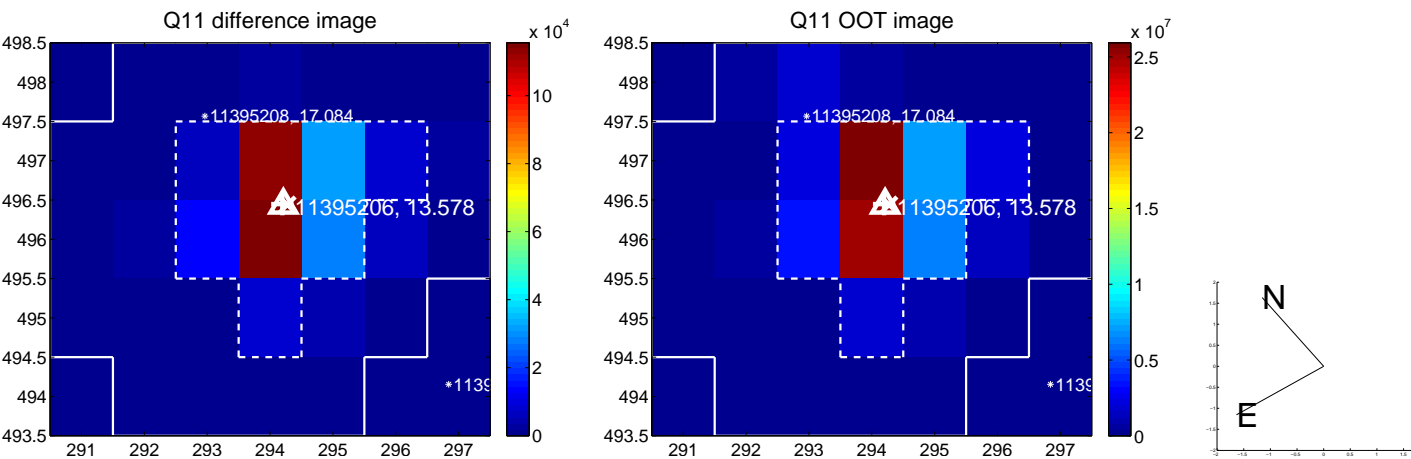
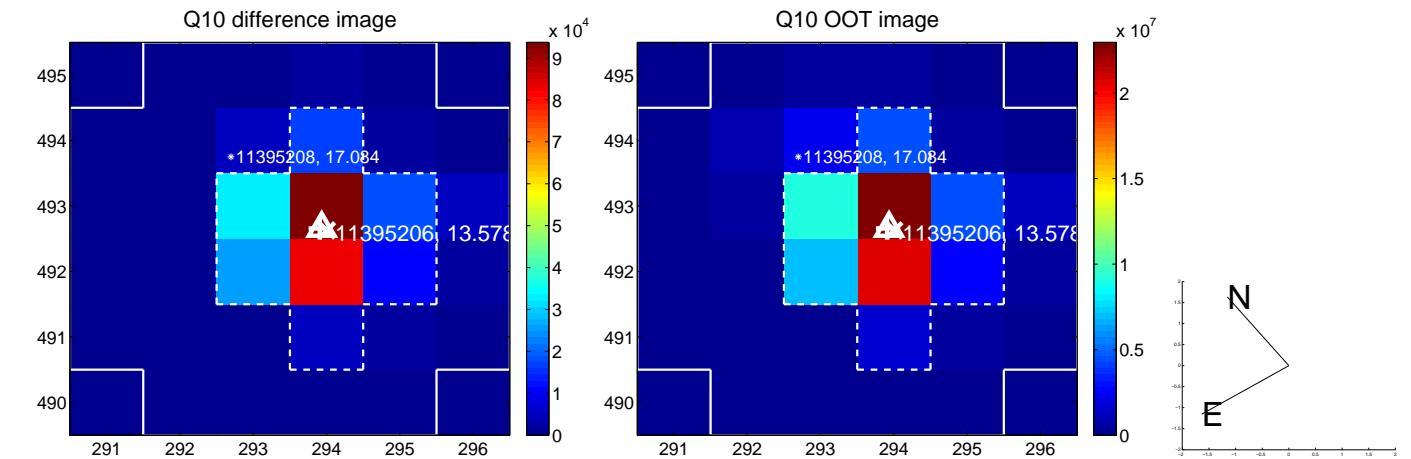
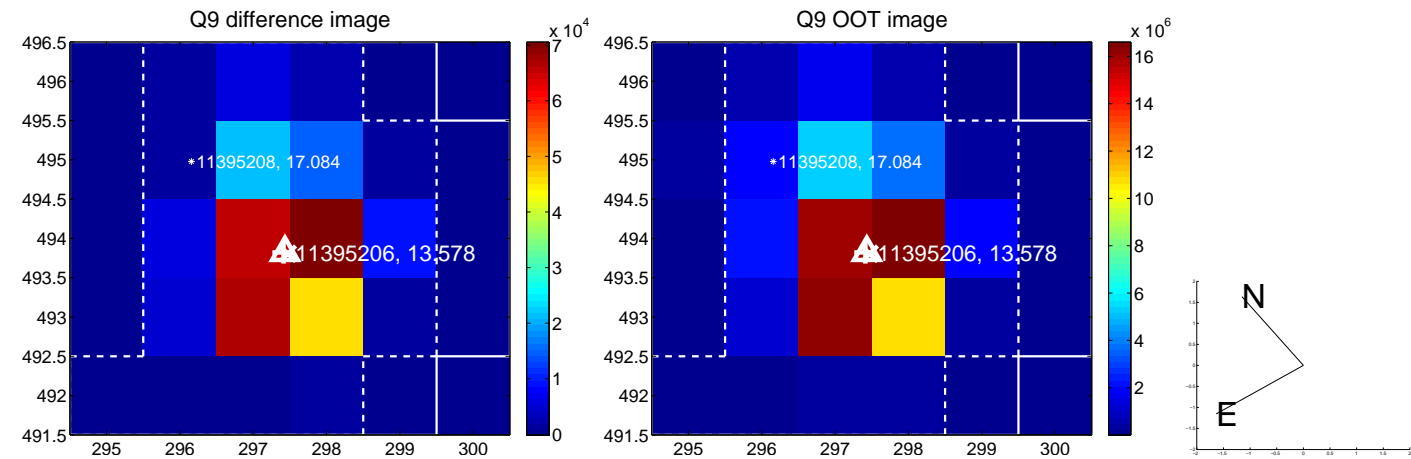
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



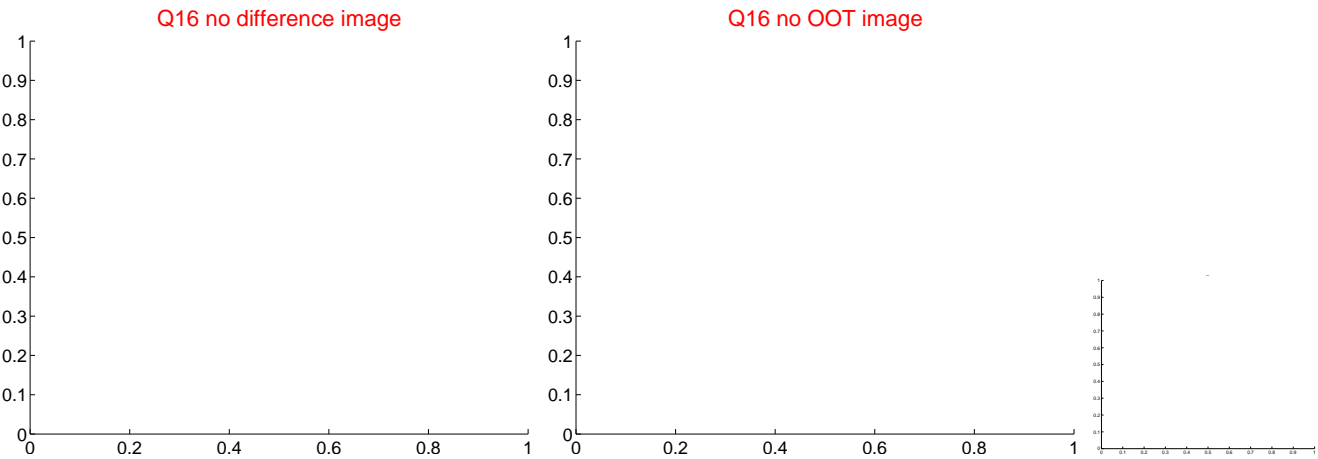
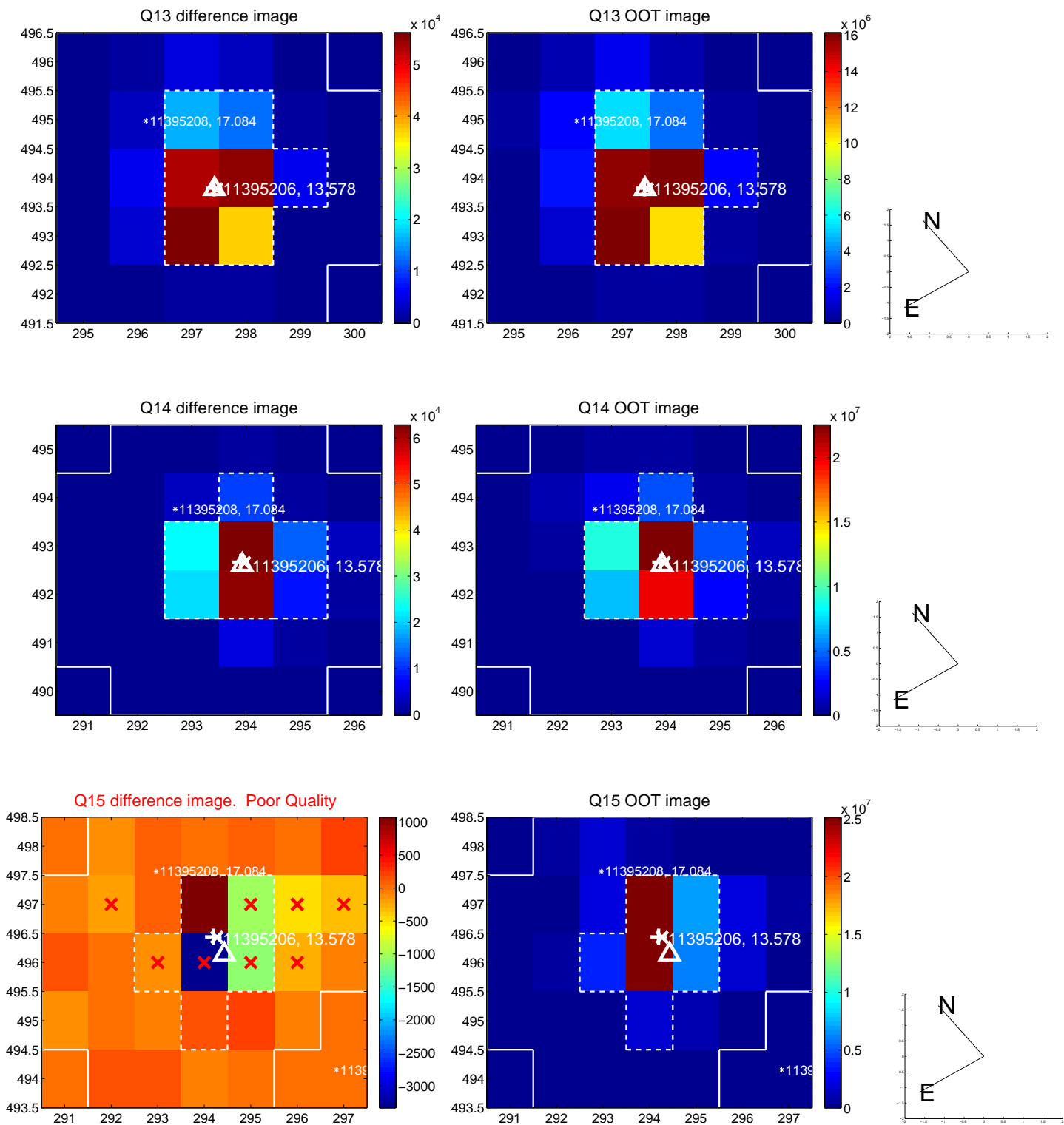
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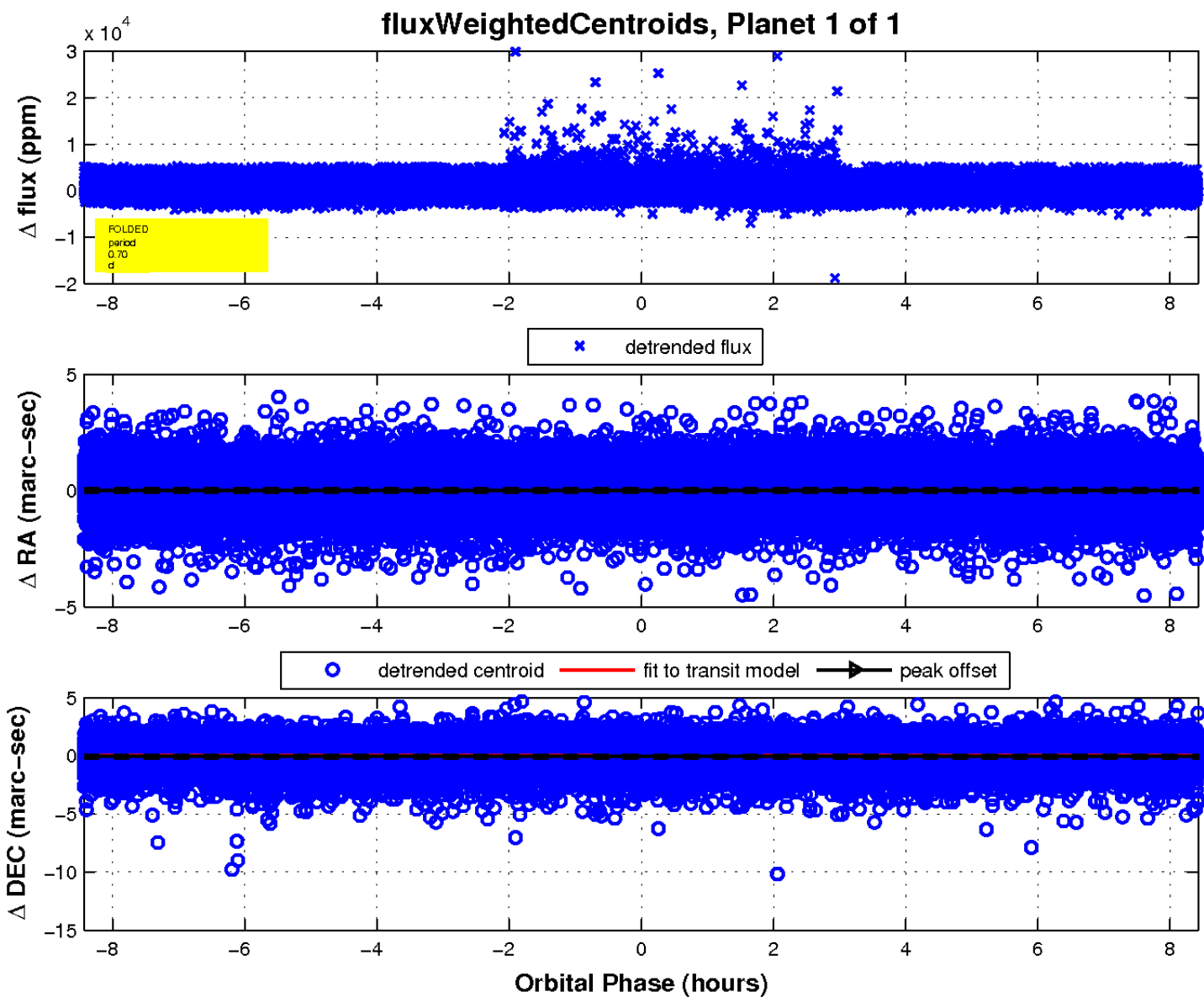
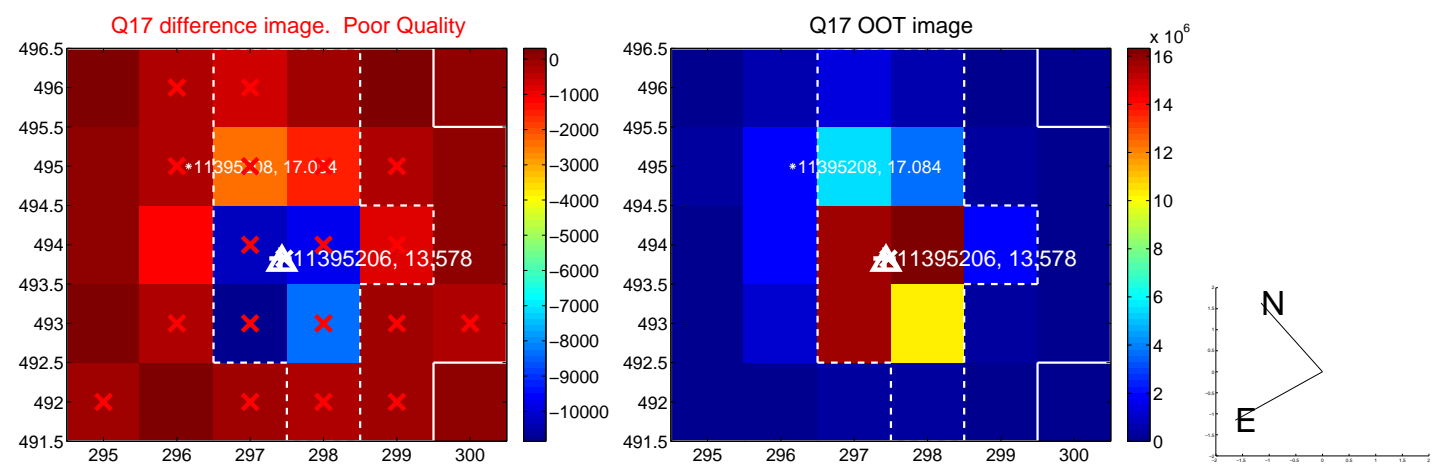


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UKIRT Image

Declination

