

# KIC 006382916

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
006382916-01	OBS	No	0.614122	132.026619	243.0	1.500	20.7	-1.0	1.62	6548	2.55	17790.08
006382916-02	OBS	No	0.605330	132.073228	366.3	4.194	14.8	6.0	1.62	6548	3.12	18135.44
006382916-03	OBS	No	23.890364	139.009112	226.5	2.000	15.7	-1.0	1.62	6548	2.46	134.97

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006382916-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
006382916-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
006382916-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—NO_FITS—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.

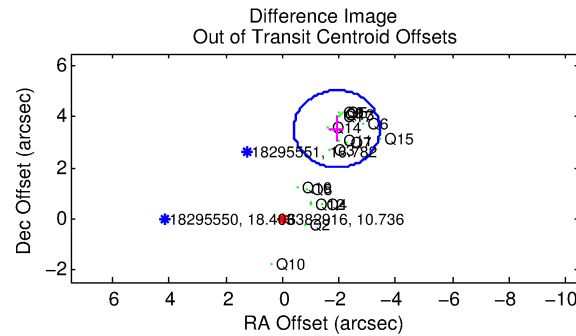
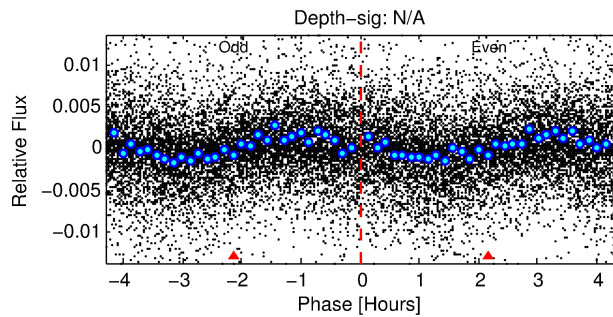
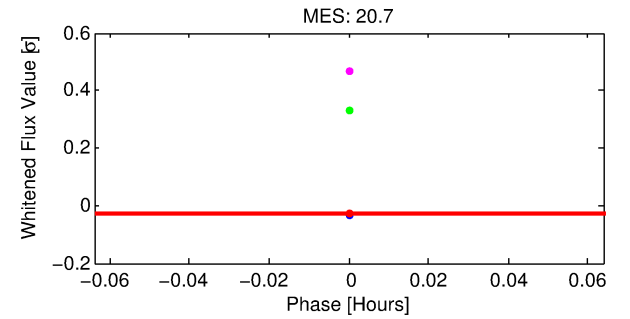
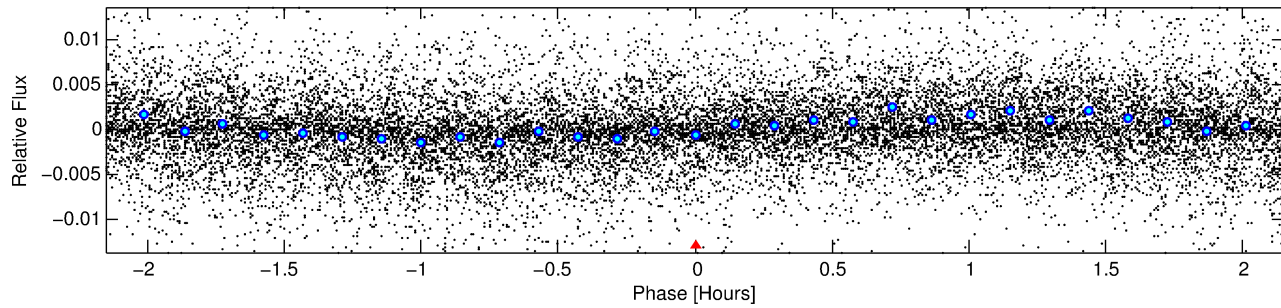
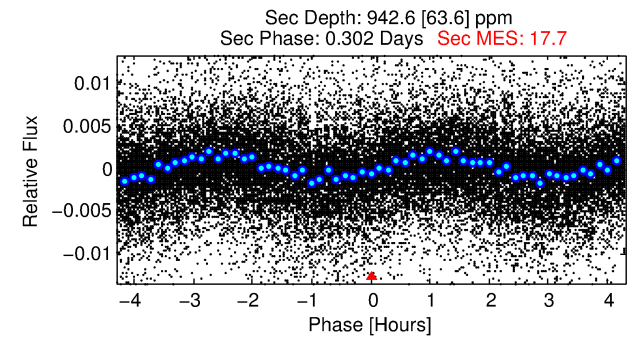
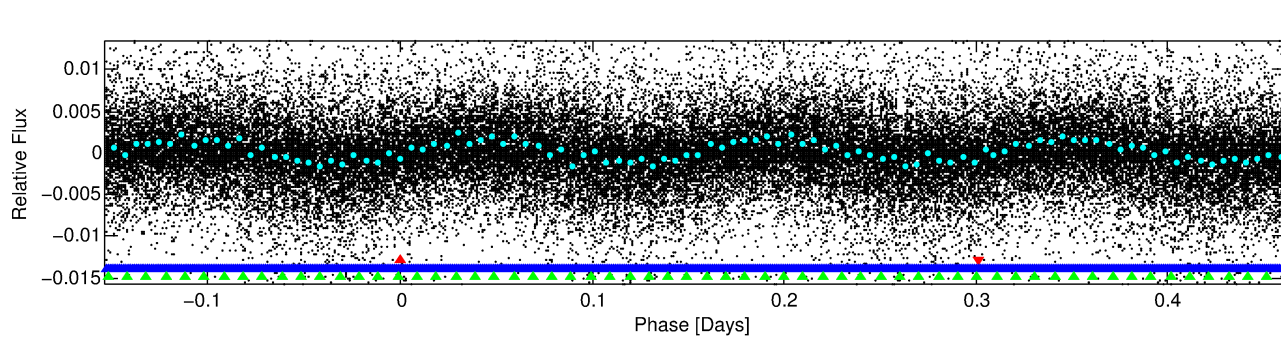
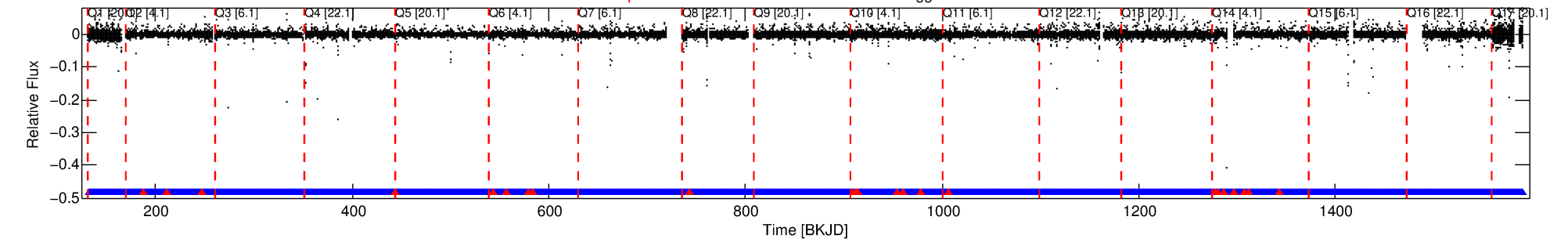
Ephemeris Match Information For 006382916-01

No Significant Match Found

# DV One-Page Summary

KIC: 6382916 Candidate: 1 of 3 Period: 0.614 d

Kp: 10.74 R\*: 1.62 Rs Teff: 6548.0 K Logg: 4.15 Fe/H: 0.040



## TPS TCE Results:

Period = 0.61412 d  
Epoch = 132.0266 BKJD

DV fit results are unavailable

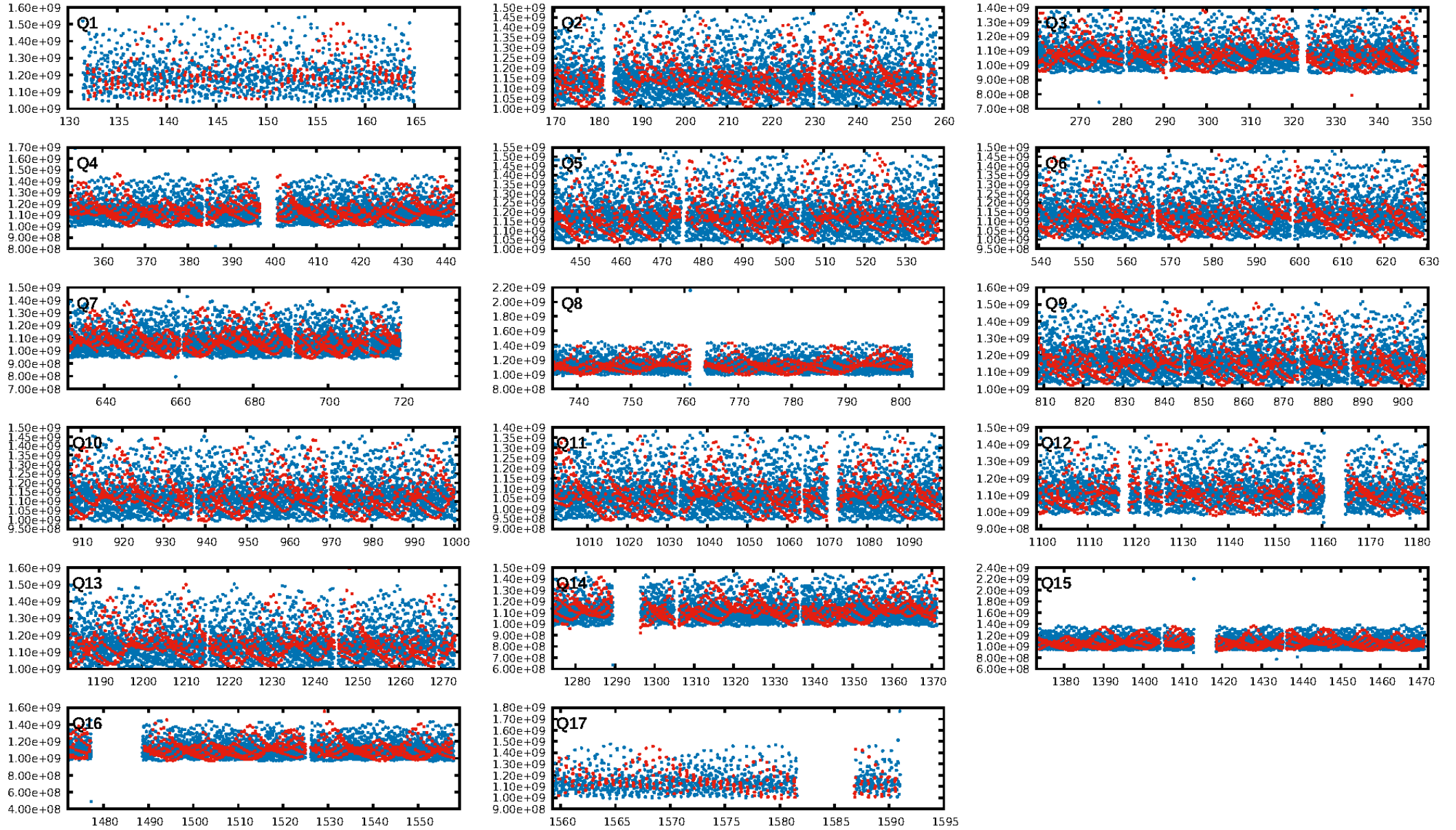
## DV Diagnostic Results:

ShortPeriod-sig: 3.8% [0.05σ]  
LongPeriod-sig: 100.0% [223.45σ]  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 0.99 [2048/2075]  
GhostDiagnostic-chr: 0.5788  
Centroid-sig: N/A  
Centroid-so: 141.890 arcsec [3.26σ]  
OotOffset-rm: 4.018 arcsec [7.92σ]  
KicOffset-rm: 4.326 arcsec [9.03σ]  
OotOffset-st: 4/4/4/5 [17]  
KicOffset-st: 4/4/4/5 [17]  
DiffImageQuality-fgm: 0.12 [2/17]  
DiffImageOverlap-fno: 0.00 [0/17]

Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 10:26:30 Z

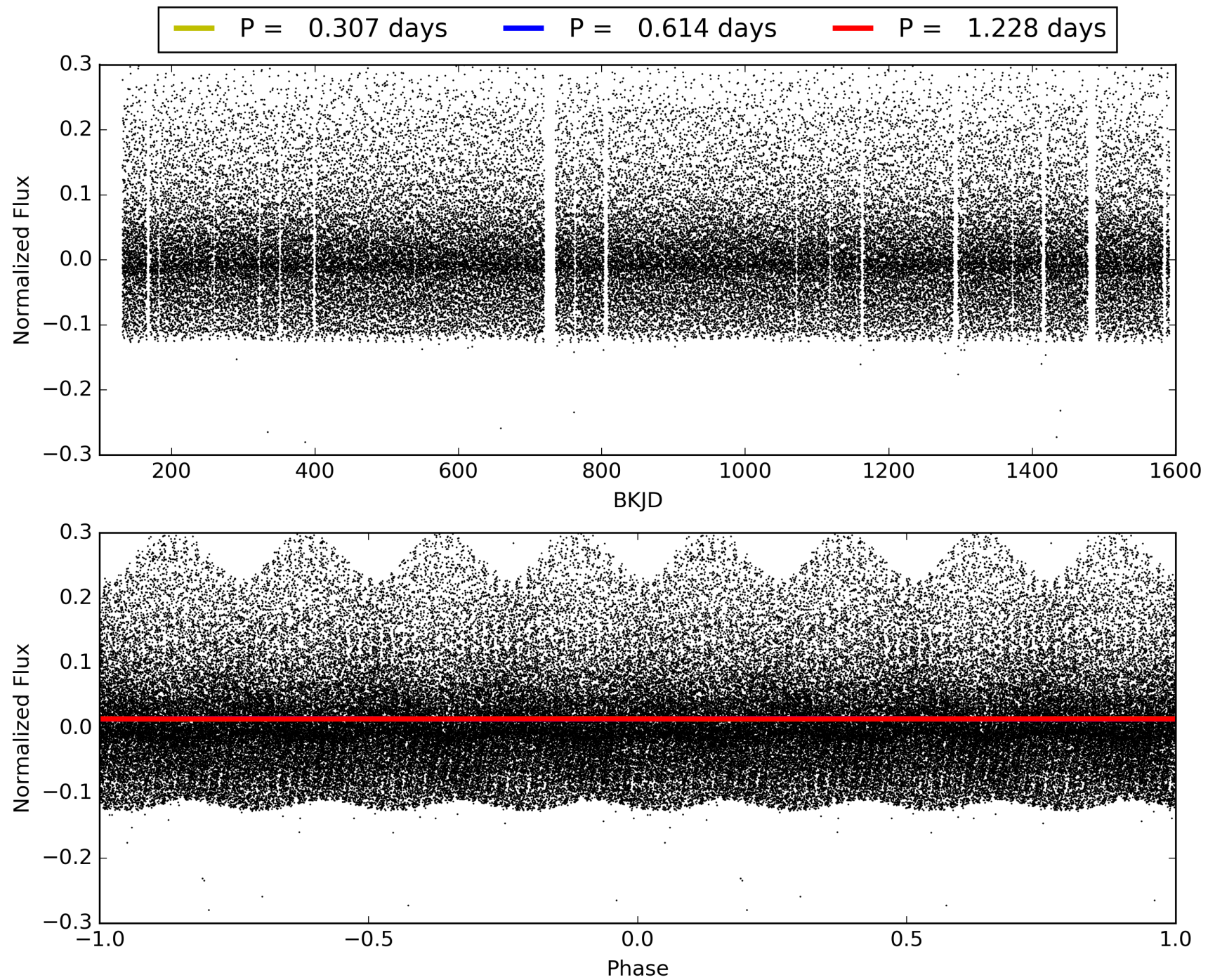
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

# TCE 006382916-01, PDC Light Curves





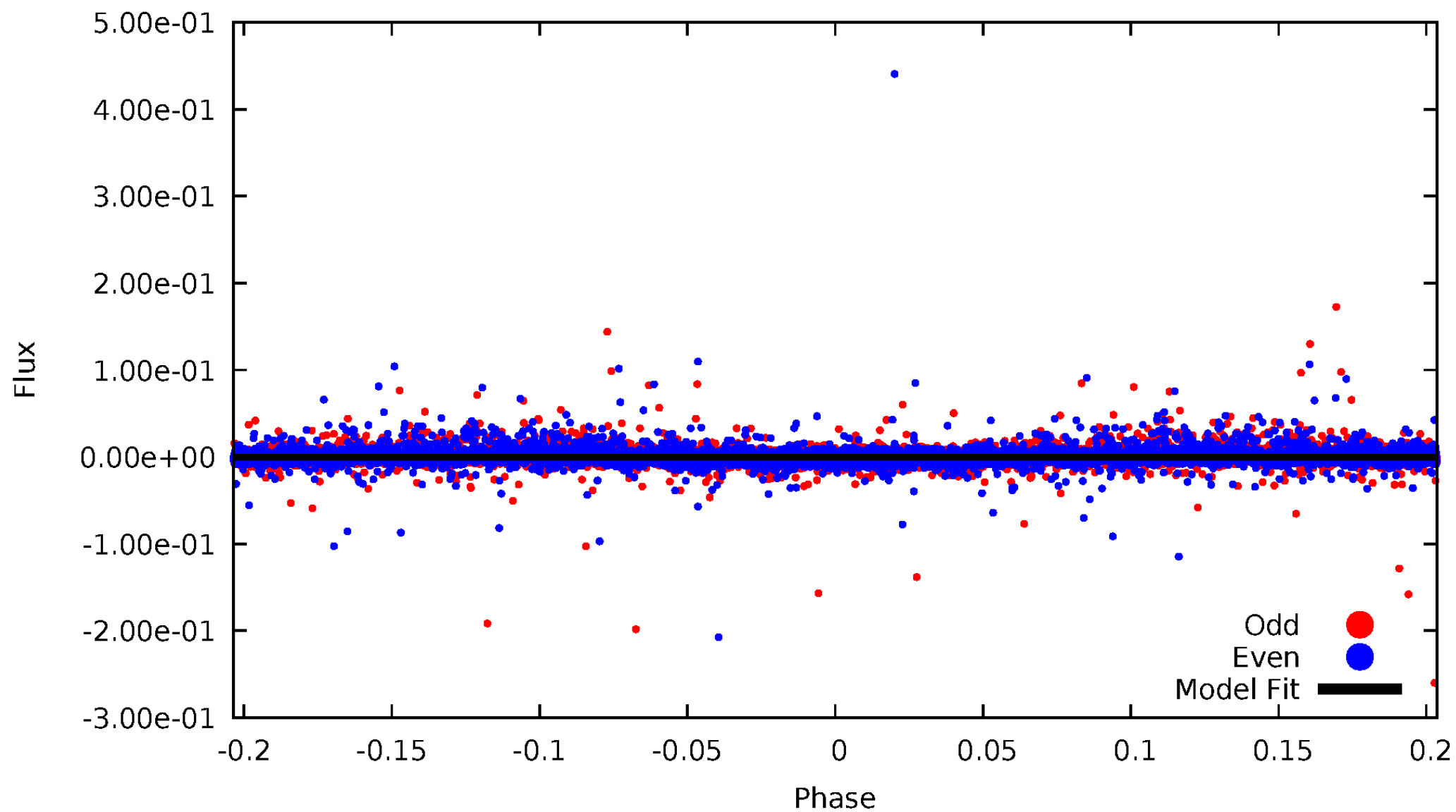
TCE 006382916-01





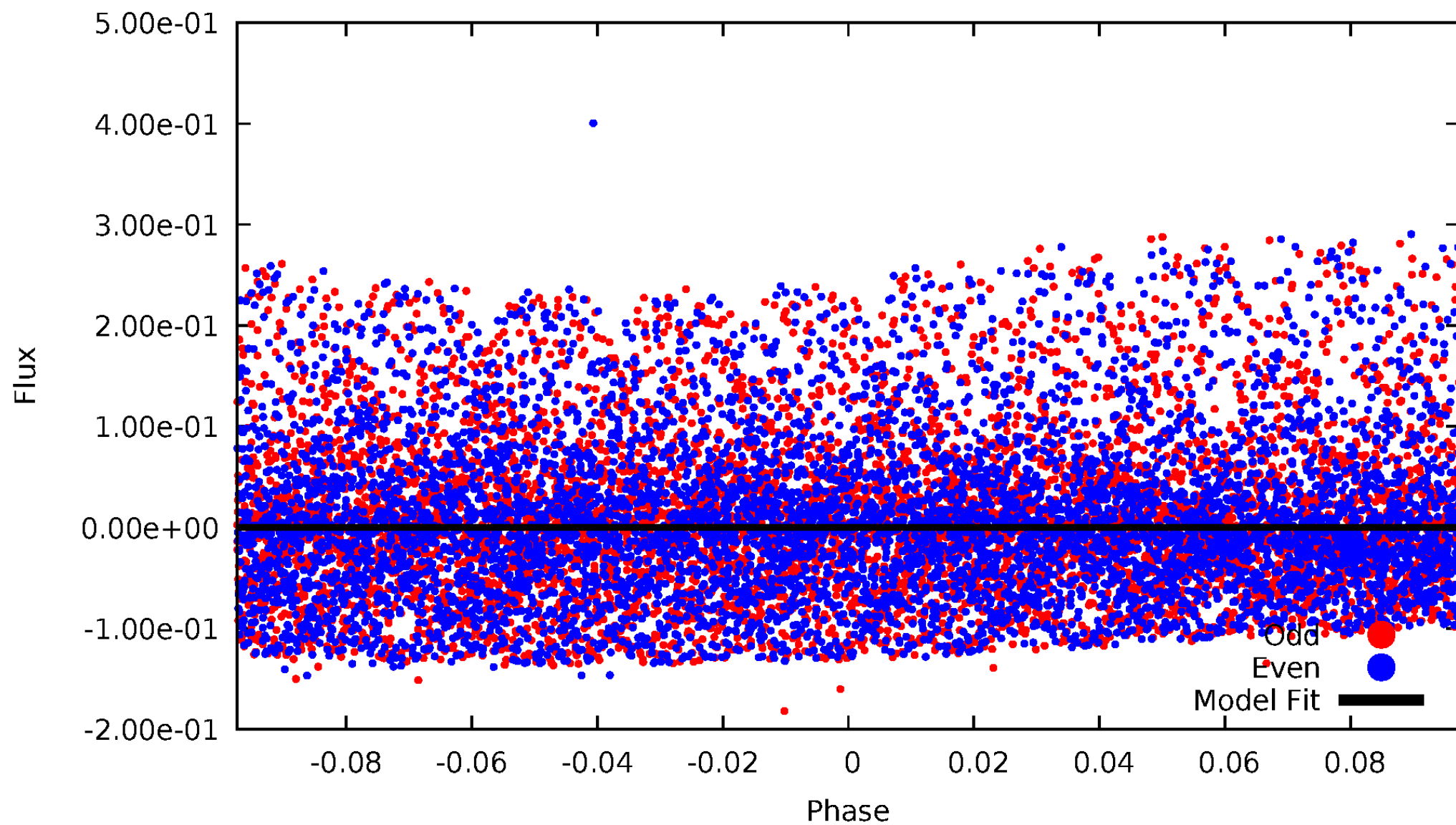
# DV Odd/Even

TCE 006382916-01



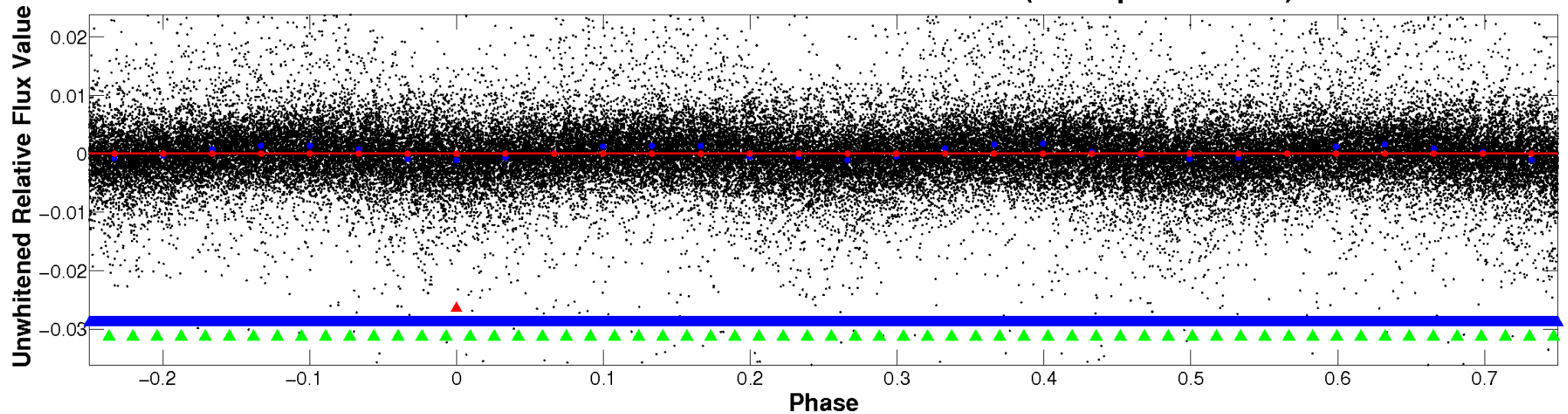
# ALT Odd/Even

TCE 006382916-01

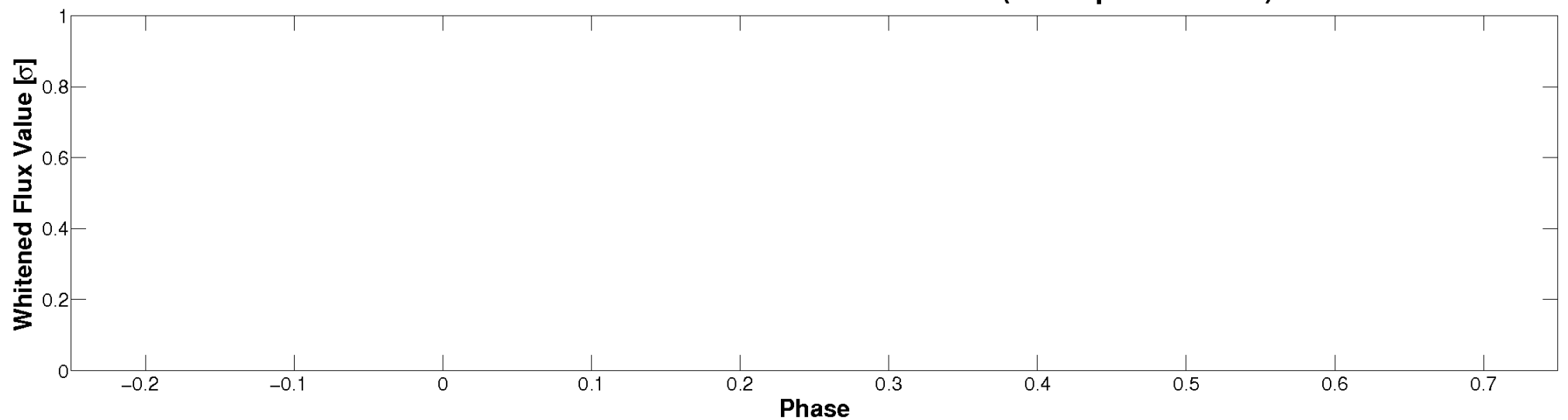


# Non-Whitened Vs. Whitened Light Curve

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



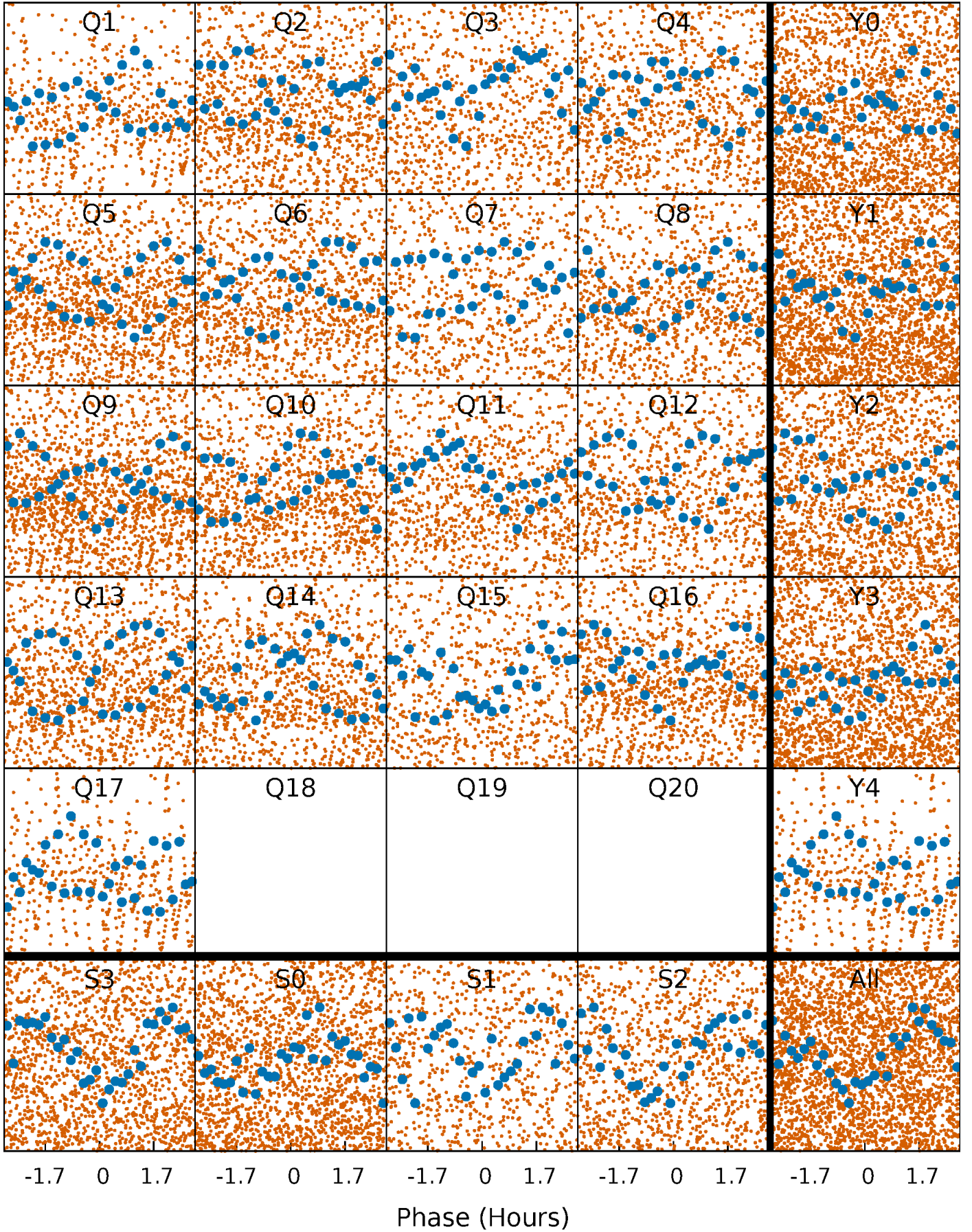
**Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)**





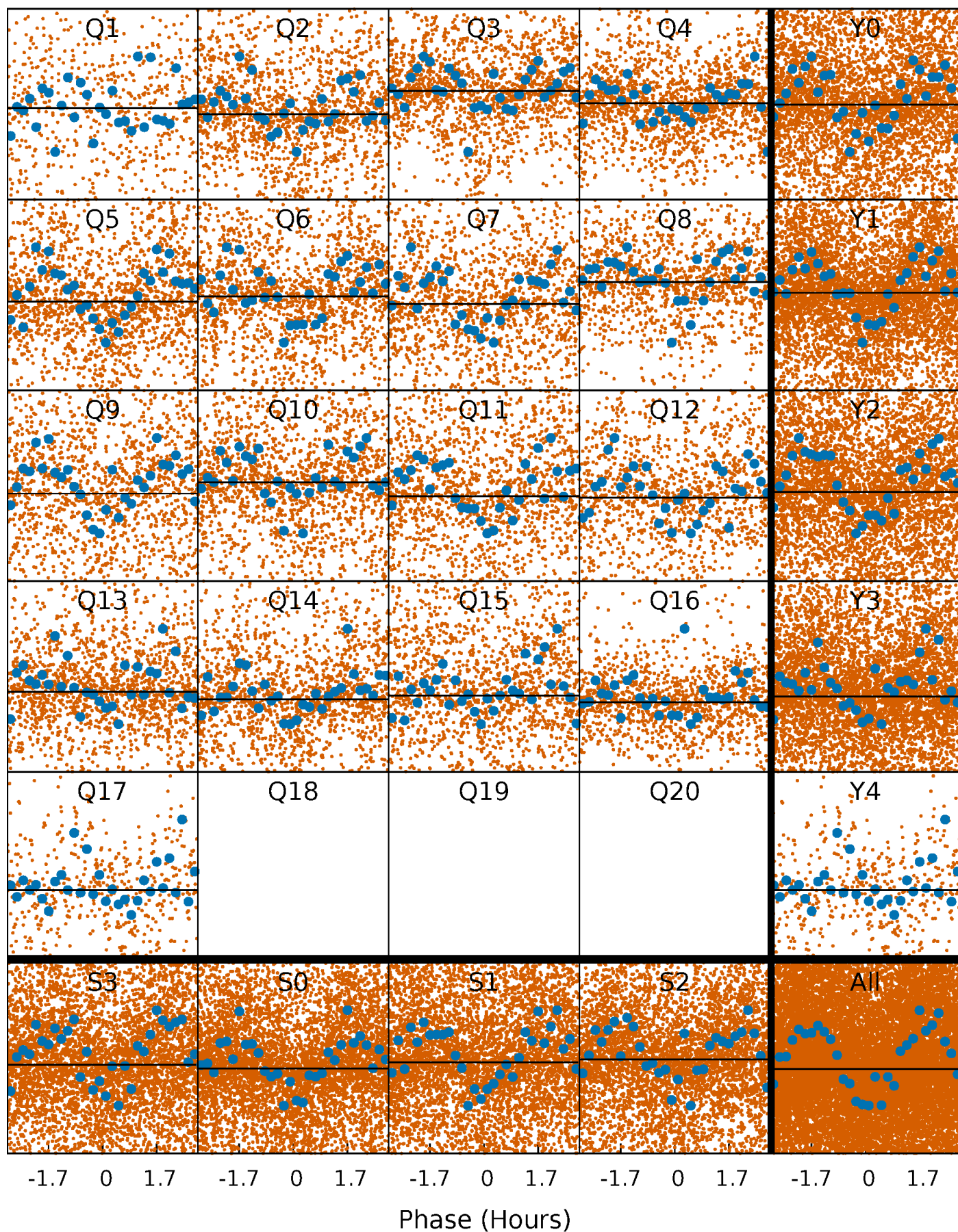
# PDC Quarter-Phased Transit Curves

TCE 006382916-01   P= 0.614122 Days    $T_0=132.026619$  (BKJD)



# DV Quarter-Phased Transit Curves

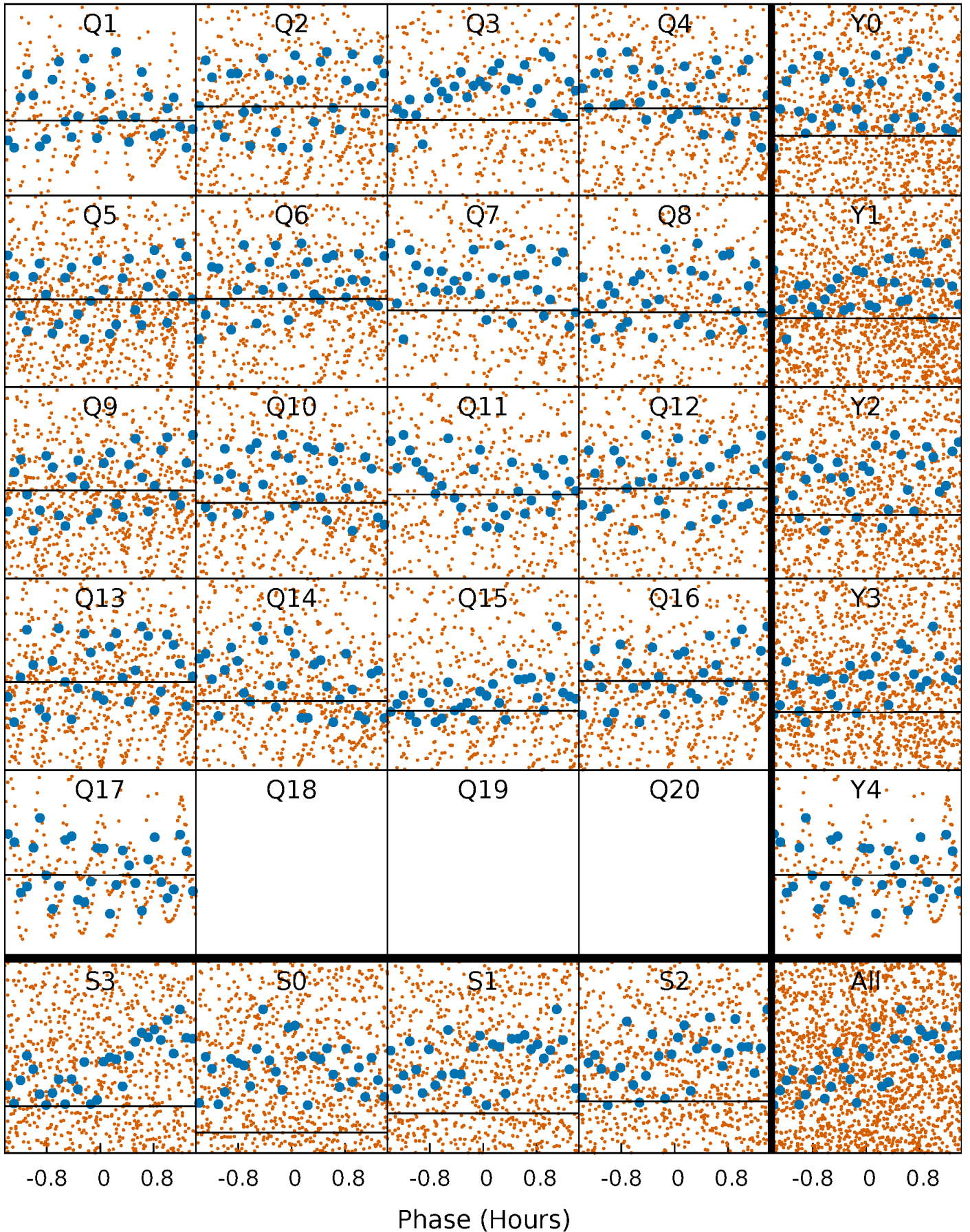
TCE 006382916-01 P= 0.614122 Days  $T_0=132.026619$  (BKJD)





# Alt. Detrend Quarter-Phased Transit Curves

TCE 006382916-01 P= 0.614122 Days  $T_0=132.063942$  (BKJD)

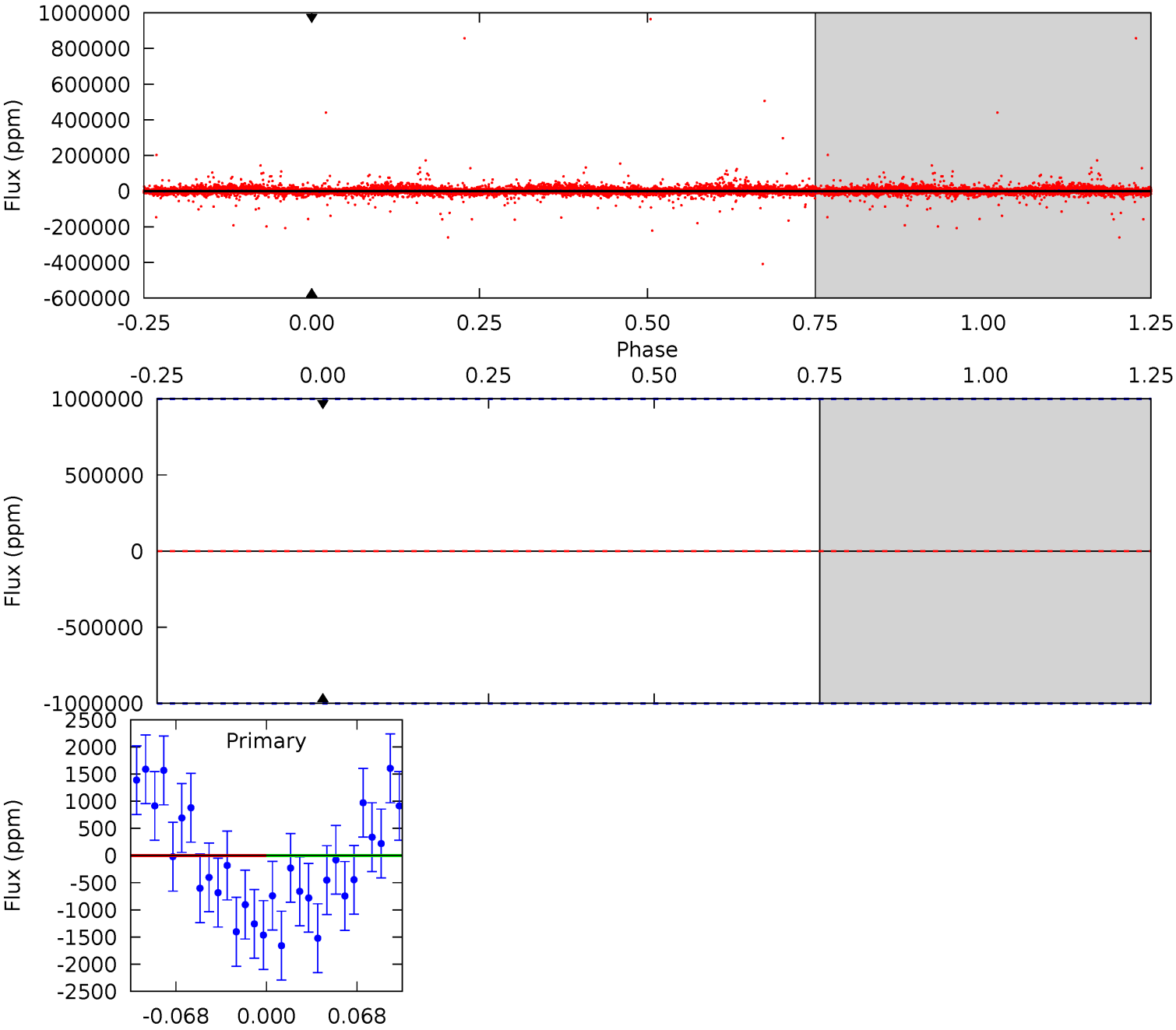




# DV Model-Shift Uniqueness Test

006382916-01, P = 0.614122 Days, E = 131.412497 Days

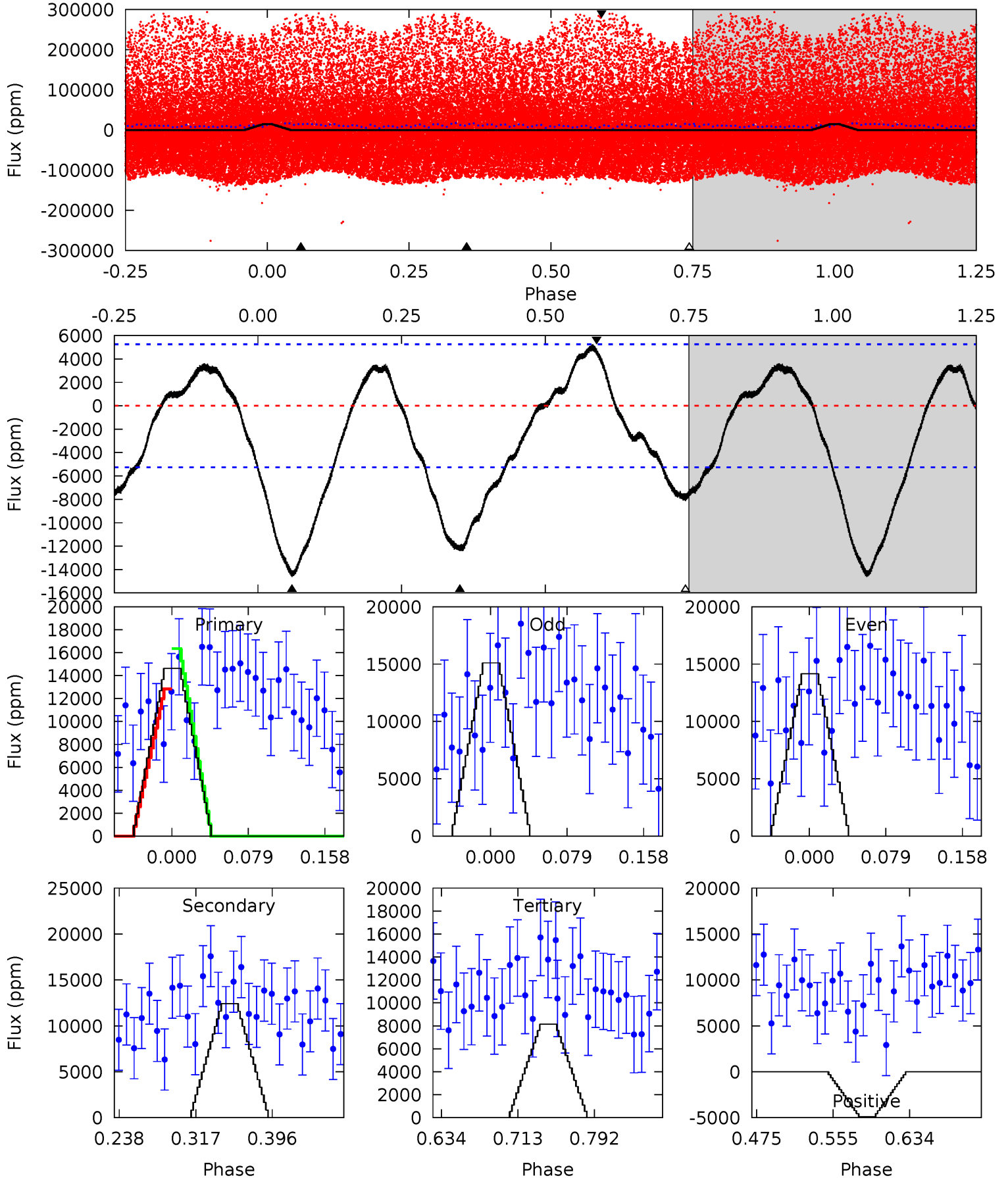
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



# Alt Model-Shift Uniqueness Test

006382916-01, P = 0.614122 Days, E = 131.449820 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
12.8	10.9	7.14	4.29	4.61	1.76	2.99	5.69	8.54	3.75	6.60	0.41	2.77	0.26	1.55



### Stellar Parameters For KIC 006382916

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$6548^{+148}_{-181}$	$4.146^{+0.167}_{-0.185}$	$0.040^{+0.250}_{-0.350}$	$1.621^{+0.494}_{-0.359}$	$1.340^{+0.188}_{-0.209}$	$0.443^{+0.442}_{-0.224}$
	+2%/-3%	+4%/-4%	+625%/-875%	+30%/-22%	+14%/-16%	+100%/-50%
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 006382916-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$0 \pm 1000000$	$12.80^{+14.18}_{-9.21}$	$4111^{+302}_{-261}$	$-5175^{+38038}_{-25279}$	$-1.049^{+162.426}_{-154.867}$
Alt.	$-12419 \pm 1140$	$11.60^{+13.99}_{-7.66}$	$4128^{+332}_{-274}$	$8755^{+17017}_{-3135}$	$12^{+95}_{-10}$

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



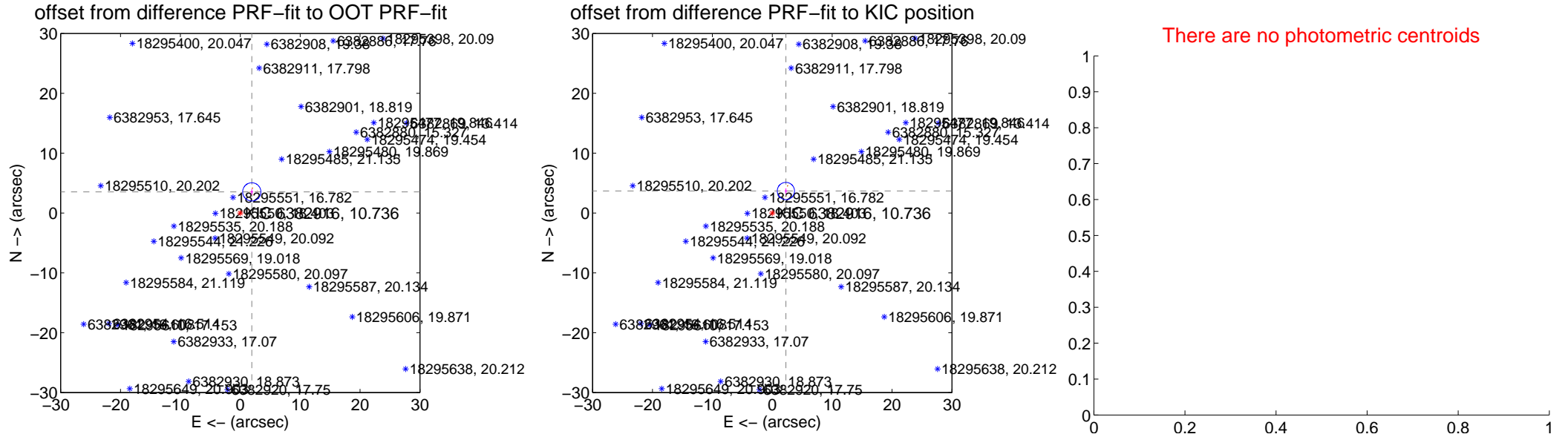
## DV Centroid Data

Supplemental centroid analysis for 006382916-01. **Kepler magnitude: 10.74.** Transit SNR -1.00

**There are 2 quarters with good PRF difference image offsets**

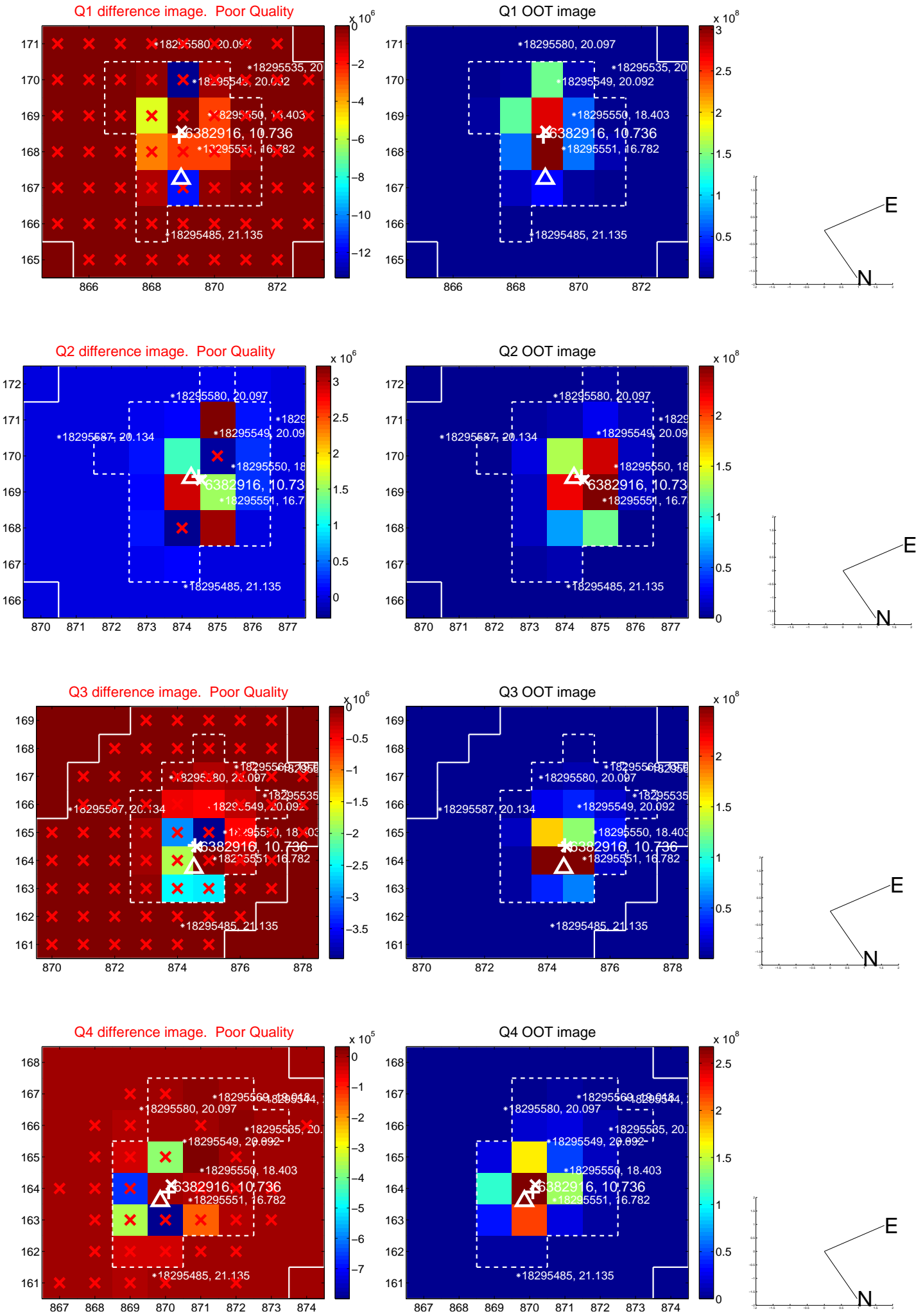
The direct PRF centroid is offset from the target star catalog position by about 0.67 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	<b>4.018 <math>\pm</math> 0.507</b>	<b>7.92</b>	-1.920 $\pm$ 0.234	3.530 $\pm$ 0.472
PRF-fit source offset from KIC position	<b>4.326 <math>\pm</math> 0.479</b>	<b>9.03</b>	-2.275 $\pm$ 0.229	3.680 $\pm$ 0.445
photometric centroid source offset	—	—	—	—

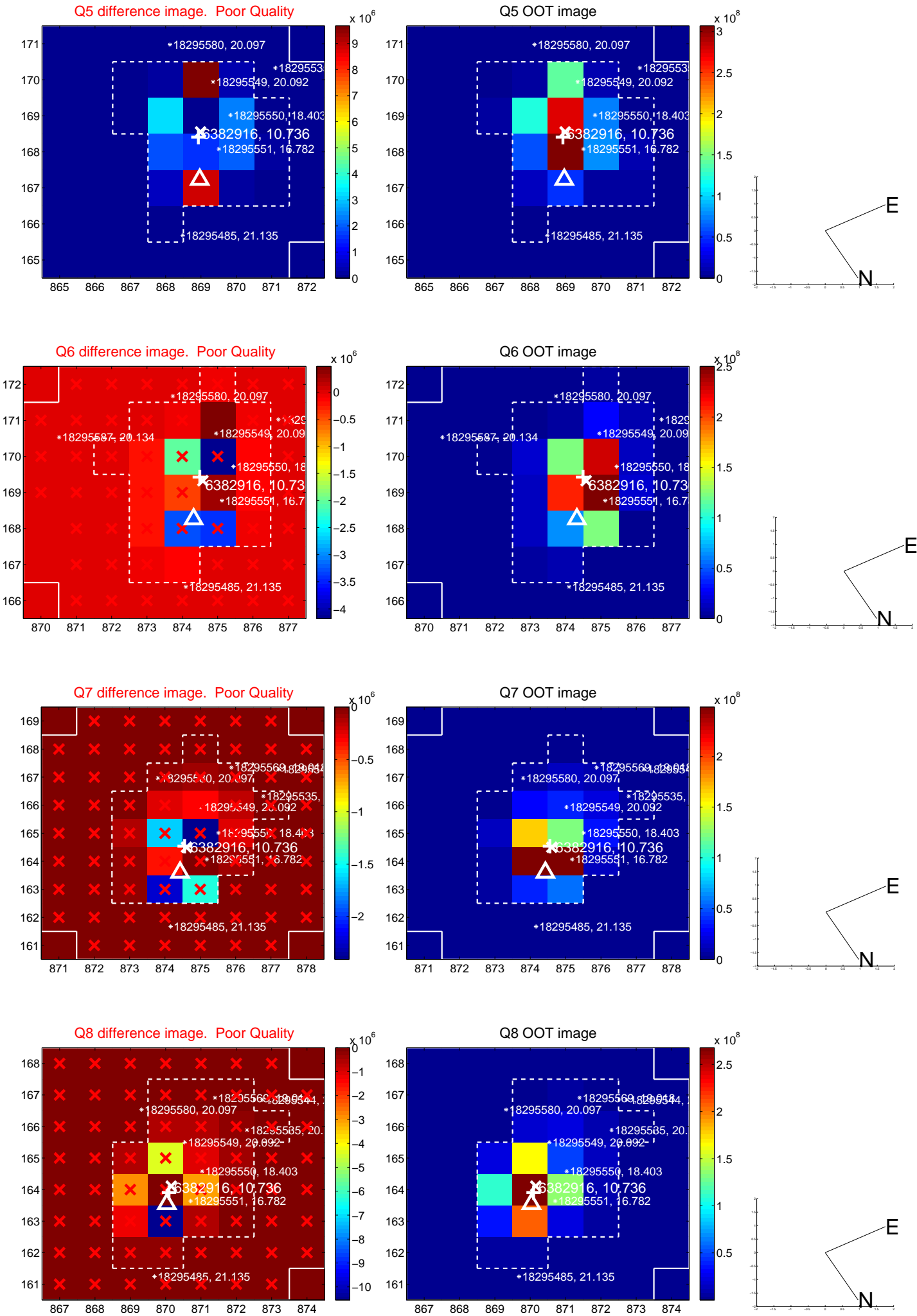


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

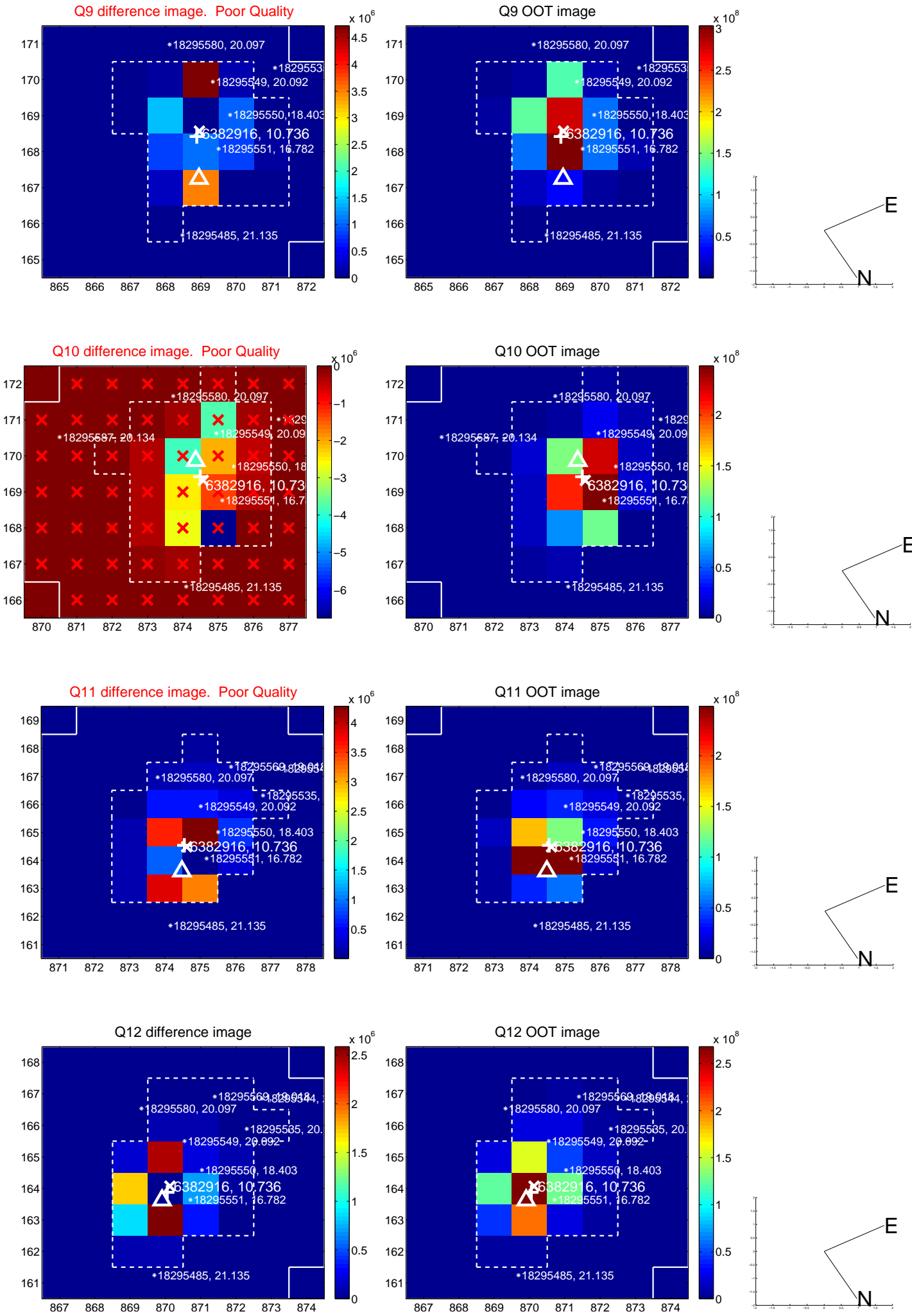
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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



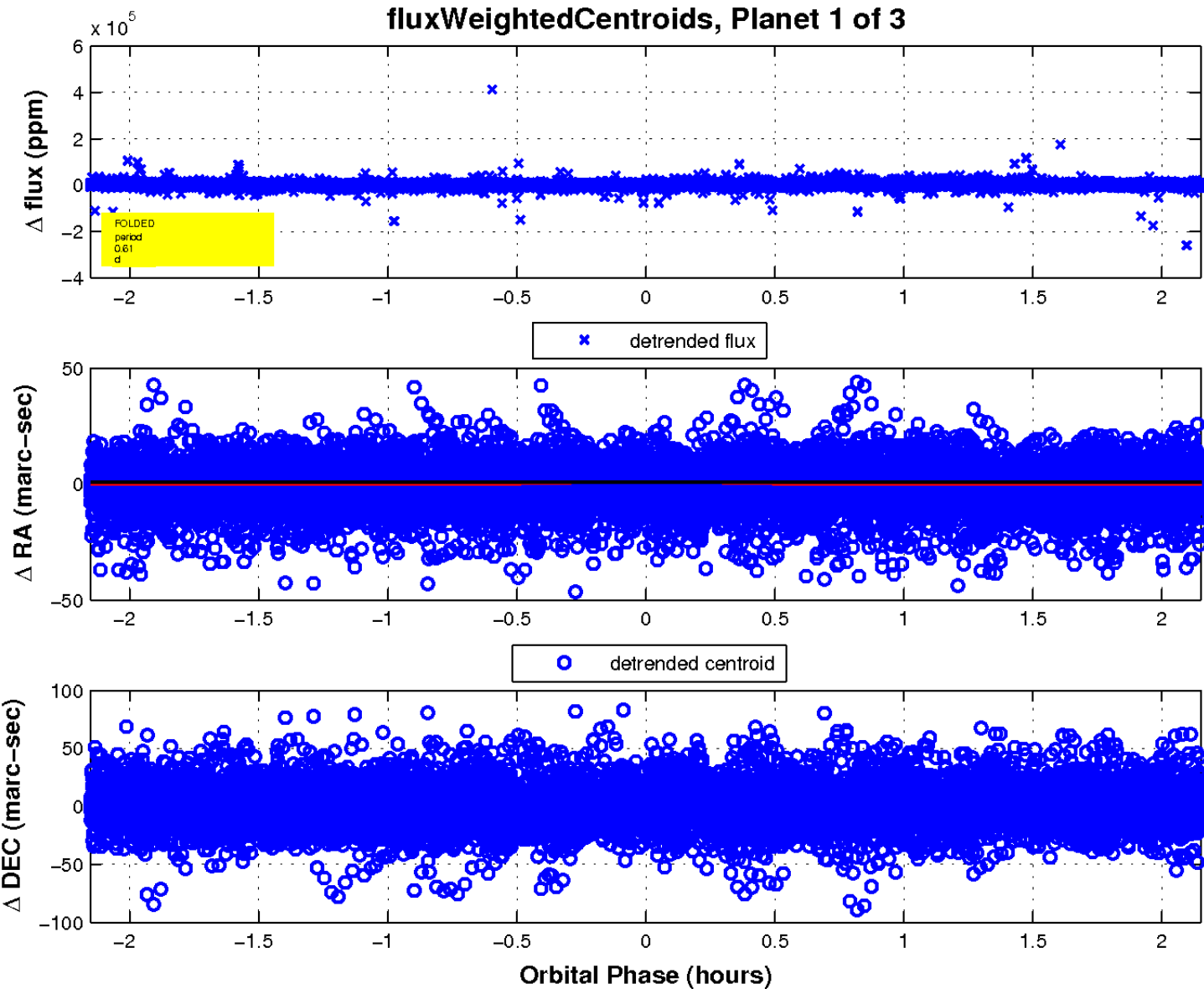
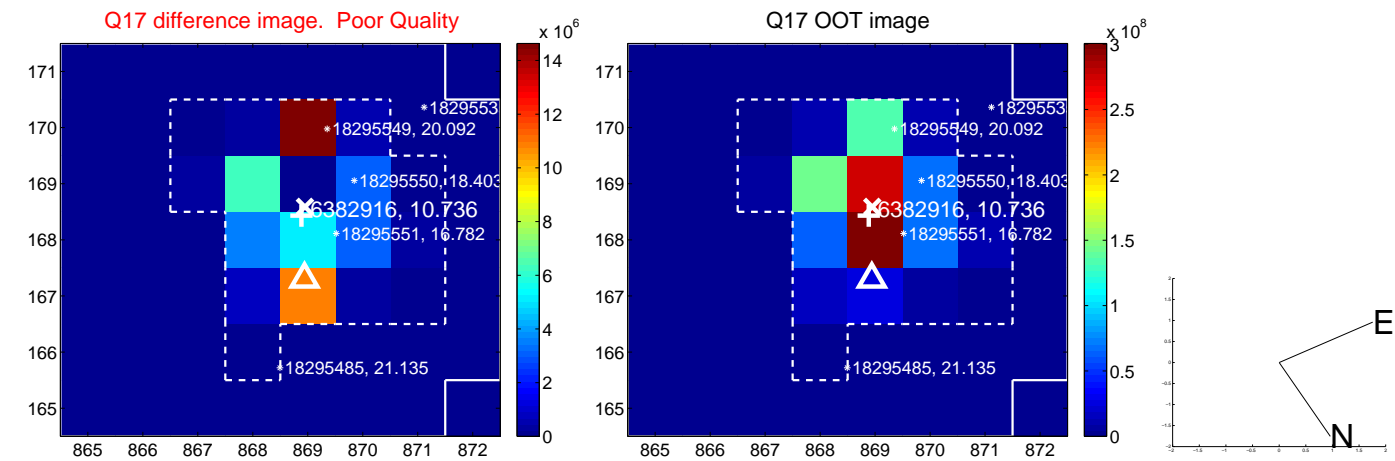
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.





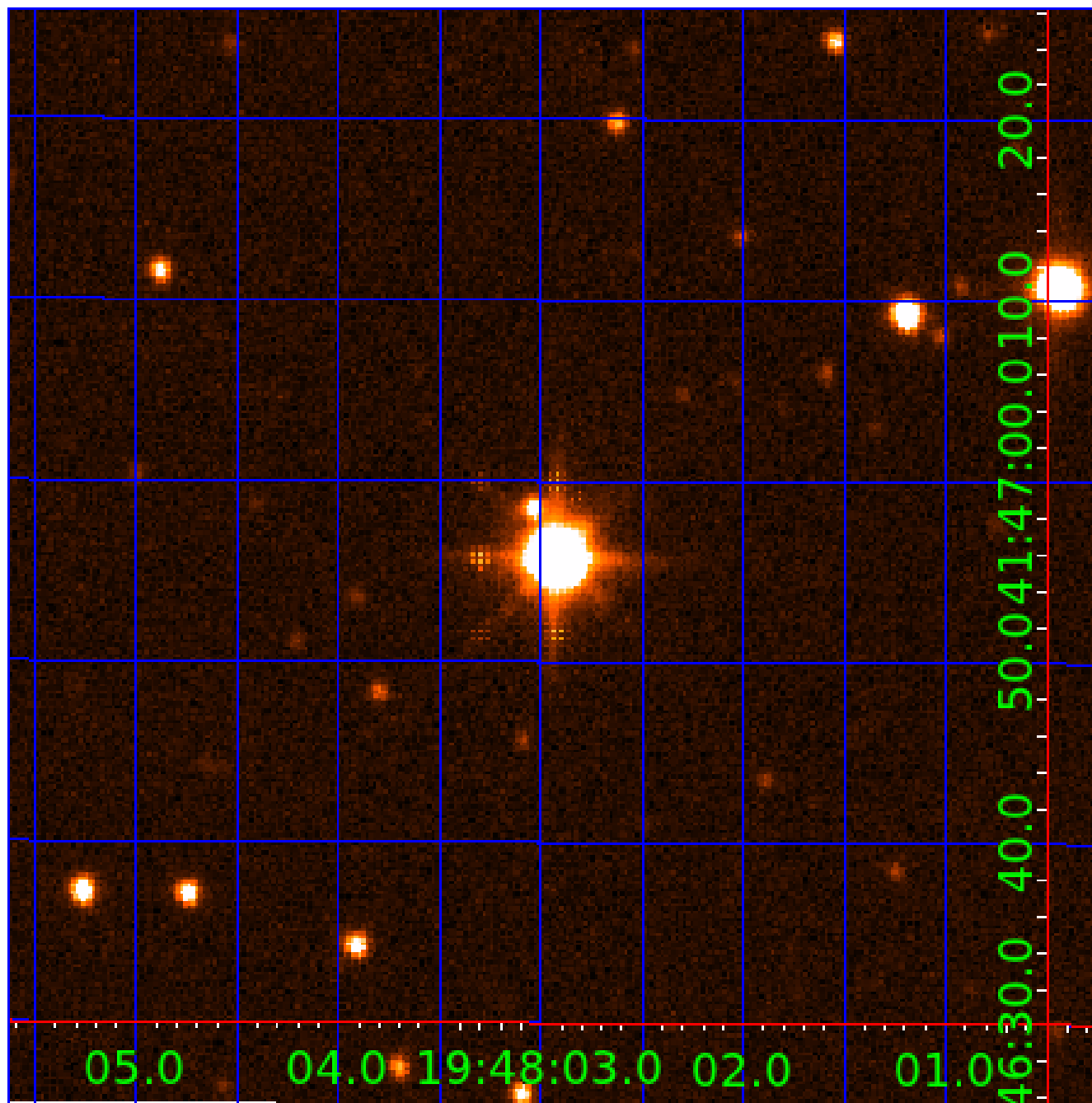


white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



UKIRT Image

Declination



# KIC 006382916

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
006382916-01	OBS	No	0.614122	132.026619	243.0	1.500	20.7	-1.0	1.62	6548	2.55	17790.08
006382916-02	OBS	No	0.605330	132.073228	366.3	4.194	14.8	6.0	1.62	6548	3.12	18135.44
006382916-03	OBS	No	23.890364	139.009112	226.5	2.000	15.7	-1.0	1.62	6548	2.46	134.97

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006382916-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
006382916-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
006382916-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—NO_FITS—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 006382916-02

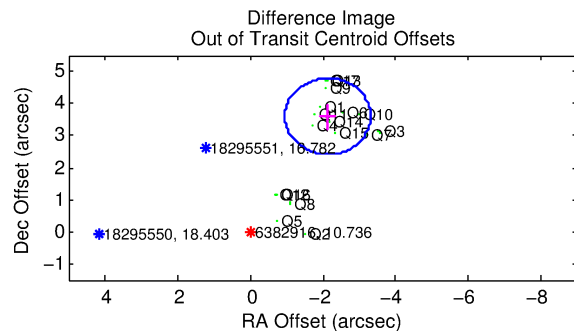
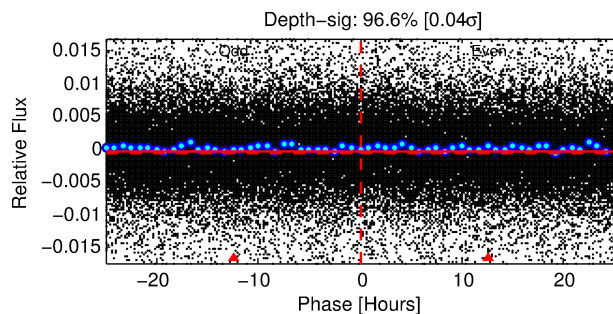
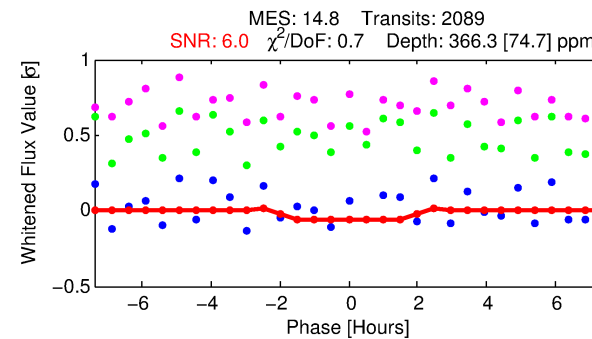
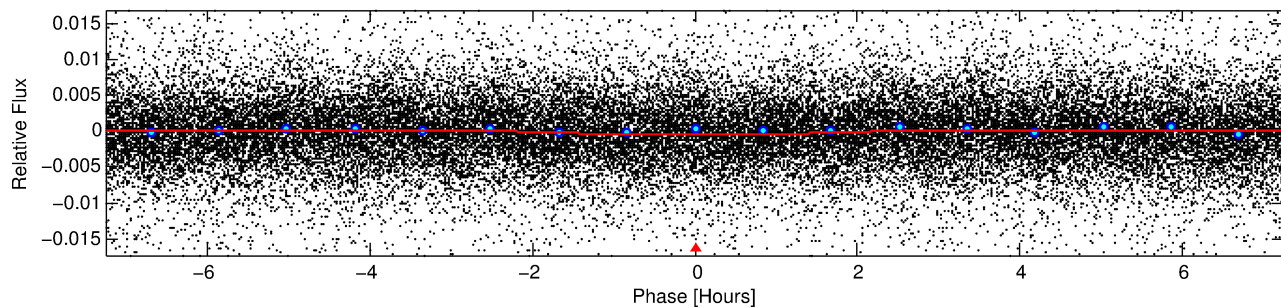
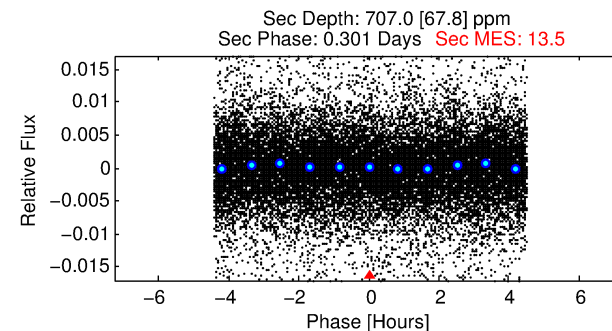
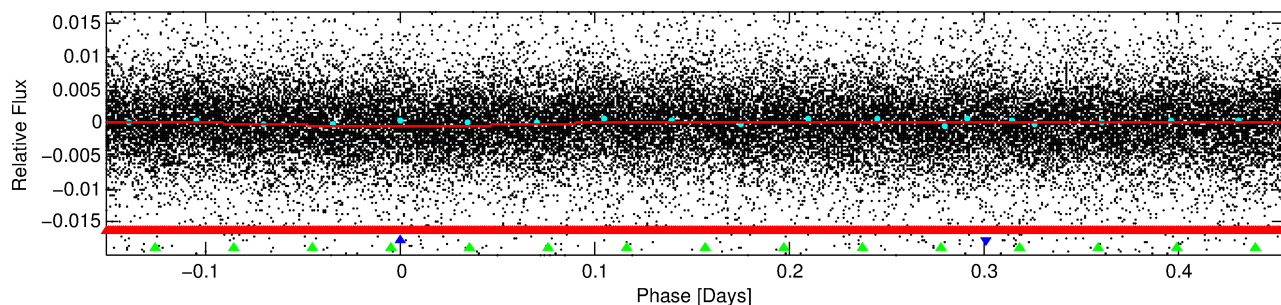
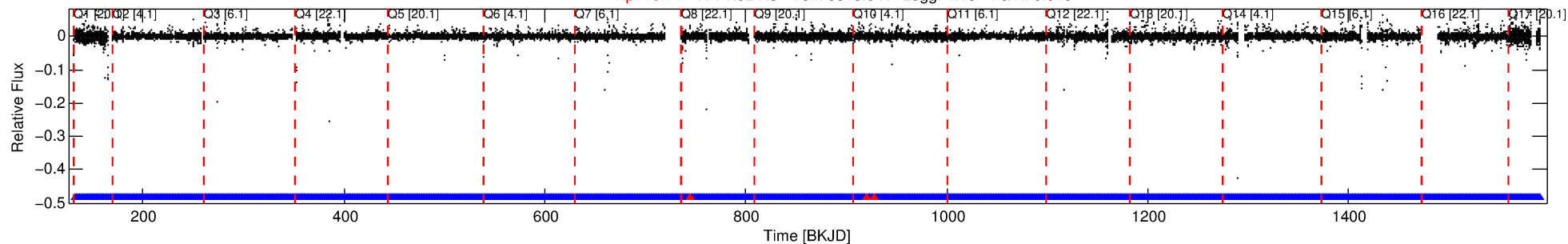
No Significant Match Found



# DV One-Page Summary

KIC: 6382916 Candidate: 2 of 3 Period: 0.605 d

Kp: 10.74 R\*: 1.62 Rs Teff: 6548.0 K Logg: 4.15 Fe/H: 0.040



## DV Fit Results:

Period = 0.60533 [0.00002] d  
Epoch = 132.0732 [0.0060] BKJD  
Rp/R\* = 0.0176 [0.0316]  
a/R\* = 1.29 [4.84]  
b = 0.01 [1033.11]  
Seff = 18135.44 [6642.37]  
Teq = 2959 [271] K  
Rp = 3.12 [5.67] Re  
a = 0.0154 [0.0038] AU  
Ag = 9.56 [34.48] [0.25σ]  
Teffp = 8044 [7225] K [0.70σ]

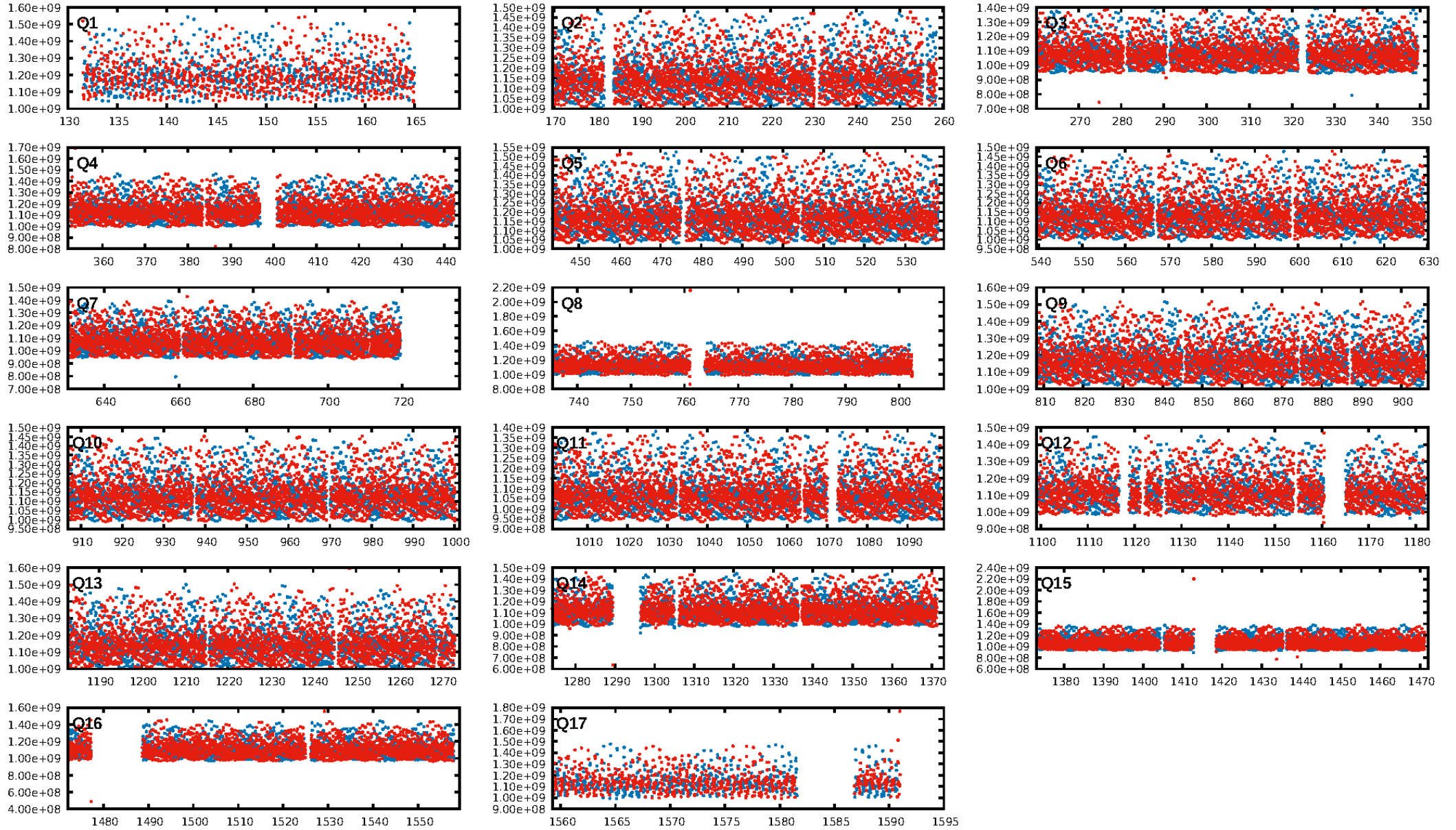
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: 3.8% [0.05σ]  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [1994/1997]  
GhostDiagnostic-chr: 6.114  
Centroid-sig: N/A  
Centroid-so: 2.138 arcsec [4.22σ]  
OotOffset-rm: 4.180 arcsec [10.62σ]  
KicOffset-rm: 4.501 arcsec [12.65σ]  
OotOffset-st: 4/4/4/5 [17]  
KicOffset-st: 4/4/4/5 [17]  
DiffImageQuality-fgm: 0.35 [6/17]  
DiffImageOverlap-fno: 0.00 [0/17]

Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 10:26:42 Z

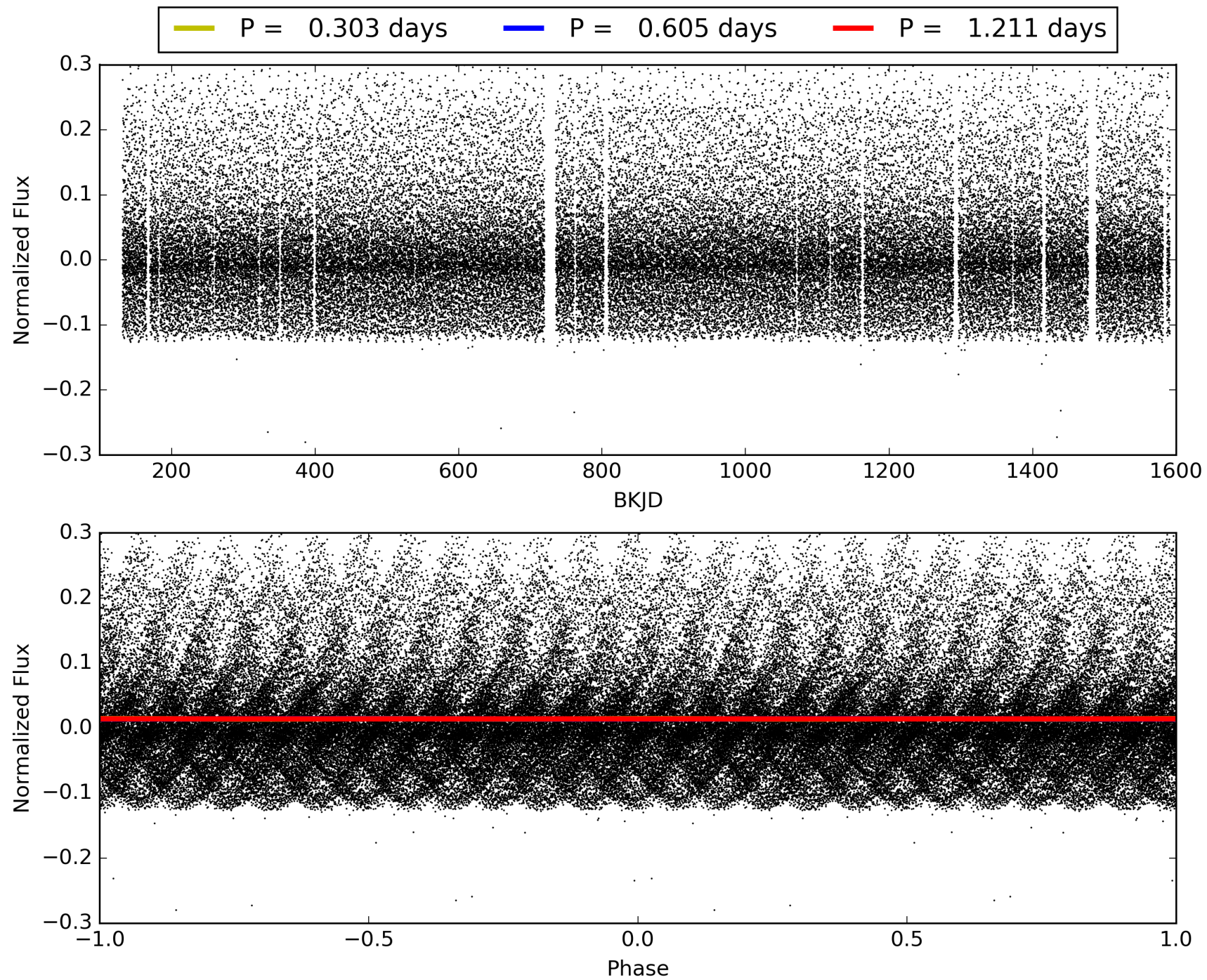
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

# TCE 006382916-02, PDC Light Curves



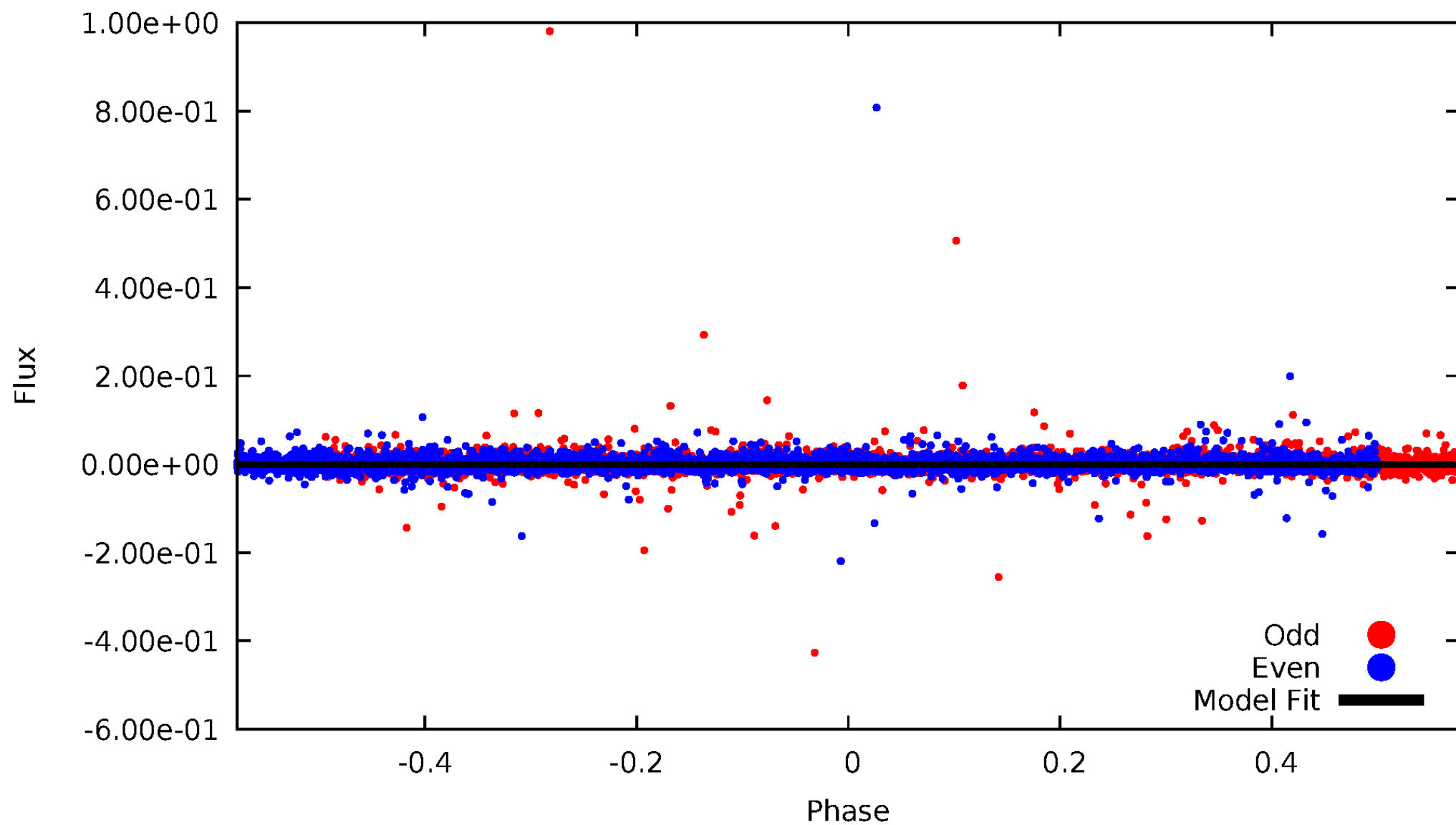


TCE 006382916-02



# DV Odd/Even

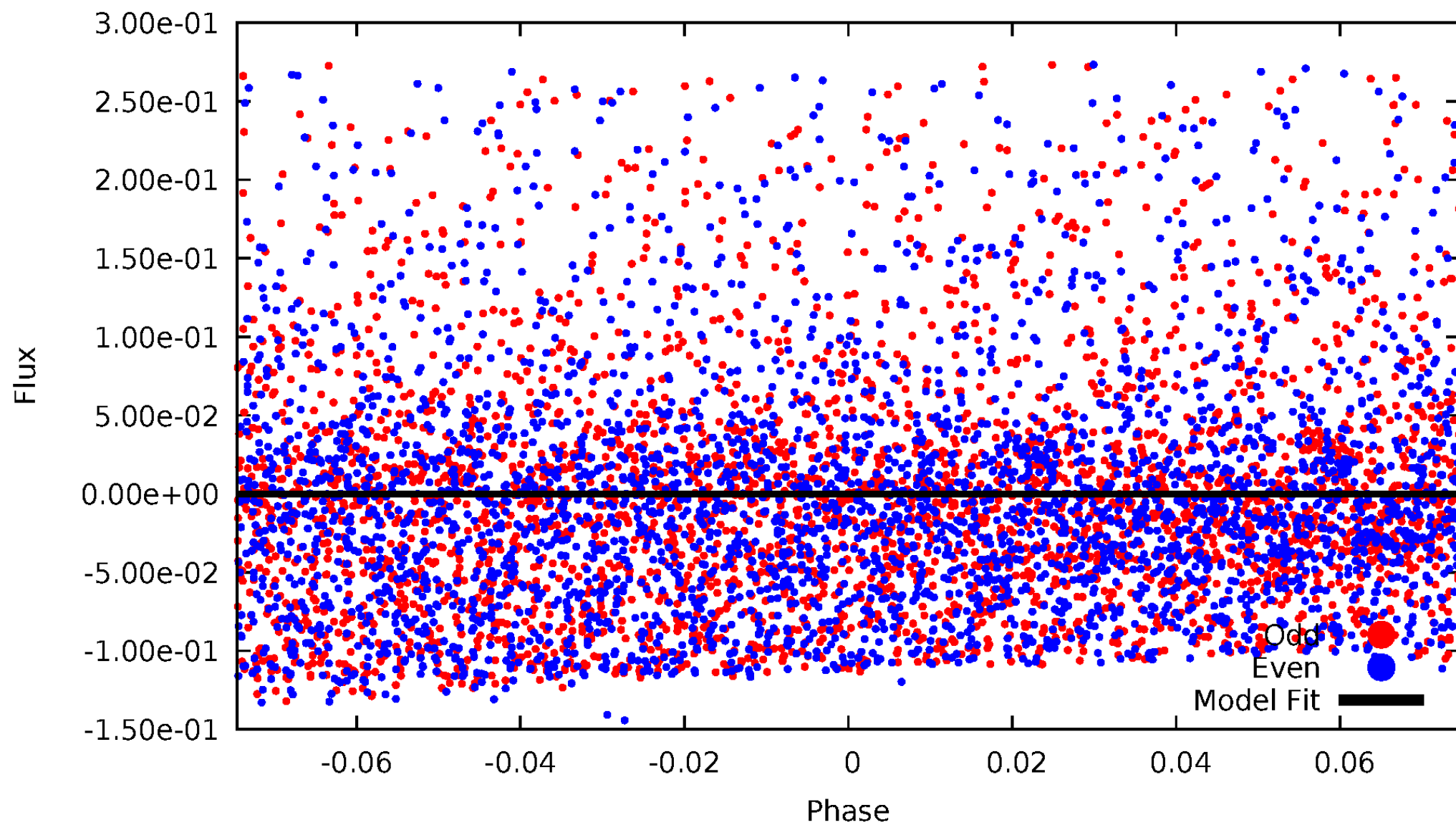
TCE 006382916-02





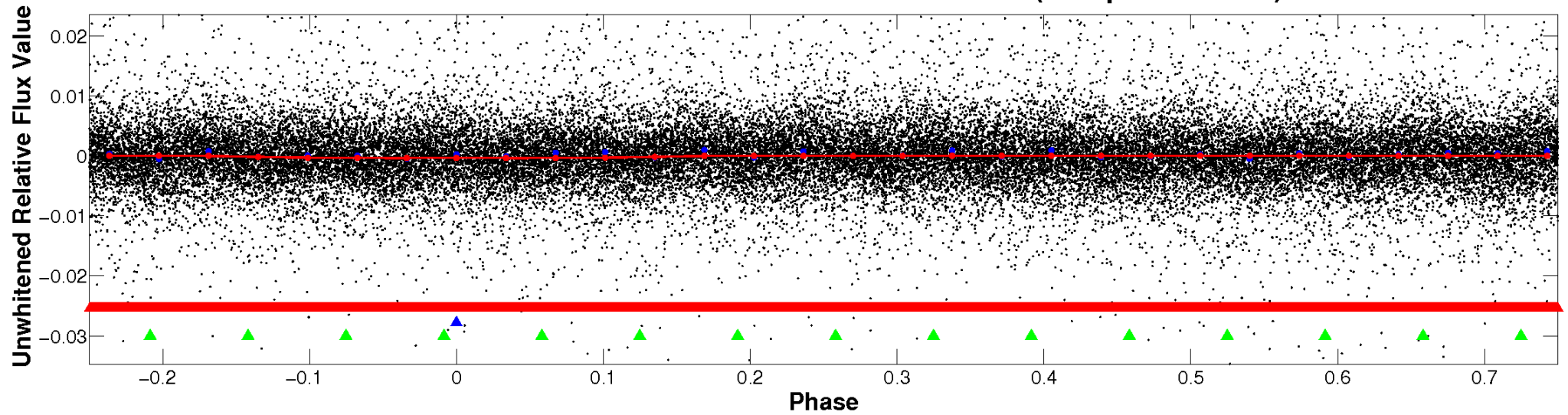
# ALT Odd/Even

TCE 006382916-02

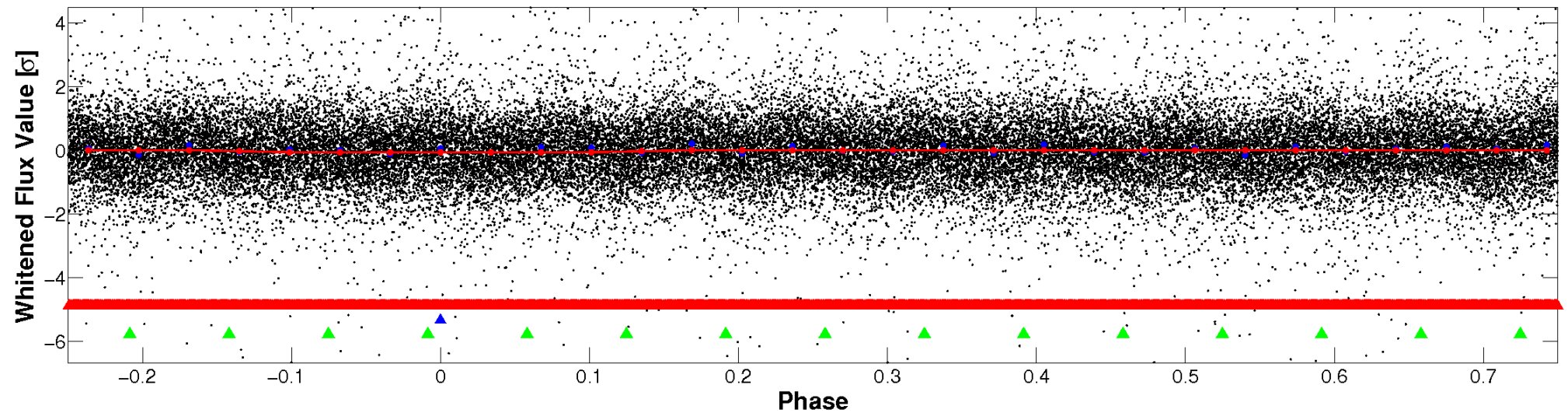


# Non-Whitened Vs. Whitened Light Curve

**Planet 2 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)**

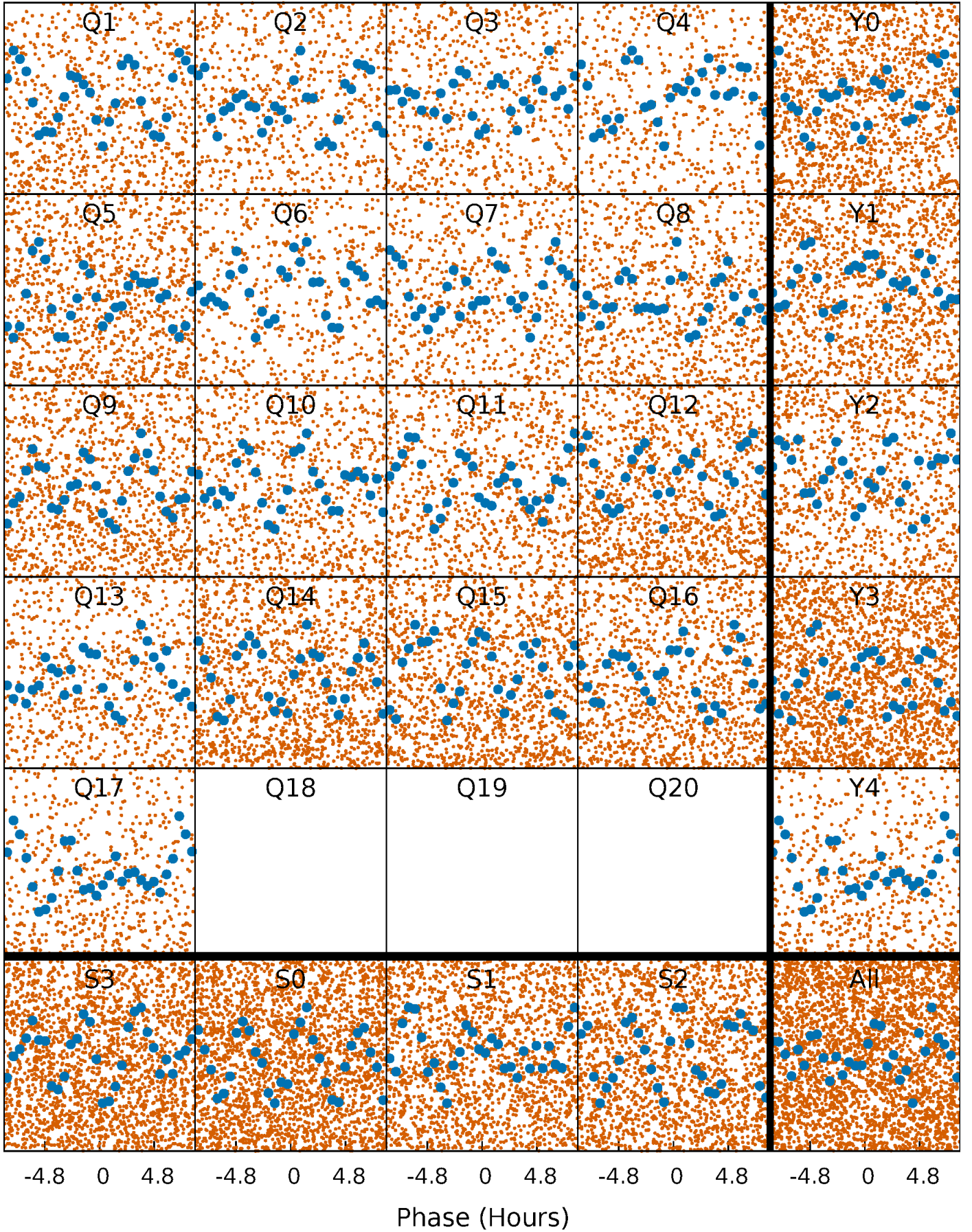


**Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)**



# PDC Quarter-Phased Transit Curves

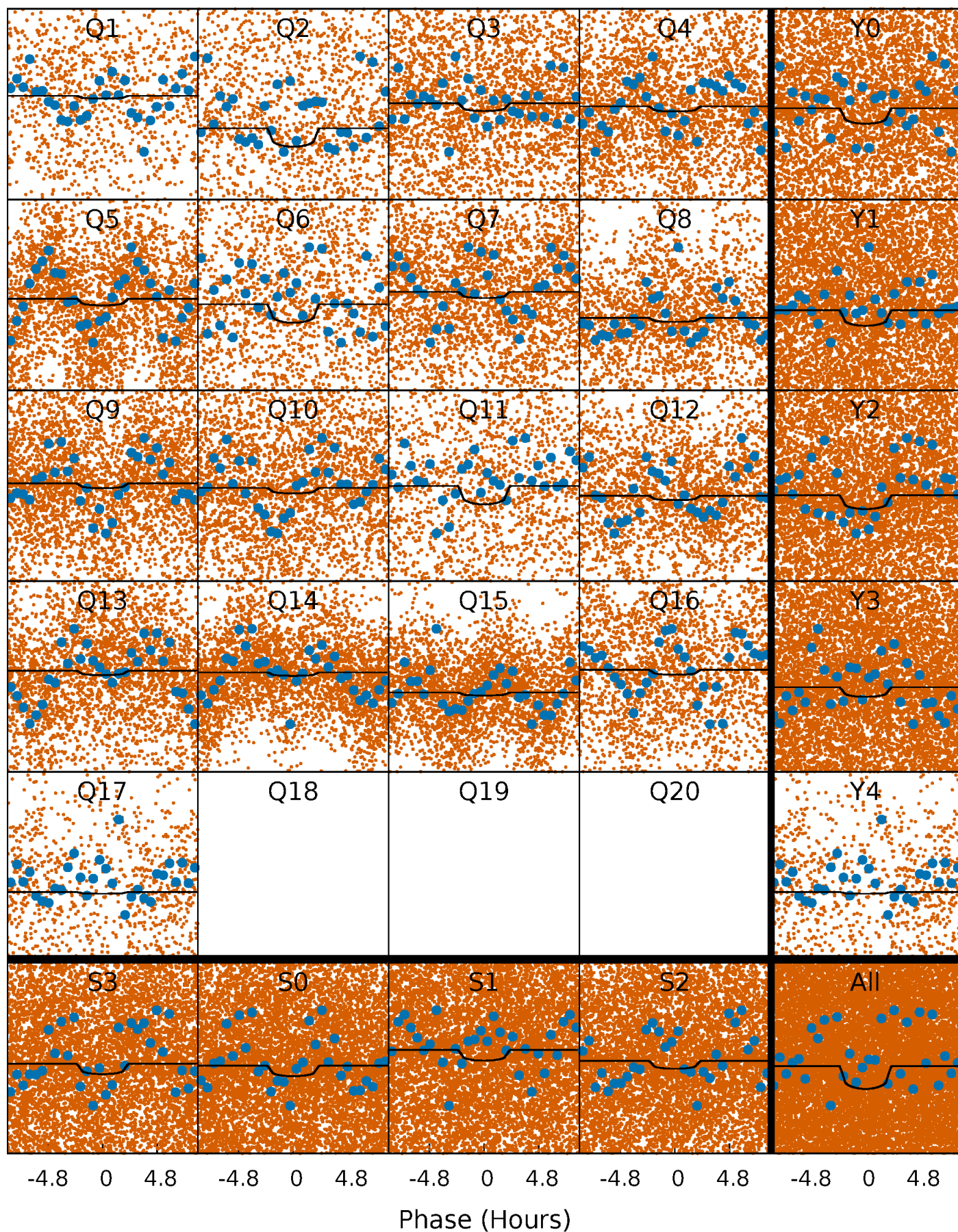
TCE 006382916-02   P= 0.605330 Days    $T_0=132.073228$  (BKJD)





# DV Quarter-Phased Transit Curves

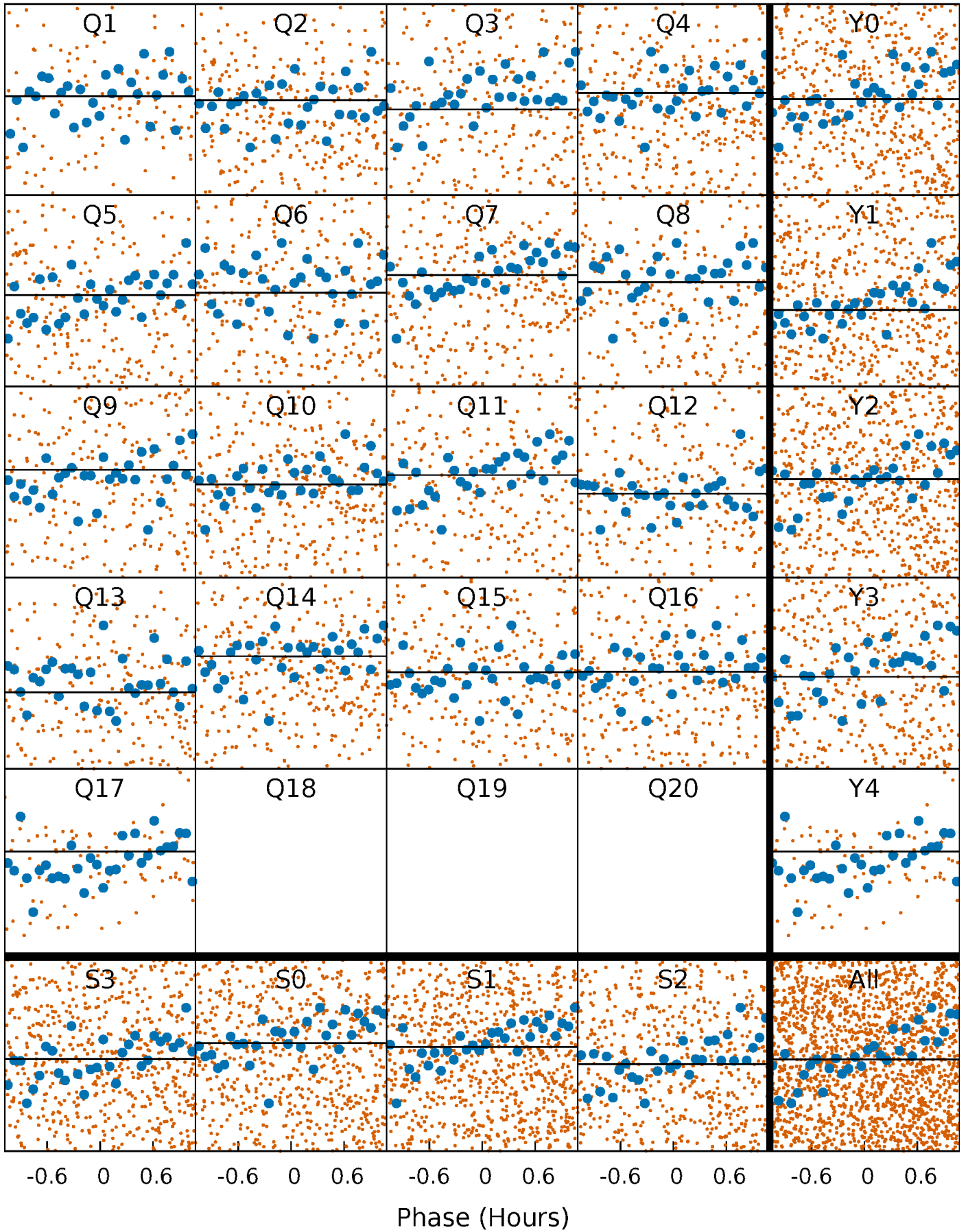
TCE 006382916-02   P= 0.605330 Days    $T_0=132.073228$  (BKJD)





# Alt. Detrend Quarter-Phased Transit Curves

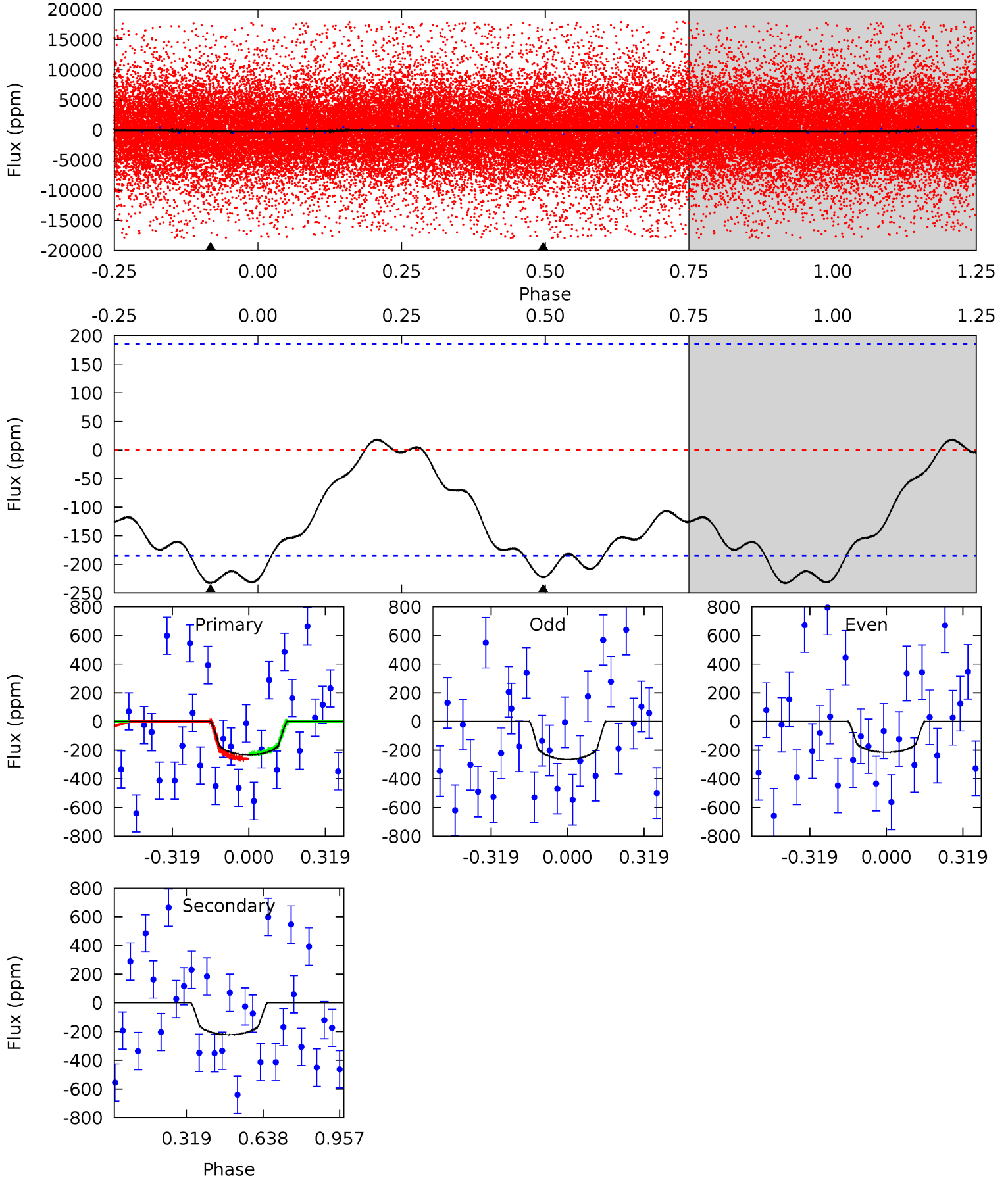
TCE 006382916-02   P= 0.604900 Days    $T_0=131.857122$  (BKJD)



# DV Model-Shift Uniqueness Test

006382916-02, P = 0.605330 Days, E = 131.467898 Days

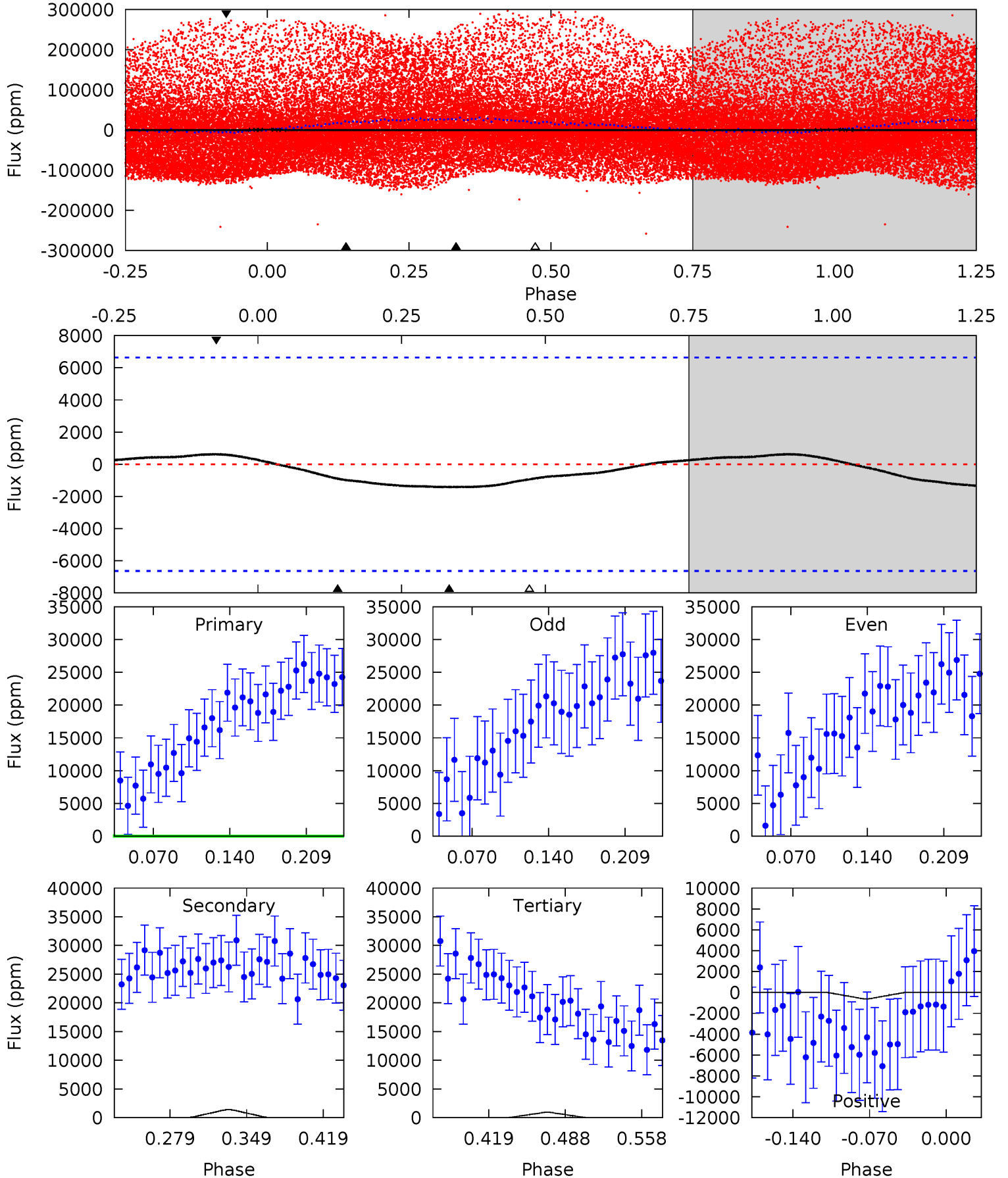
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.42	5.19	0	0	4.32	1.00	0.38	5.42	5.42	5.19	5.19	0.57	0.22	0.07	0.45



# Alt Model-Shift Uniqueness Test

006382916-02, P = 0.604900 Days, E = 131.252222 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
0.63	1.00	0.66	0.44	4.64	1.81	0.44	-0.02	0.19	0.34	0.56	0.37	0.04	0.31	0.67



### Stellar Parameters For KIC 006382916

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$6548^{+148}_{-181}$	$4.146^{+0.167}_{-0.185}$	$0.040^{+0.250}_{-0.350}$	$1.621^{+0.494}_{-0.359}$	$1.340^{+0.188}_{-0.209}$	$0.443^{+0.442}_{-0.224}$
	+2%/-3%	+4%/-4%	+625%/-875%	+30%/-22%	+14%/-16%	+100%/-50%
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 006382916-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$-223 \pm 43$	$5.17^{+5.34}_{-3.62}$	$4139^{+303}_{-291}$	$4408^{+4192}_{-7330}$	$1.042^{+10.263}_{-0.788}$
Alt.	$-1426 \pm 1430$	$4.05^{+4.54}_{-2.79}$	$4141^{+312}_{-246}$	$7747^{+15074}_{-11626}$	$7.887^{+86.203}_{-7.913}$

$T_{\text{max}}$  = 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

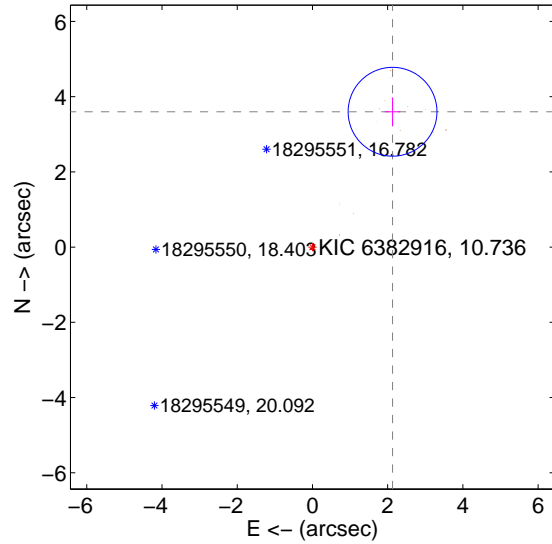
Supplemental centroid analysis for 006382916-02. **Kepler magnitude: 10.74.** Transit SNR 6.04

There are 6 quarters with good PRF difference image offsets

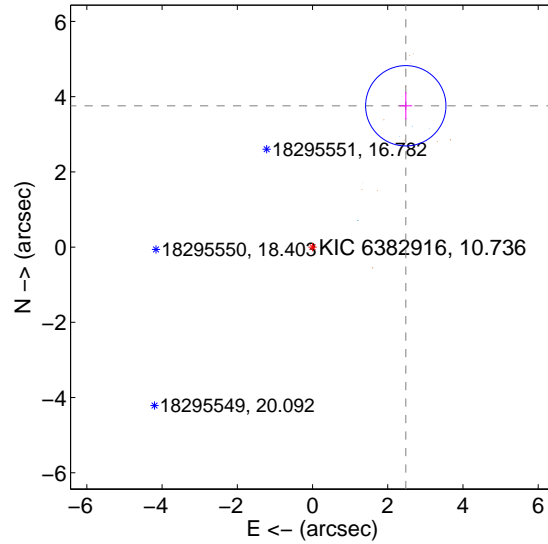
The direct PRF centroid is offset from the target star catalog position by about 0.65 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	<b>4.180 <math>\pm</math> 0.393</b>	<b>10.62</b>	-2.129 $\pm$ 0.203	3.597 $\pm$ 0.382
PRF-fit source offset from KIC position	<b>4.501 <math>\pm</math> 0.356</b>	<b>12.65</b>	-2.479 $\pm$ 0.171	3.756 $\pm$ 0.360
photometric centroid source offset	<b>2.14 <math>\pm</math> 0.51</b>	<b>4.22</b>	-1.83 $\pm$ 0.42	1.11 $\pm$ 0.69

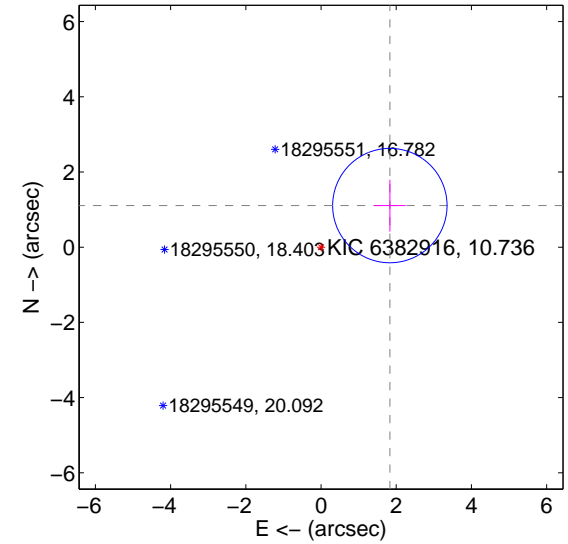
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

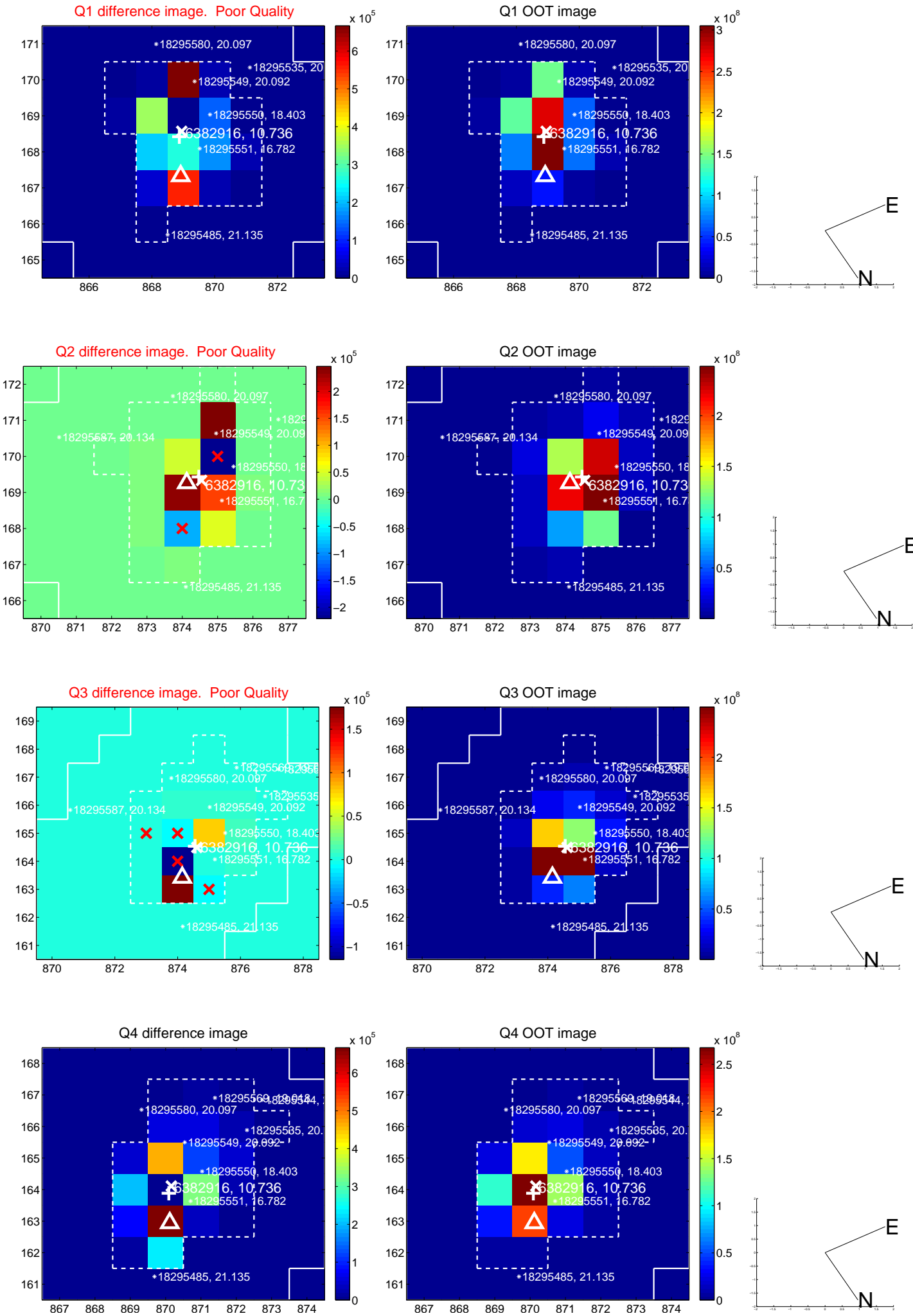


offset from photometric centroids

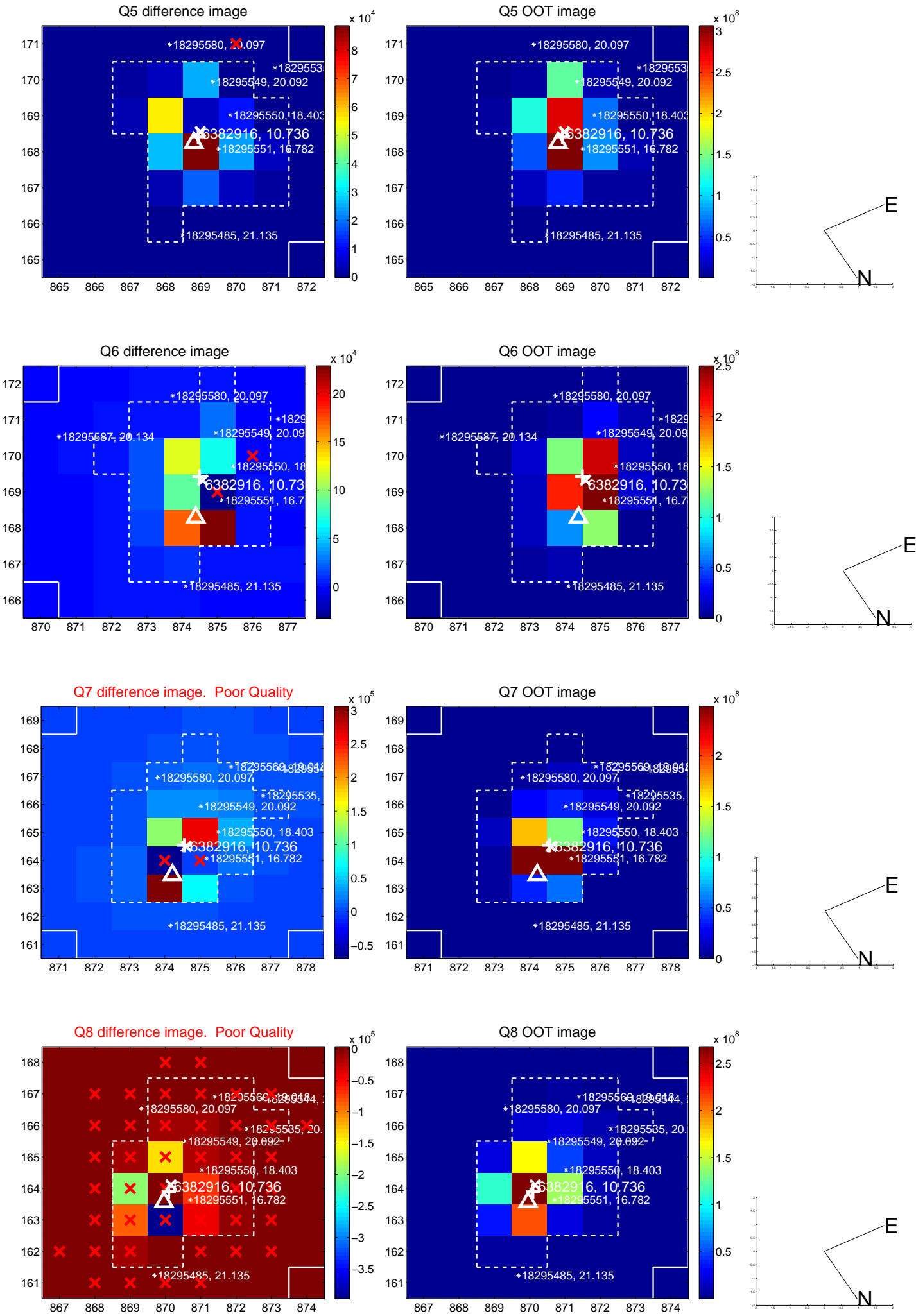


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

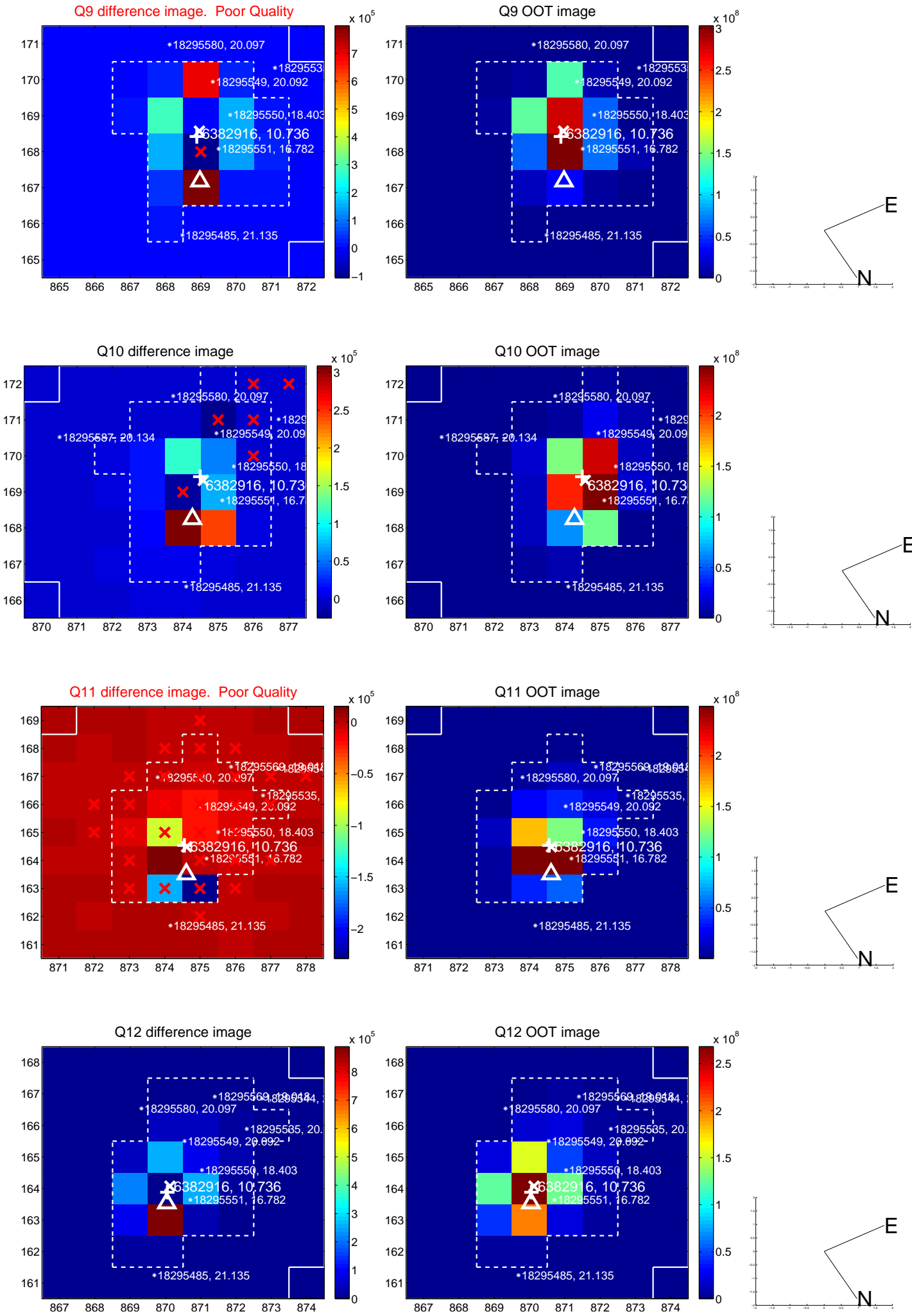
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



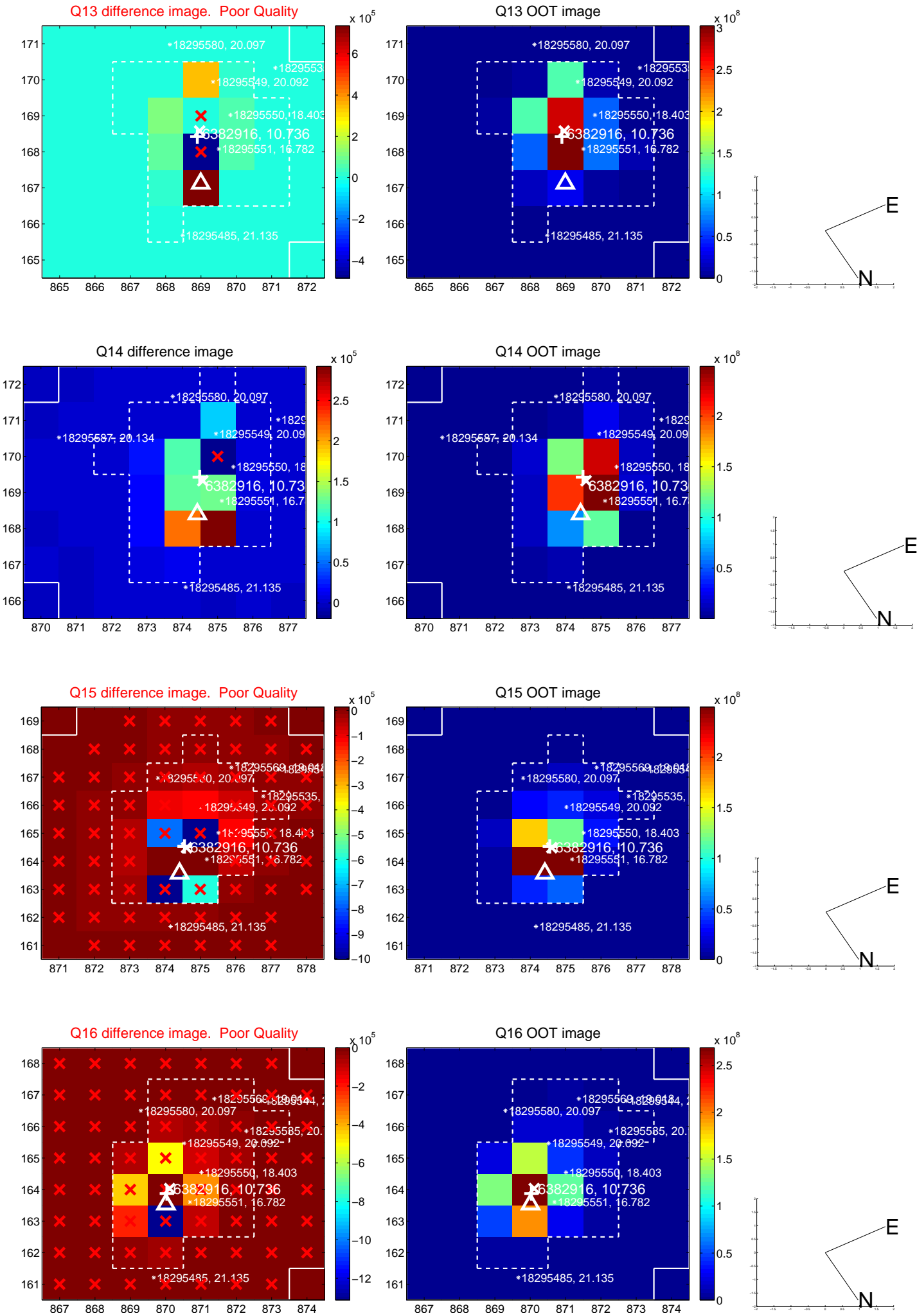
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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

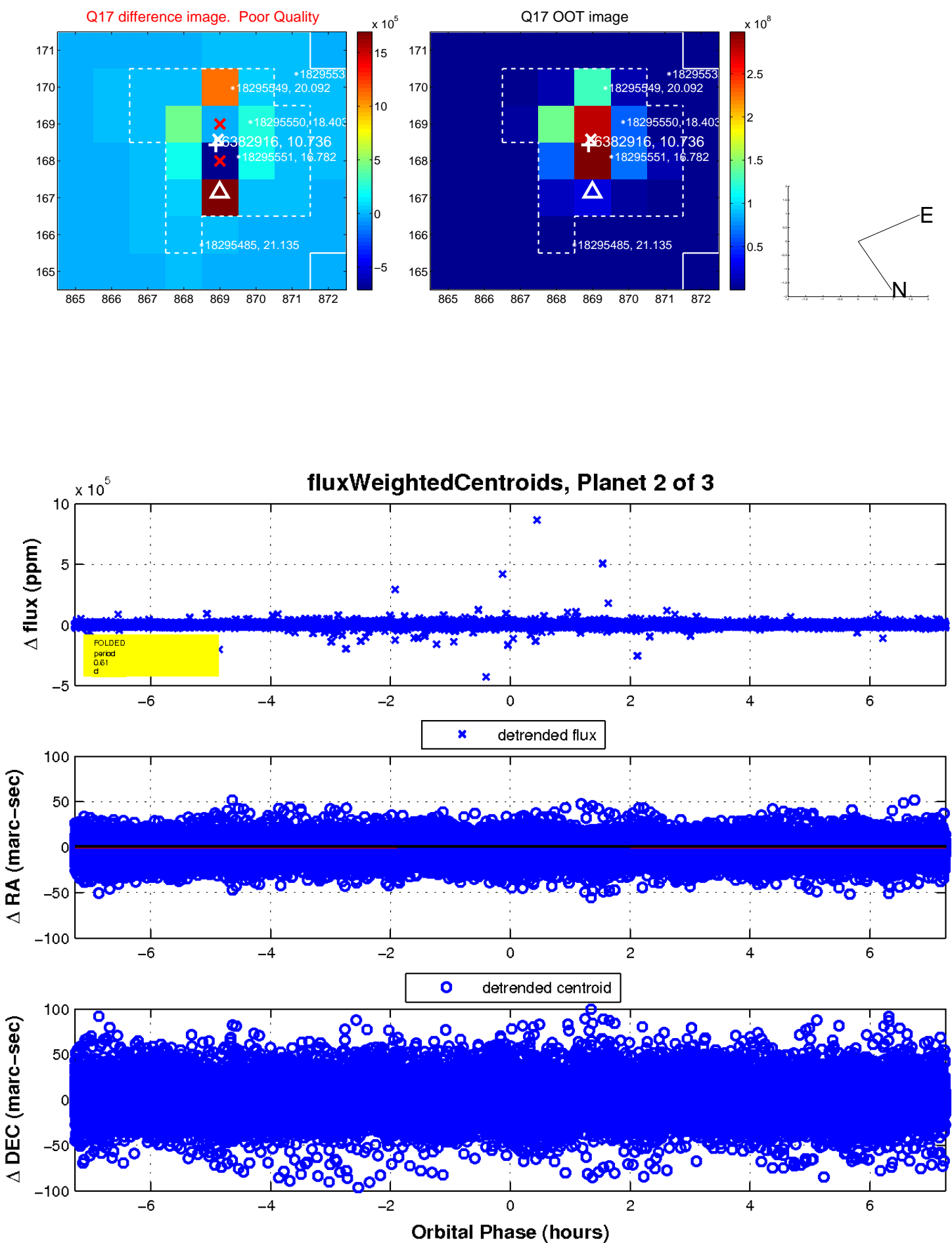


white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



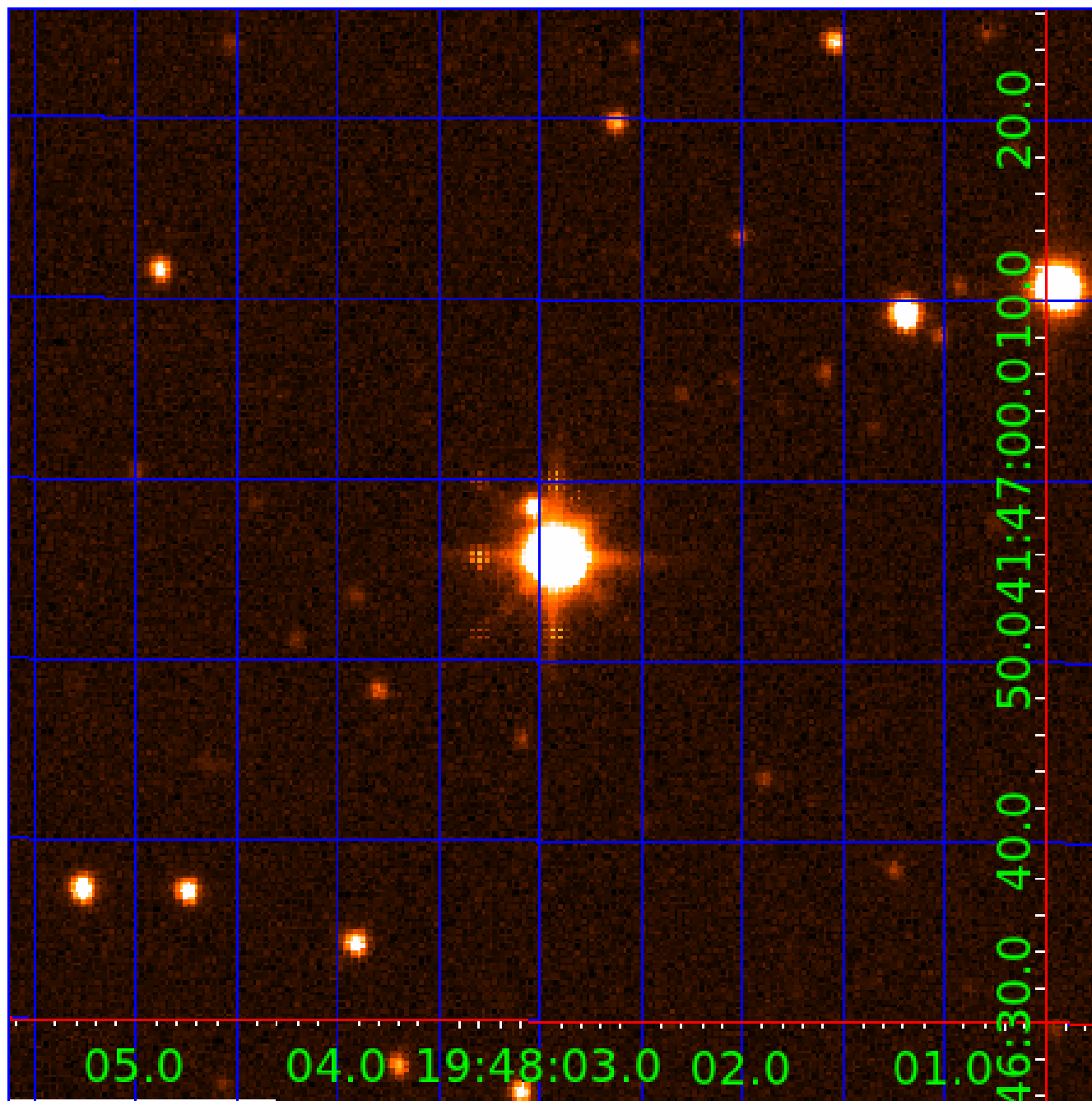


white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



UKIRT Image

Declination



# KIC 006382916

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
006382916-01	OBS	No	0.614122	132.026619	243.0	1.500	20.7	-1.0	1.62	6548	2.55	17790.08
006382916-02	OBS	No	0.605330	132.073228	366.3	4.194	14.8	6.0	1.62	6548	3.12	18135.44
006382916-03	OBS	No	23.890364	139.009112	226.5	2.000	15.7	-1.0	1.62	6548	2.46	134.97

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006382916-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
006382916-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
006382916-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—NO_FITS—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.

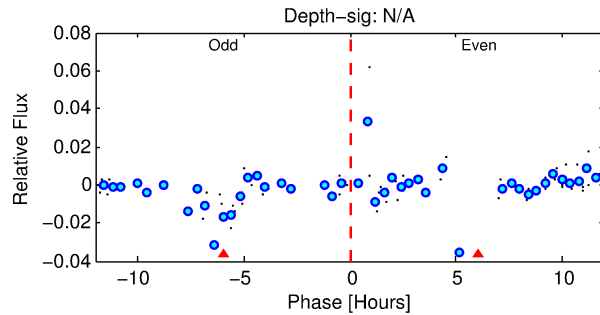
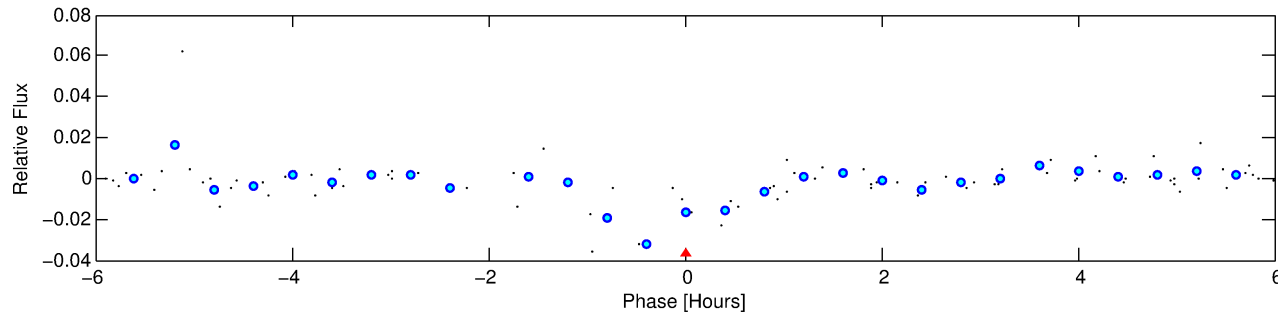
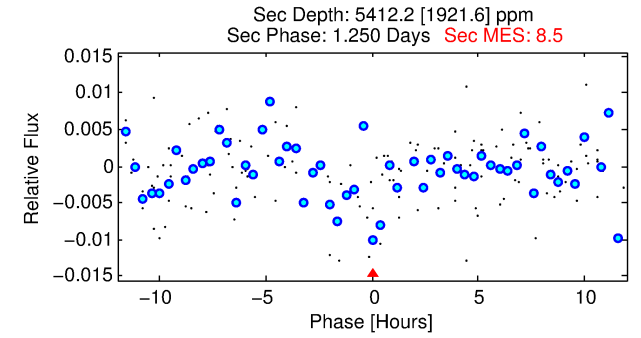
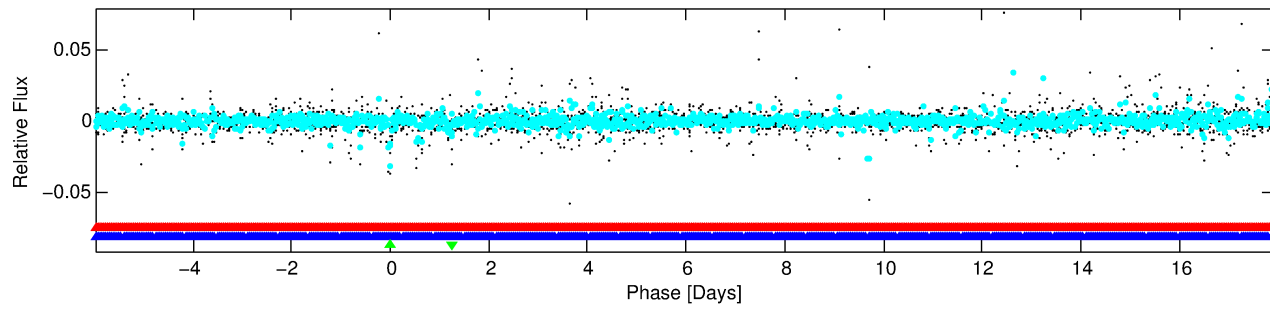
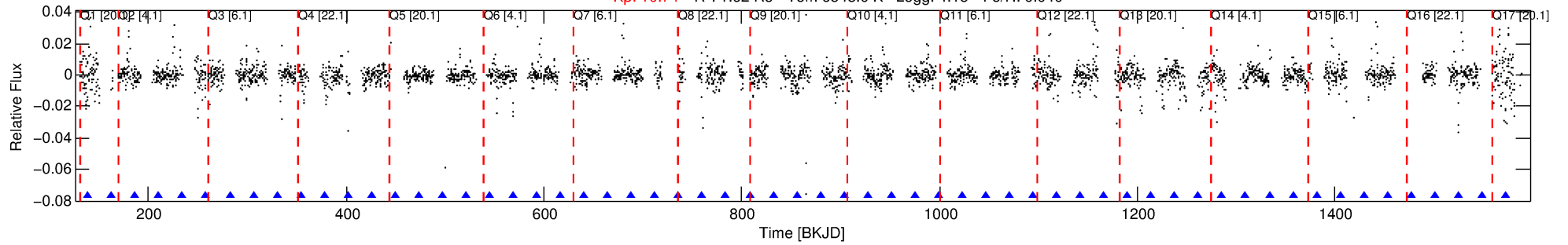
## Ephemeris Match Information For 006382916-03

No Significant Match Found

# DV One-Page Summary

KIC: 6382916 Candidate: 3 of 3 Period: 23.890 d

Kp: 10.74 R\*: 1.62 Rs Teff: 6548.0 K Logg: 4.15 Fe/H: 0.040



## TPS TCE Results:

Period = 23.89036 d  
Epoch = 139.0091 BKJD

DV fit results are unavailable

## DV Diagnostic Results:

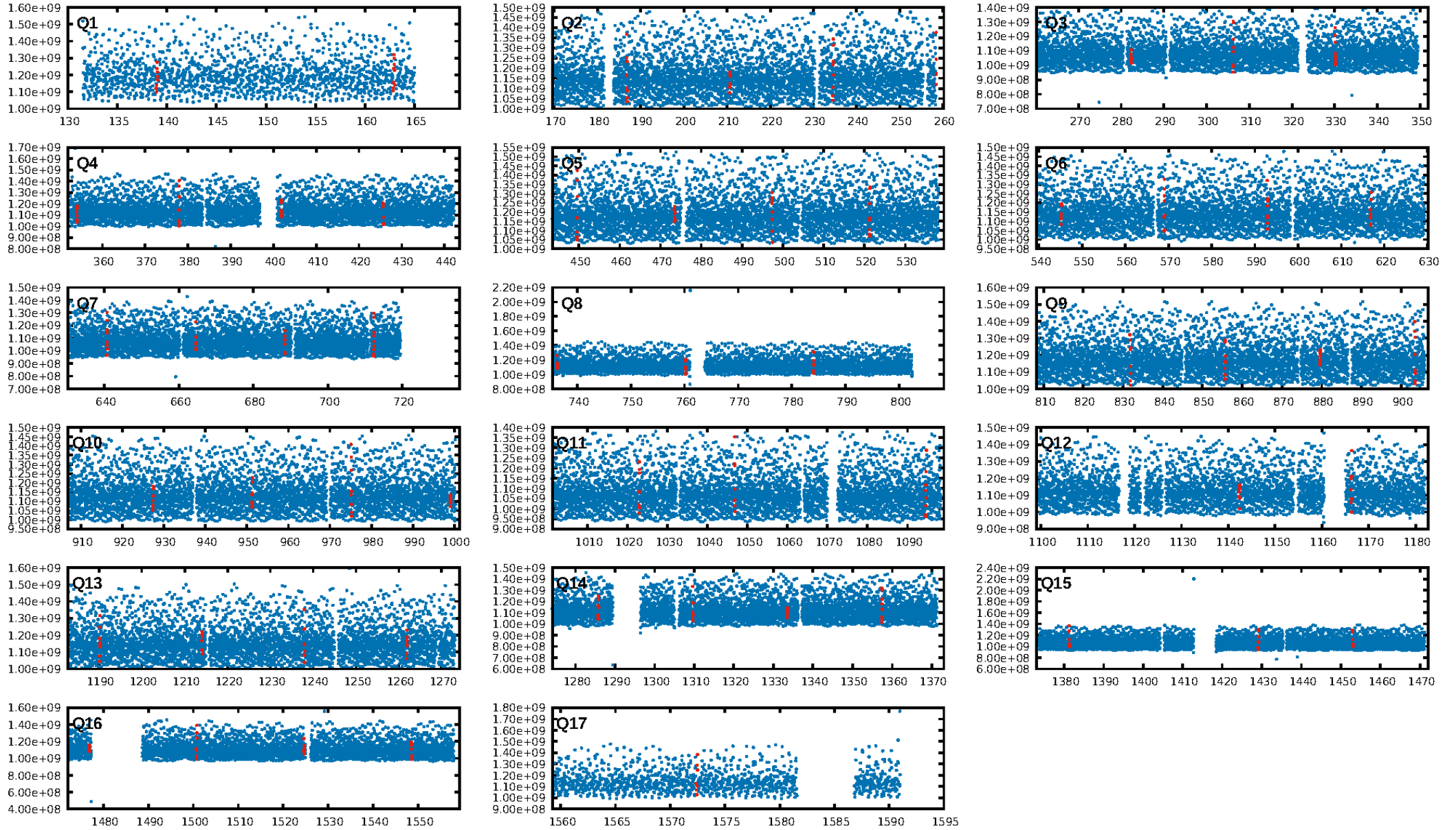
ShortPeriod-sig: 100.0% [223.45σ]  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: N/A  
GhostDiagnostic-chr: N/A  
Centroid-sig: N/A  
Centroid-so: N/A  
OotOffset-rm: N/A  
KicOffset-rm: N/A  
OotOffset-st: 0/0/0/0 [0]  
KicOffset-st: 0/0/0/0 [0]  
DiffImageQuality-fgm: N/A  
DiffImageOverlap-fno: N/A

Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 10:26:50 Z

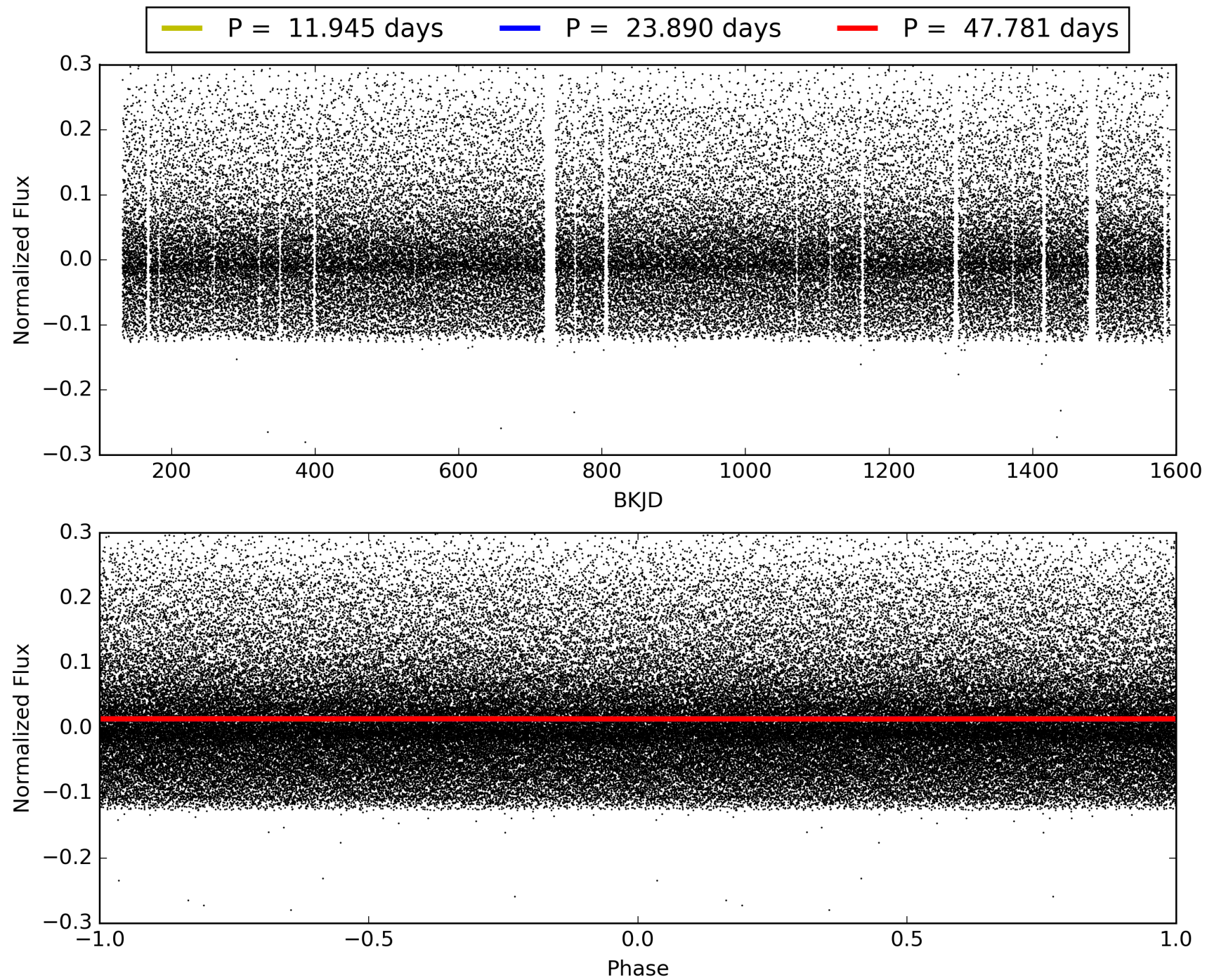
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center



# TCE 006382916-03, PDC Light Curves

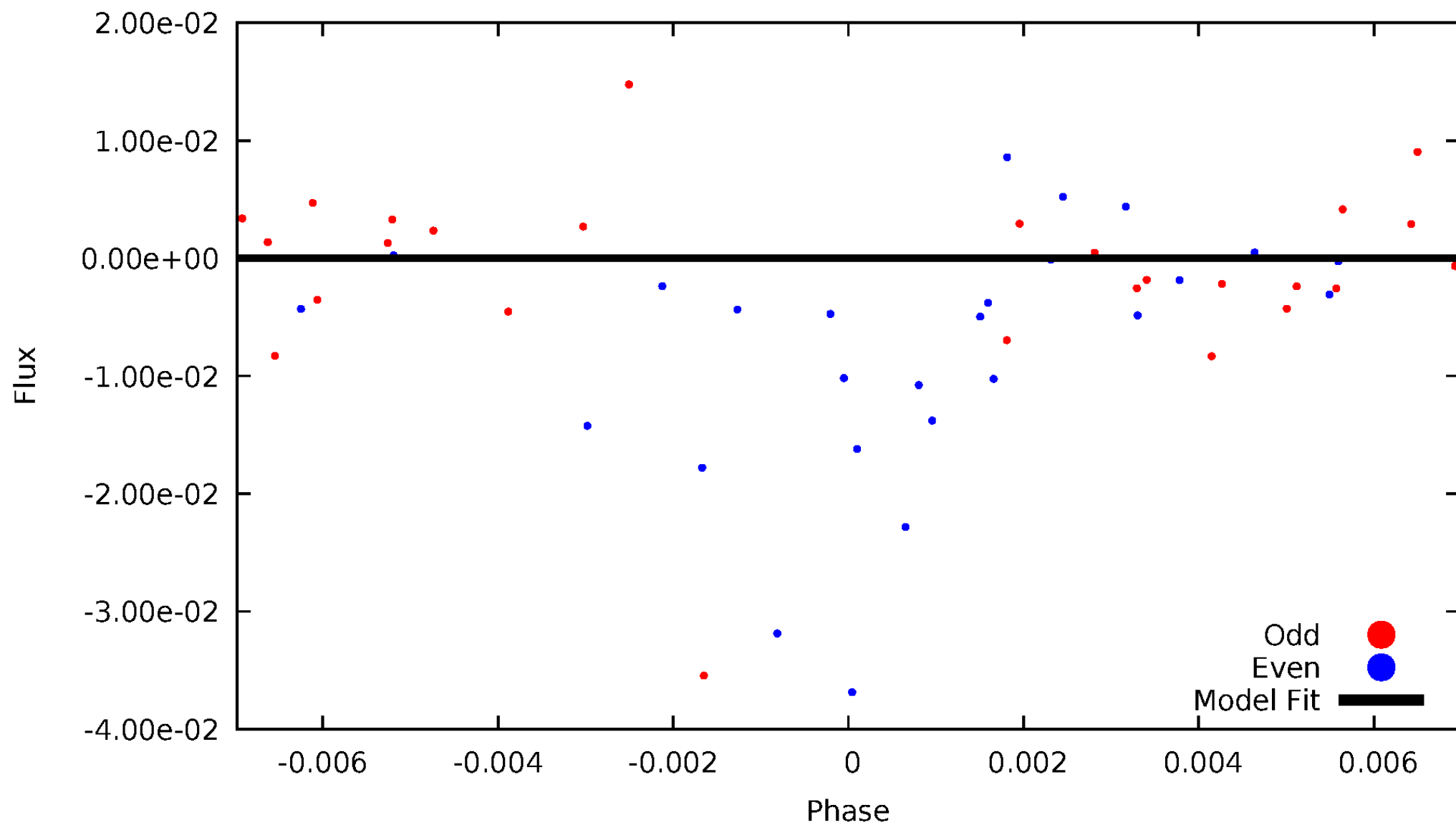


TCE 006382916-03



# DV Odd/Even

TCE 006382916-03





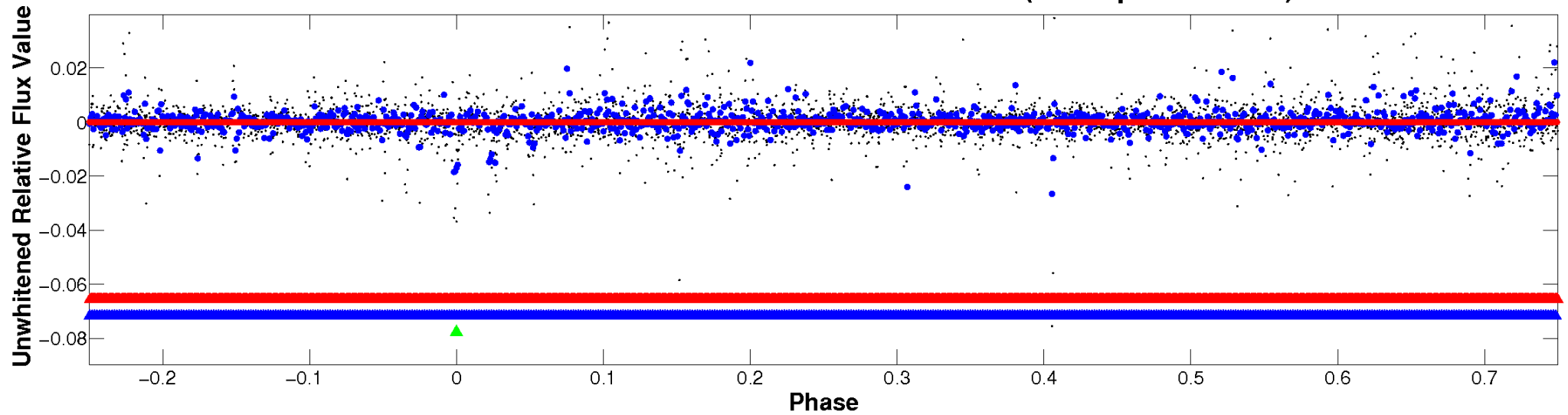


ALT Odd/Even

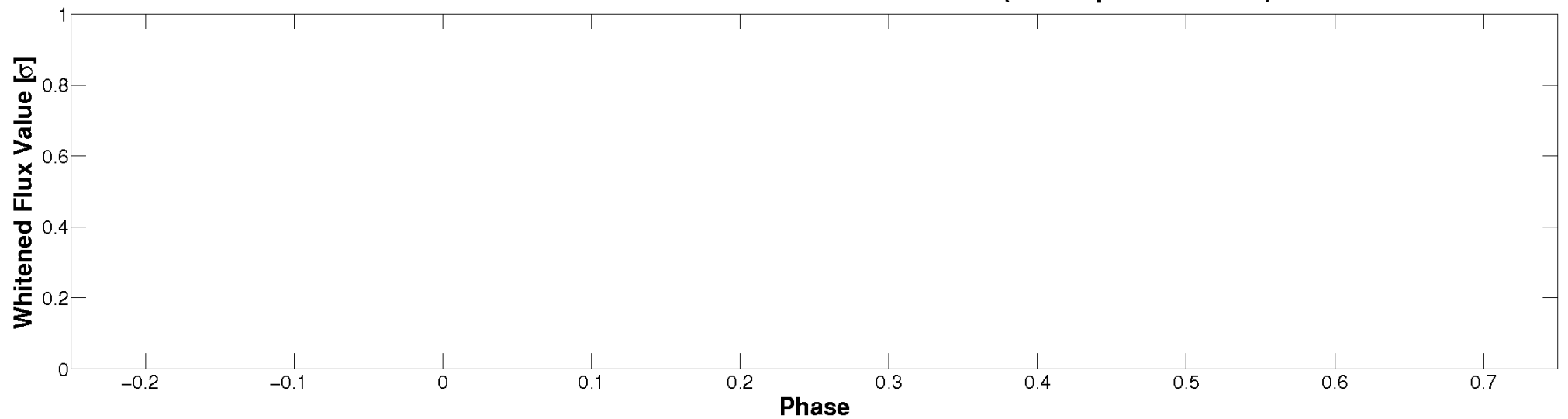
This plot does not exist for this TCE.

# Non-Whitened Vs. Whitened Light Curve

**Planet 3 : Phased Unwhitened Flux Time Series (TPS Epoch/Period)**

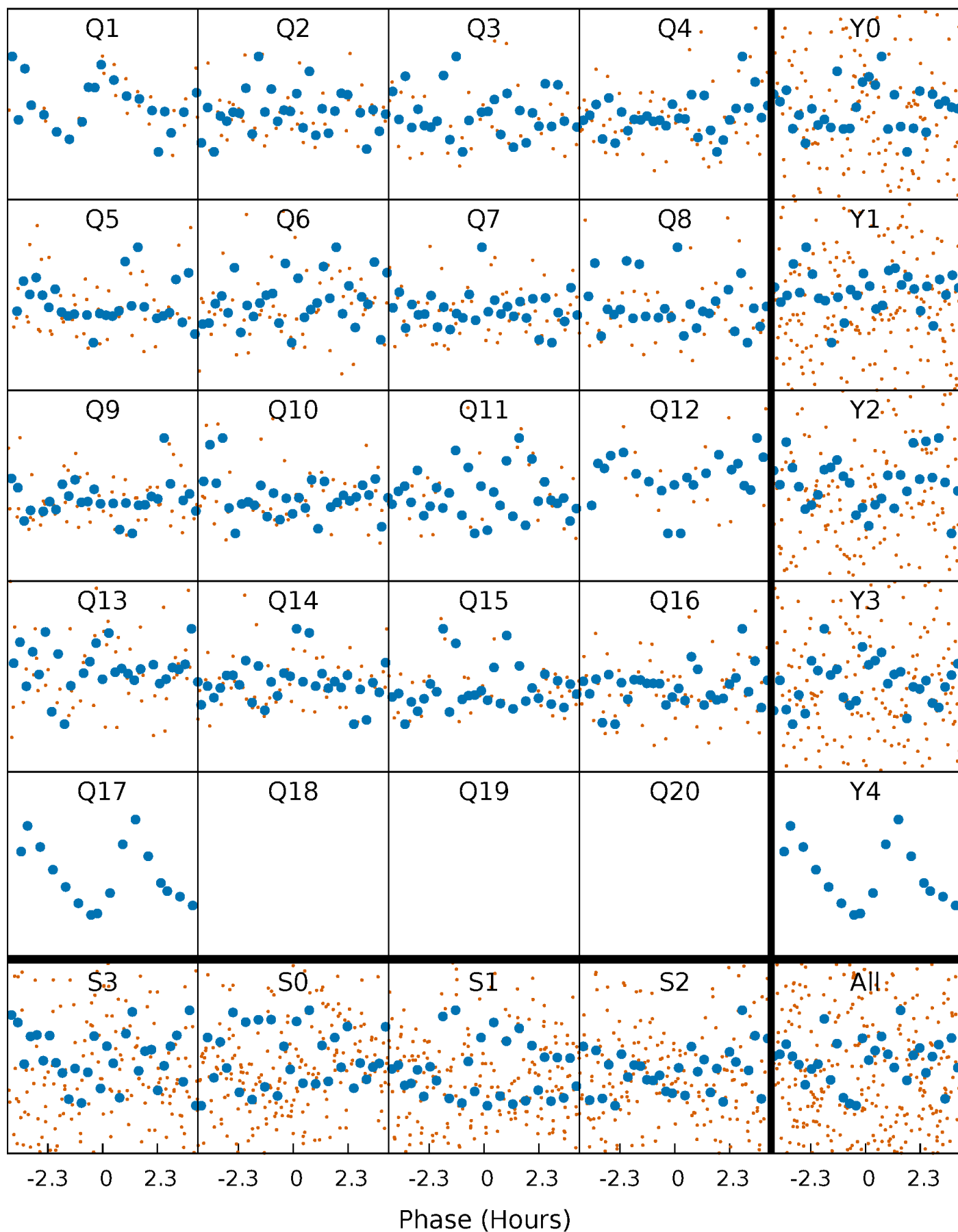


**Planet 3 : Phased Whitened Flux Time Series (TPS Epoch/Period)**



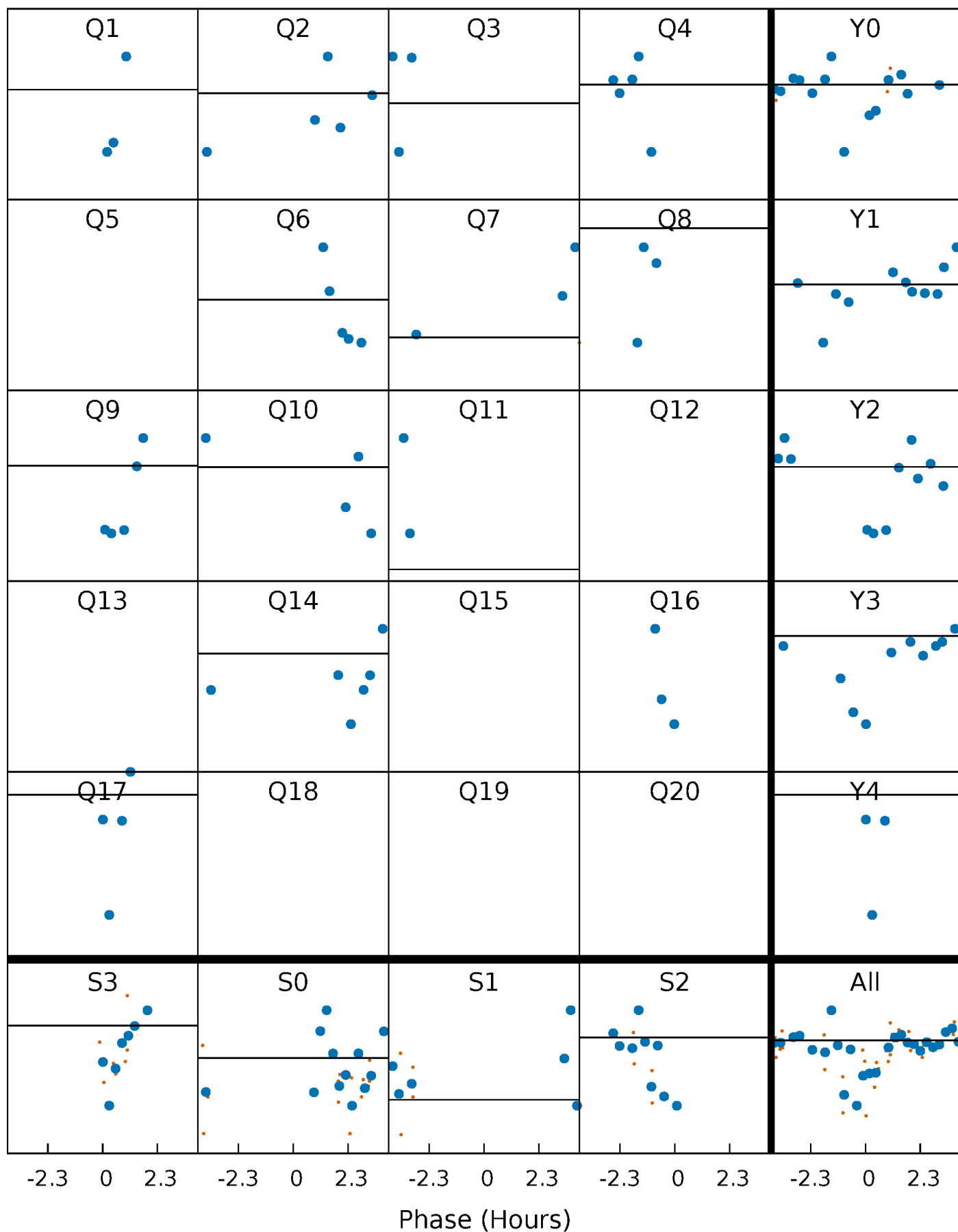
# PDC Quarter-Phased Transit Curves

TCE 006382916-03   P= 23.890364 Days    $T_0=139.009112$  (BKJD)



# DV Quarter-Phased Transit Curves

TCE 006382916-03 P= 23.890364 Days  $T_0=139.009112$  (BKJD)



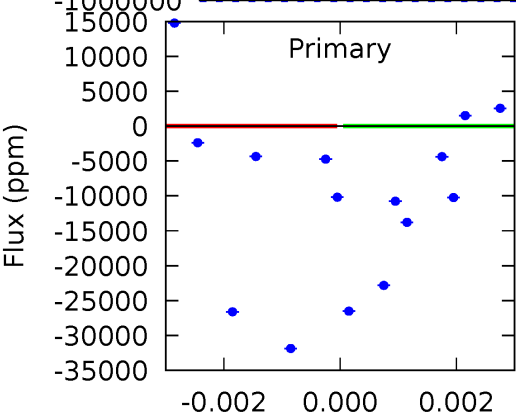
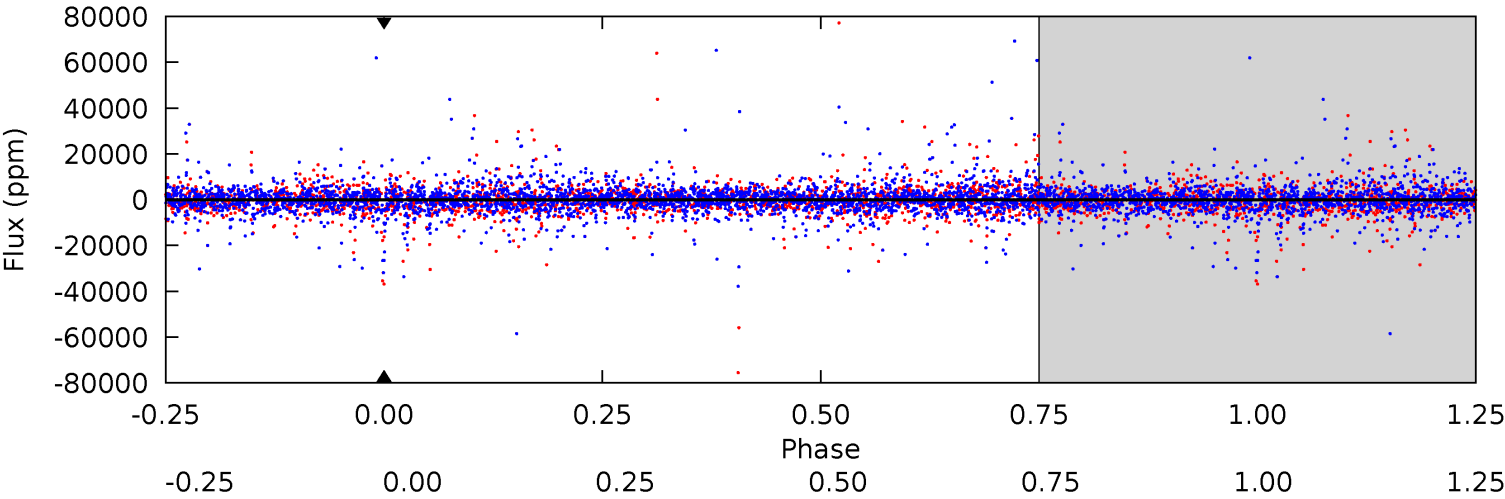


This plot does not exist for this TCE.

# DV Model-Shift Uniqueness Test

006382916-03, P = 23.890364 Days, E = 115.118748 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

This plot does not exist for this TCE.

### Stellar Parameters For KIC 006382916

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$6548^{+148}_{-181}$	$4.146^{+0.167}_{-0.185}$	$0.040^{+0.250}_{-0.350}$	$1.621^{+0.494}_{-0.359}$	$1.340^{+0.188}_{-0.209}$	$0.443^{+0.442}_{-0.224}$
	+2%/-3%	+4%/-4%	+625%/-875%	+30%/-22%	+14%/-16%	+100%/-50%
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 006382916-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	$A_{obs}$
DV	$0 \pm 1000000$	$12.05^{+13.73}_{-8.56}$	$1214^{+88}_{-76}$	$4277^{+31231}_{-30704}$	$73^{+26329}_{-17024}$
Alt.	N/A	N/A	N/A	N/A	N/A

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

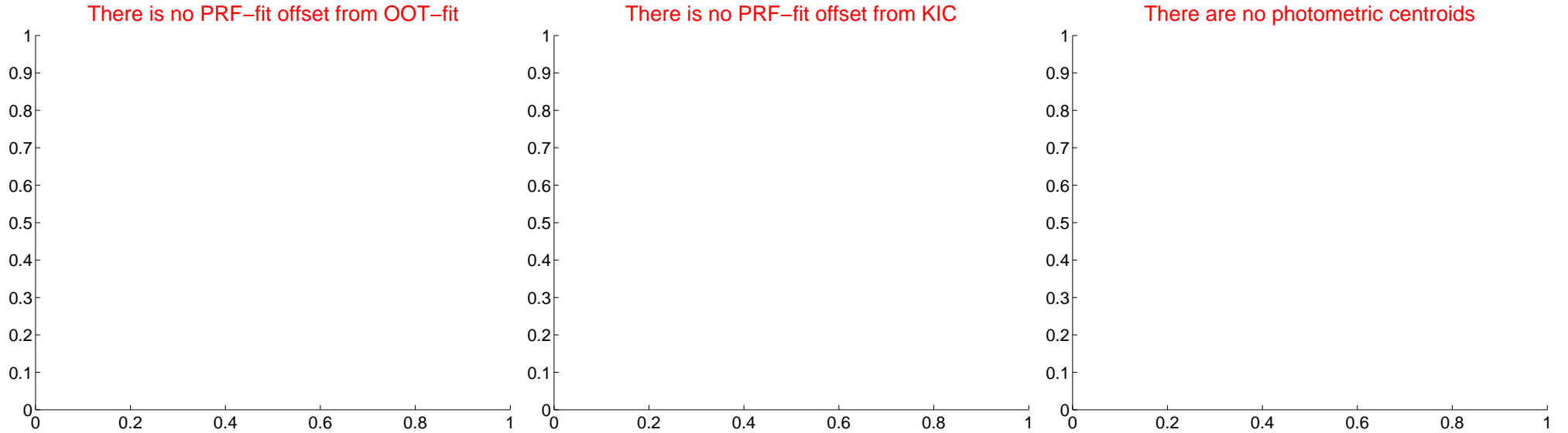
## DV Centroid Data

Supplemental centroid analysis for 006382916-03. **Kepler magnitude: 10.74.** Transit SNR -1.00

**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	—	—	—	—



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.



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.



folded centroid time series figure for this object.



UKIRT Image

Declination

