

# KIC 006268890

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
006268890-01	OBS	No	2.331678	132.756277	0.0	1.246	21.4	0.0	3.99	7474	0.04	23726.86
006268890-02	OBS	No	2.331505	132.312878	609.2	8.192	19.8	12.4	3.99	7474	11.02	23729.20
006268890-03	OBS	No	0.582872	131.885100	919.5	5.045	15.5	23.0	3.99	7474	12.11	0.00

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006268890-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
006268890-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED
006268890-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—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.

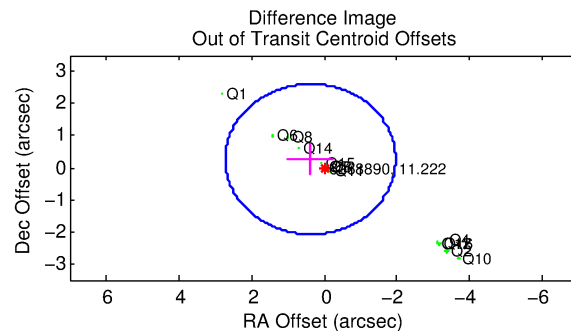
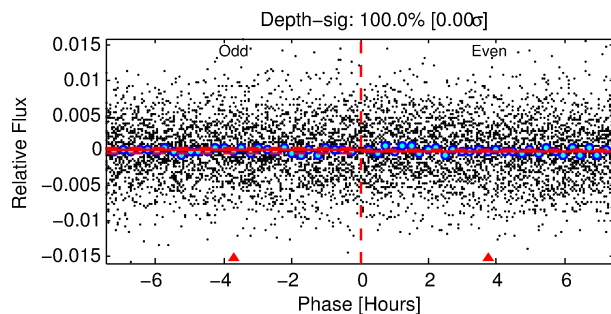
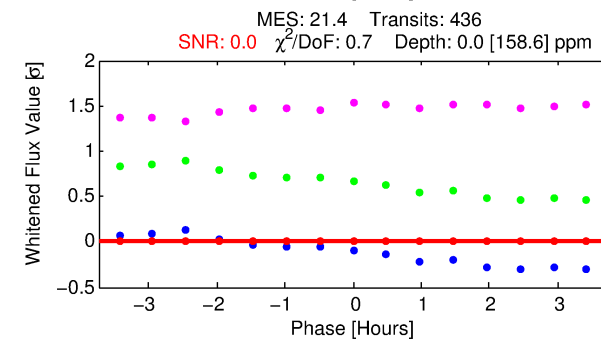
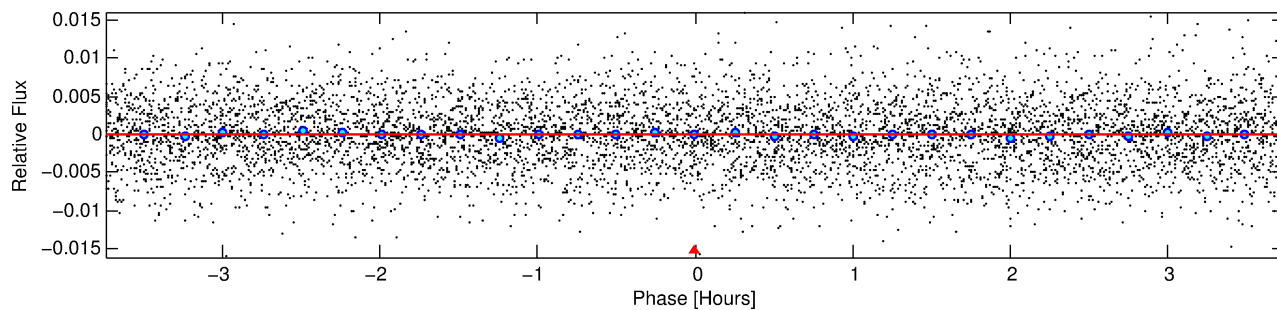
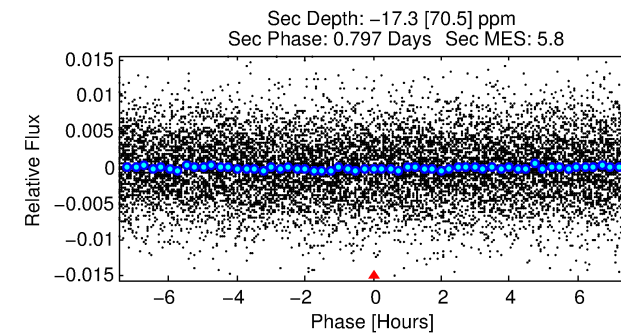
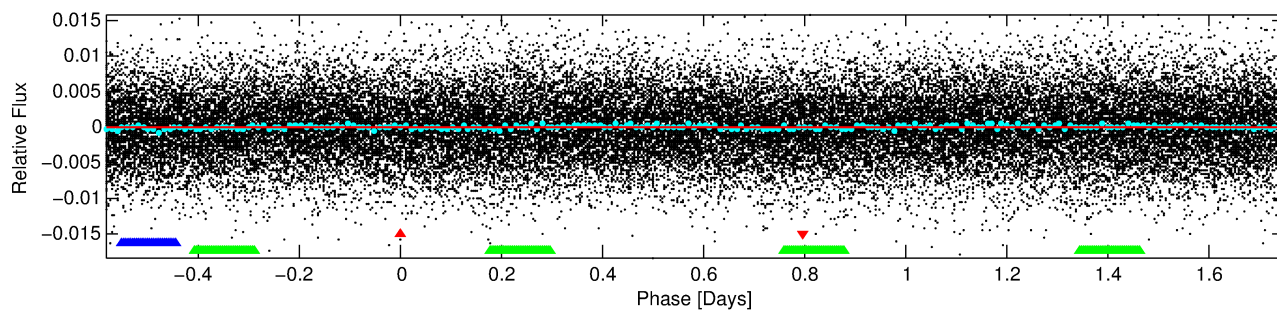
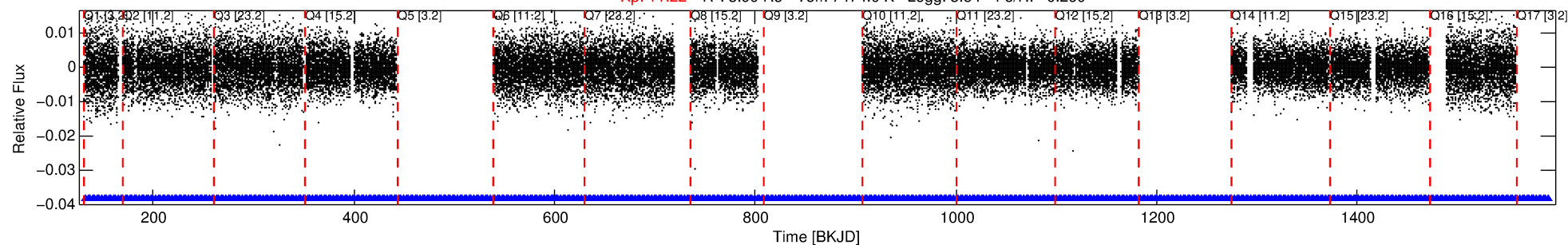
Ephemeris Match Information For 006268890-01

No Significant Match Found

# DV One-Page Summary

KIC: 6268890 Candidate: 1 of 3 Period: 2.332 d

Kp: 11.22 R\*: 3.99 Rs Teff: 7474.0 K Logg: 3.54 Fe/H: -0.260



## DV Fit Results:

Period = 2.33168 [3.04427] d  
Epoch = 132.7563 [471.0155] BKJD  
Rp/R\* = 0.0001 [0.8432]  
a/R\* = 9.83 [16298.62]  
b = 0.73 [2584.37]  
Seff = 23726.86 [47474.96]  
Teq = 3165 [1583] K  
Rp = 0.04 [366.78] Re  
a = 0.0433 [0.0454] AU  
Ag = N/A  
Teffp = N/A

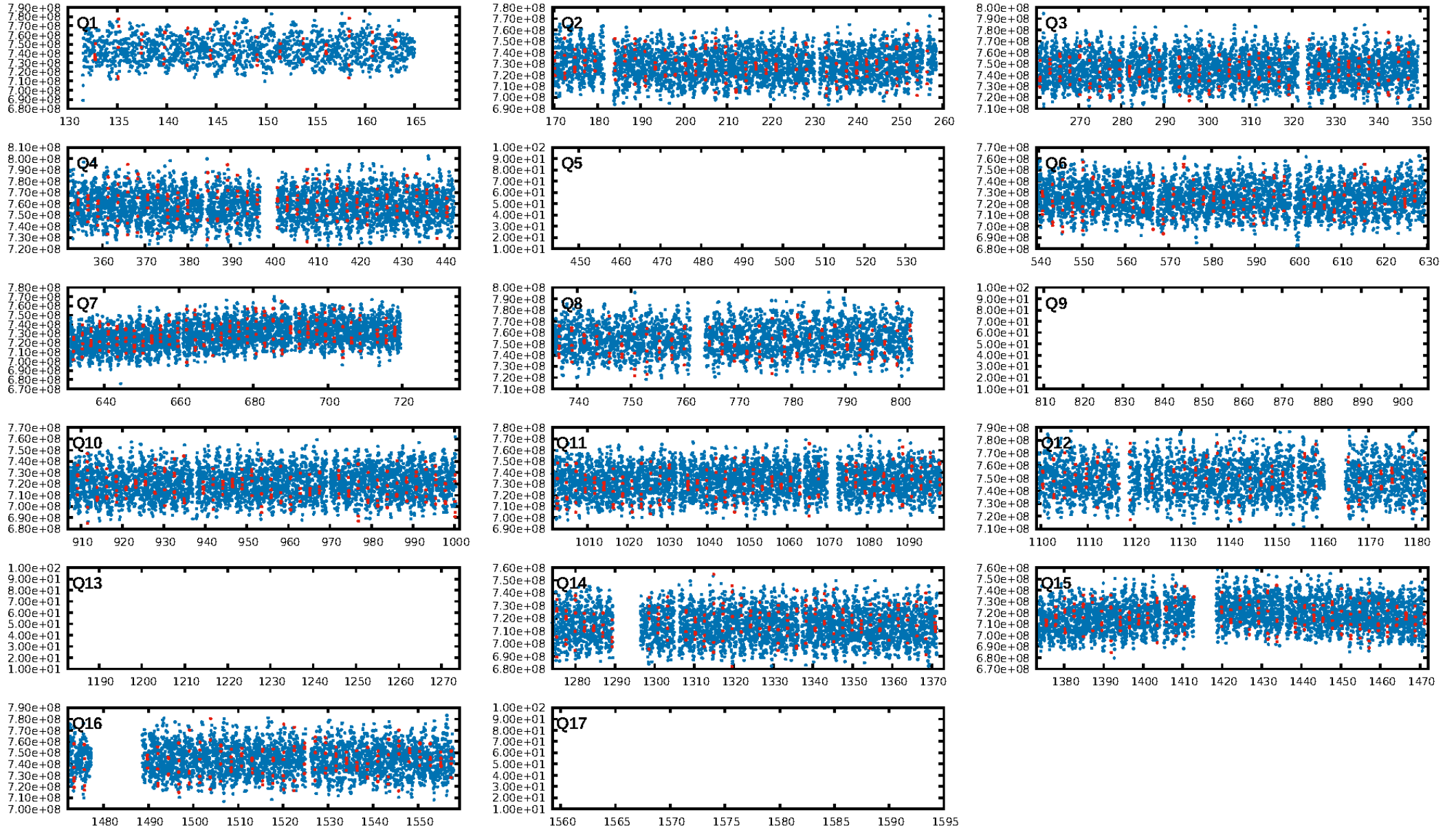
## DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [422/422]  
GhostDiagnostic-chr: N/A  
Centroid-sig: N/A  
Centroid-so: N/A  
OotOffset-rm: 0.461 arcsec [0.59σ]  
KicOffset-rm: 0.180 arcsec [0.25σ]  
OotOffset-st: 4/4/4/1 [13]  
KicOffset-st: 4/4/4/1 [13]  
DiffImageQuality-fgm: 0.38 [5/13]  
DiffImageOverlap-fno: 0.00 [0/13]

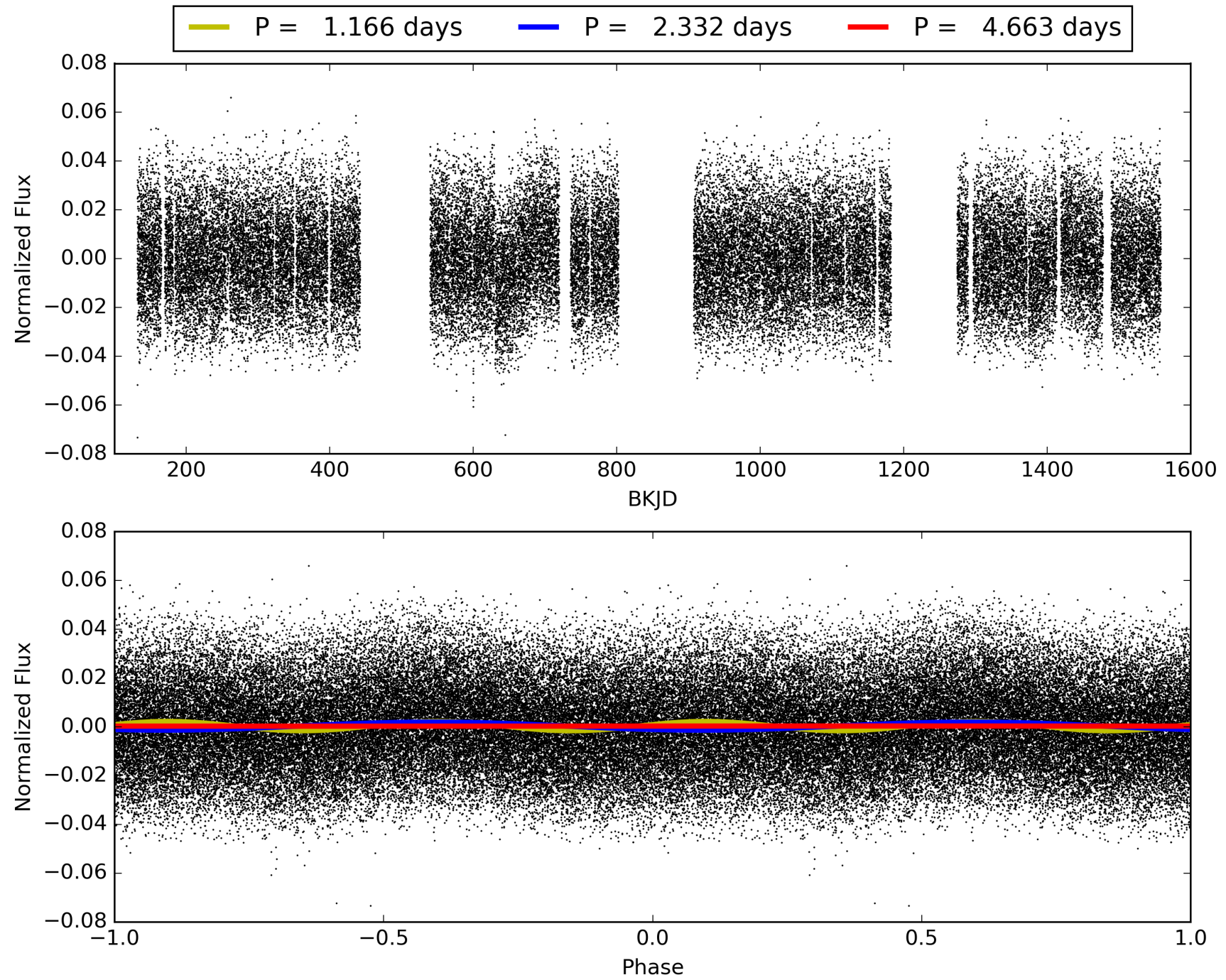
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:54:27 Z

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

# TCE 006268890-01, PDC Light Curves



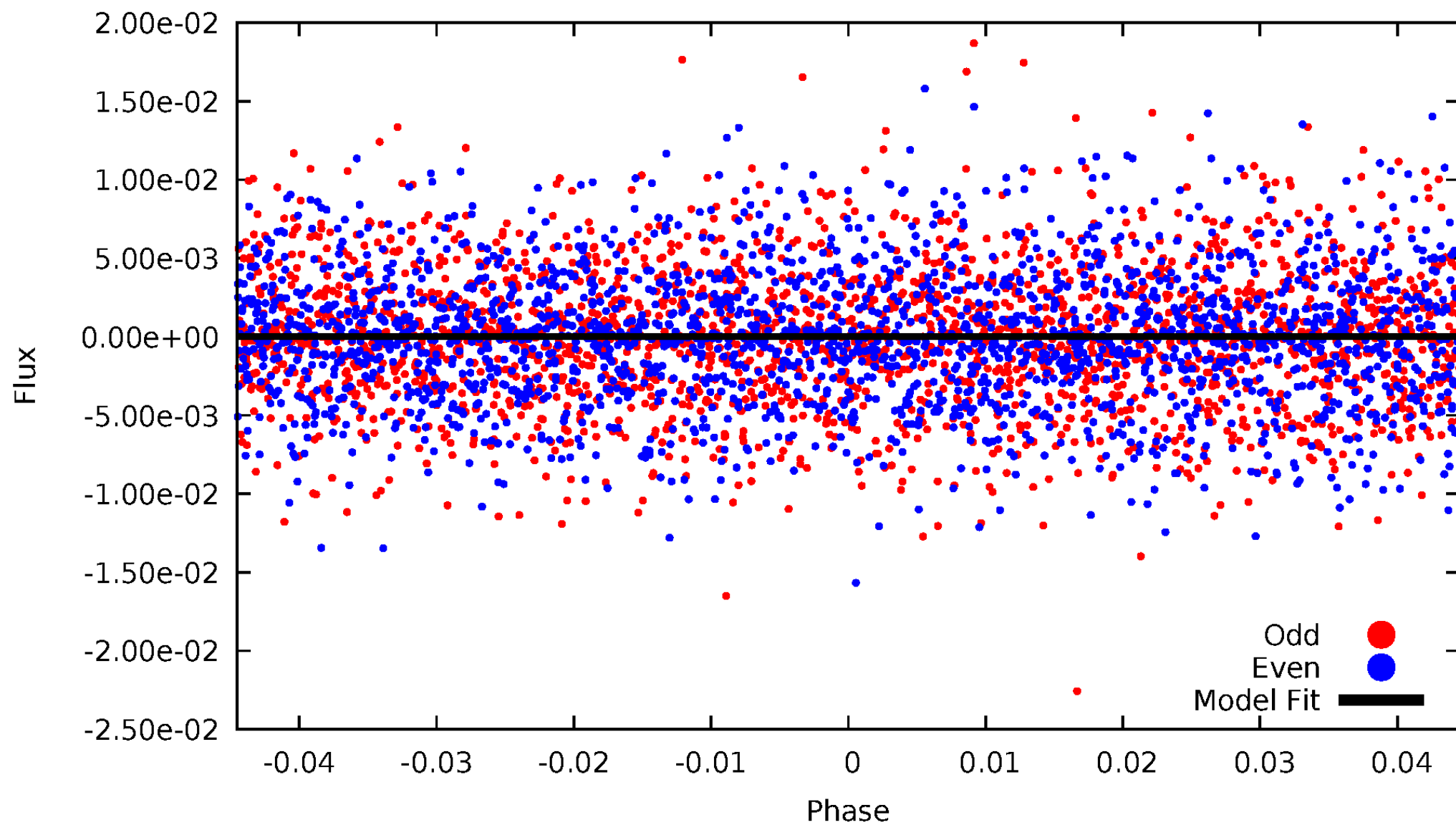
TCE 006268890-01





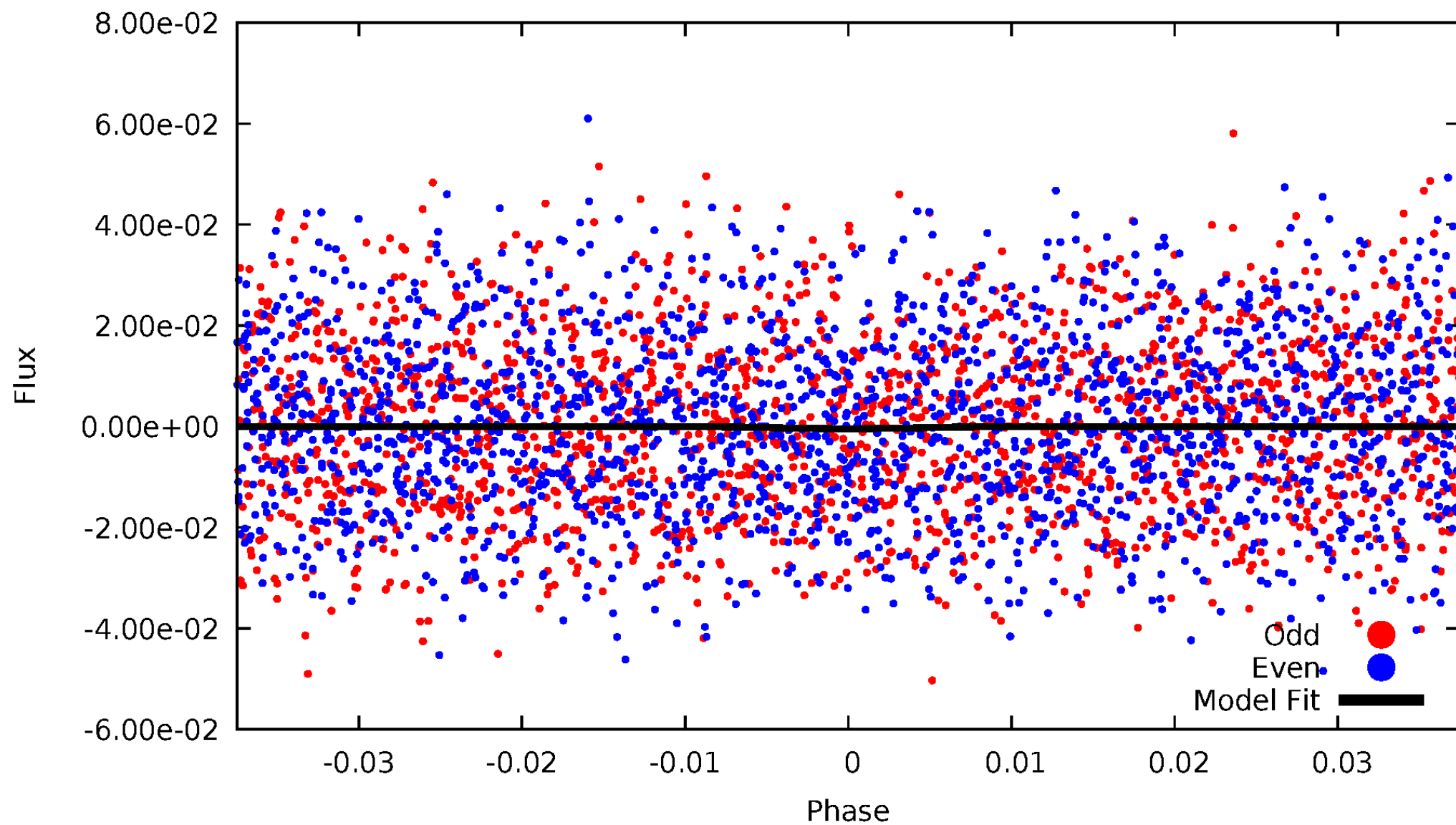
# DV Odd/Even

TCE 006268890-01



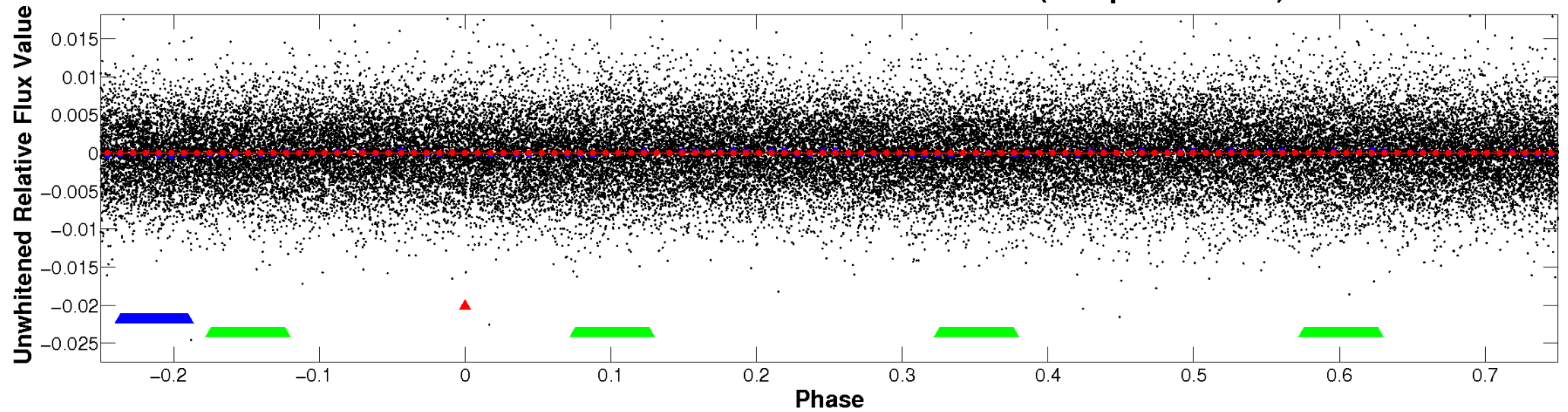
# ALT Odd/Even

TCE 006268890-01

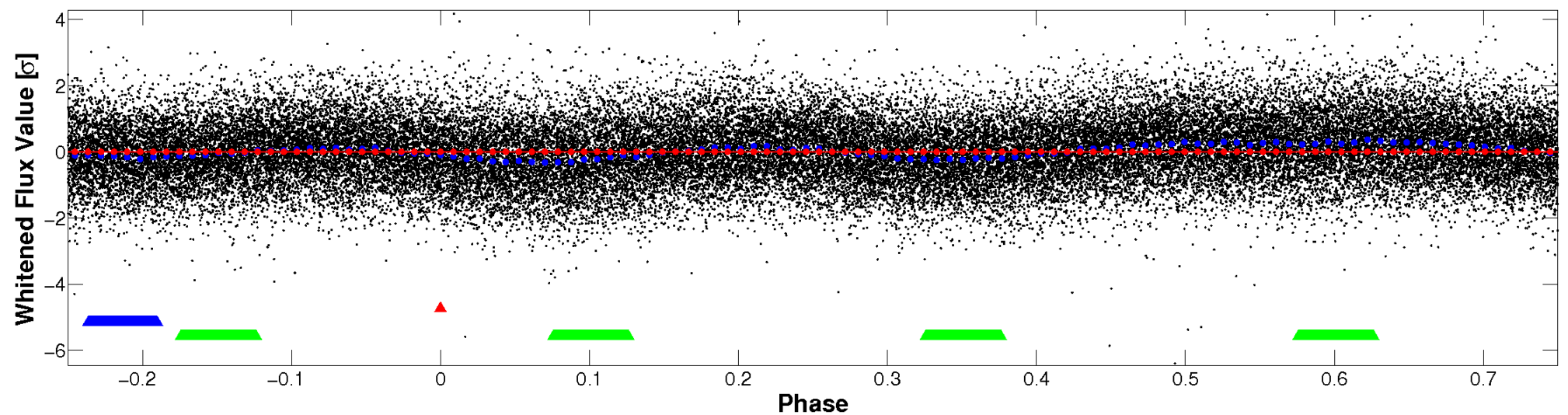


# Non-Whitened Vs. Whitened Light Curve

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

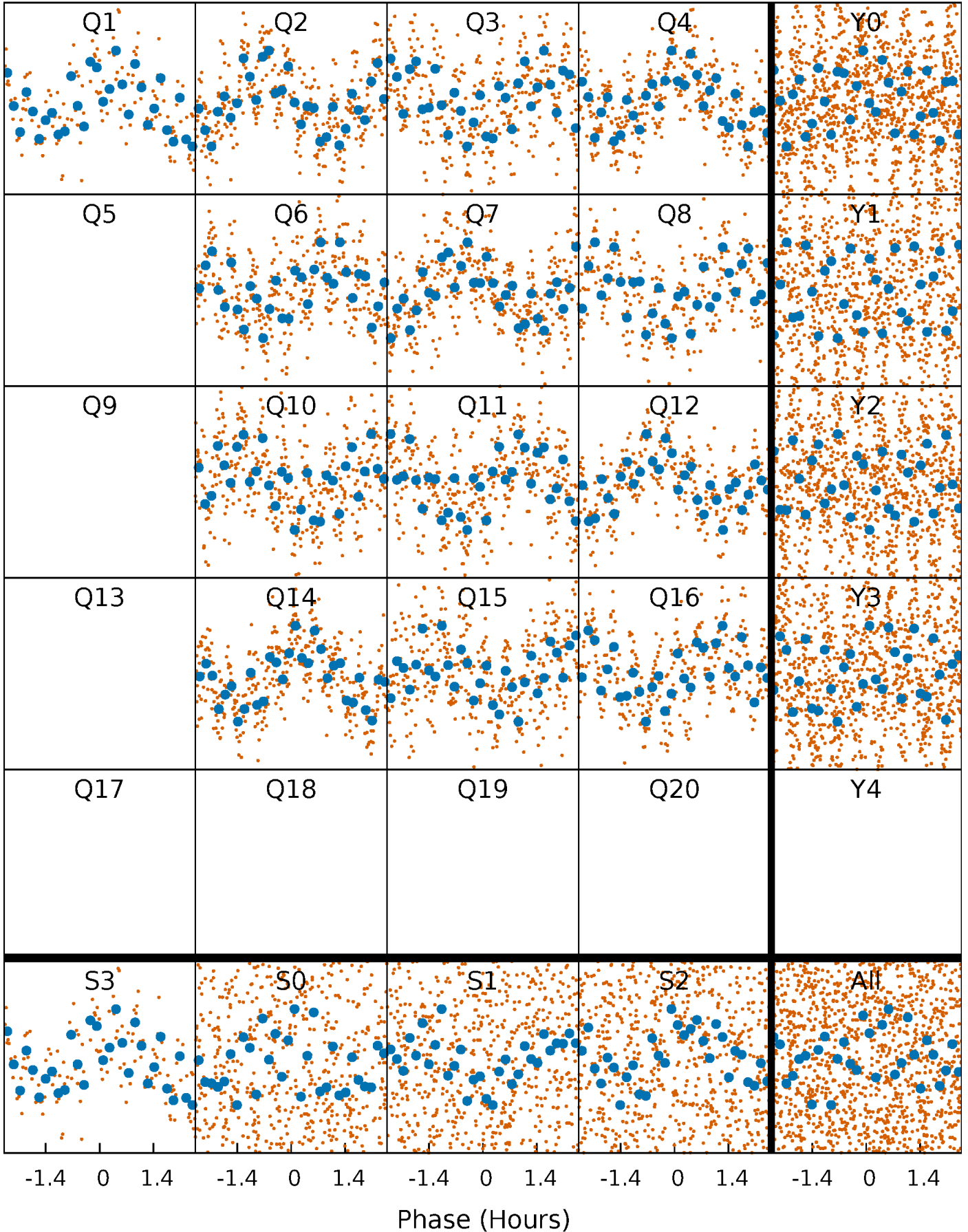


**Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)**



# PDC Quarter-Phased Transit Curves

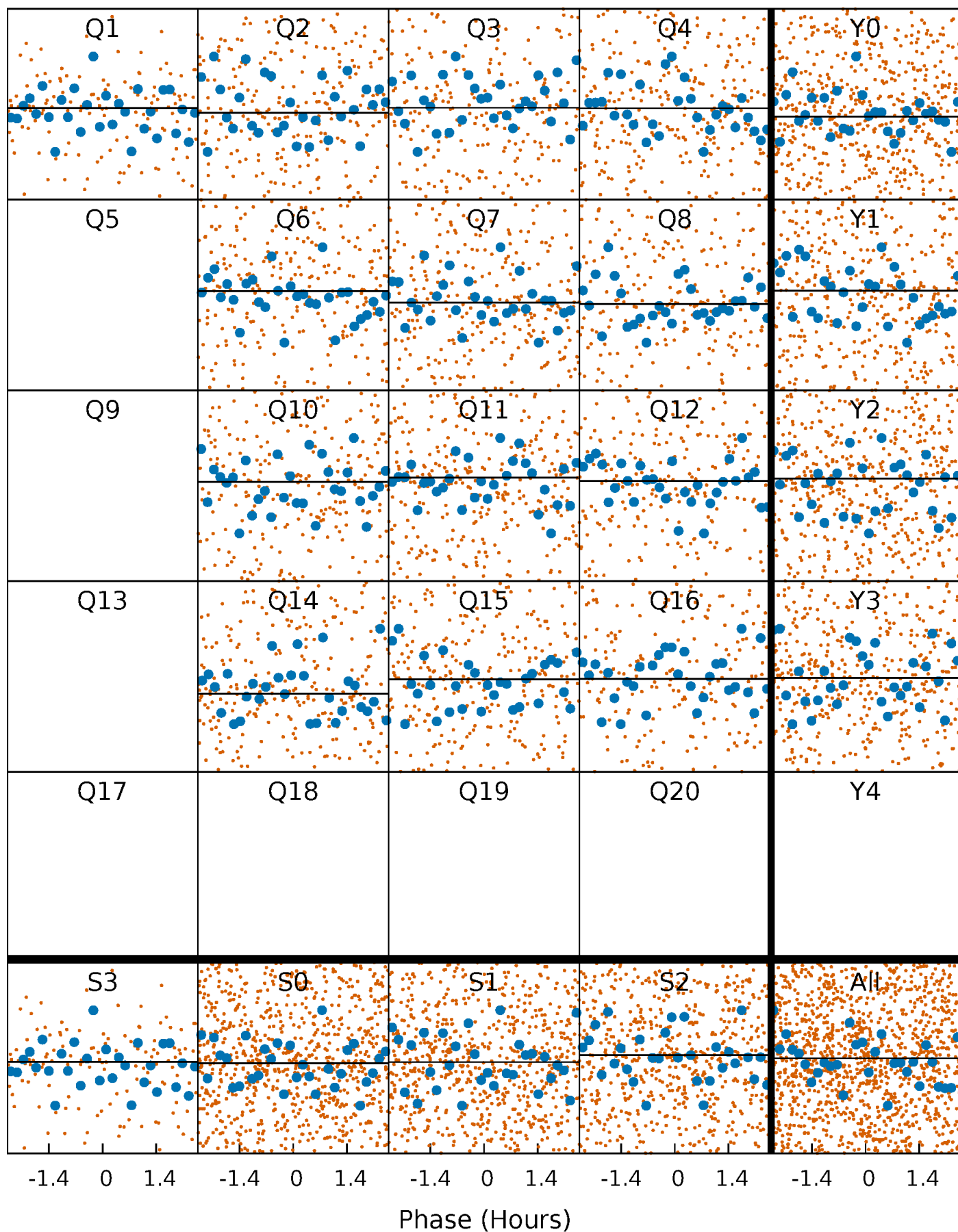
TCE 006268890-01   P= 2.331678 Days    $T_0=132.756277$  (BKJD)





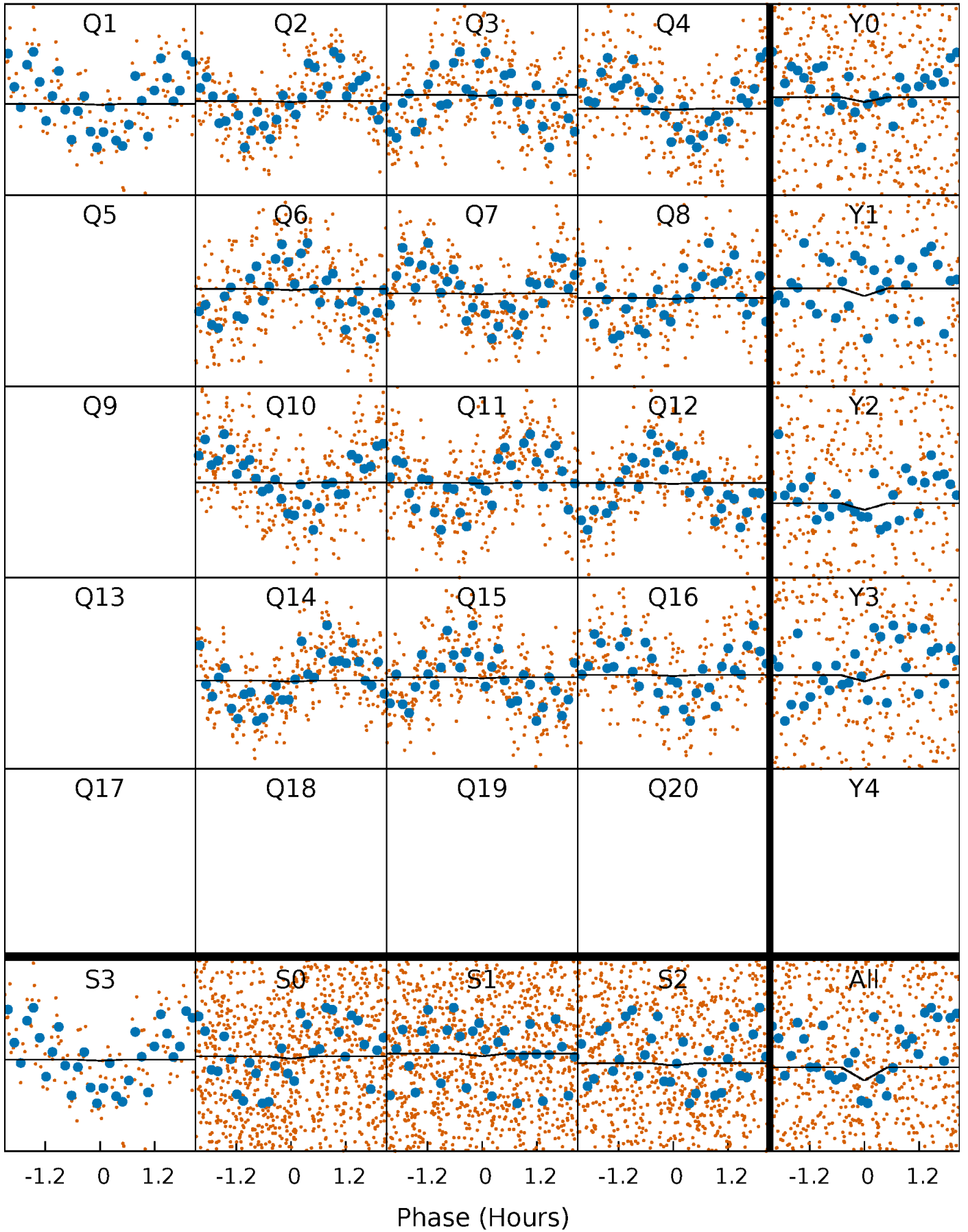
# DV Quarter-Phased Transit Curves

TCE 006268890-01 P= 2.331678 Days  $T_0=132.756277$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

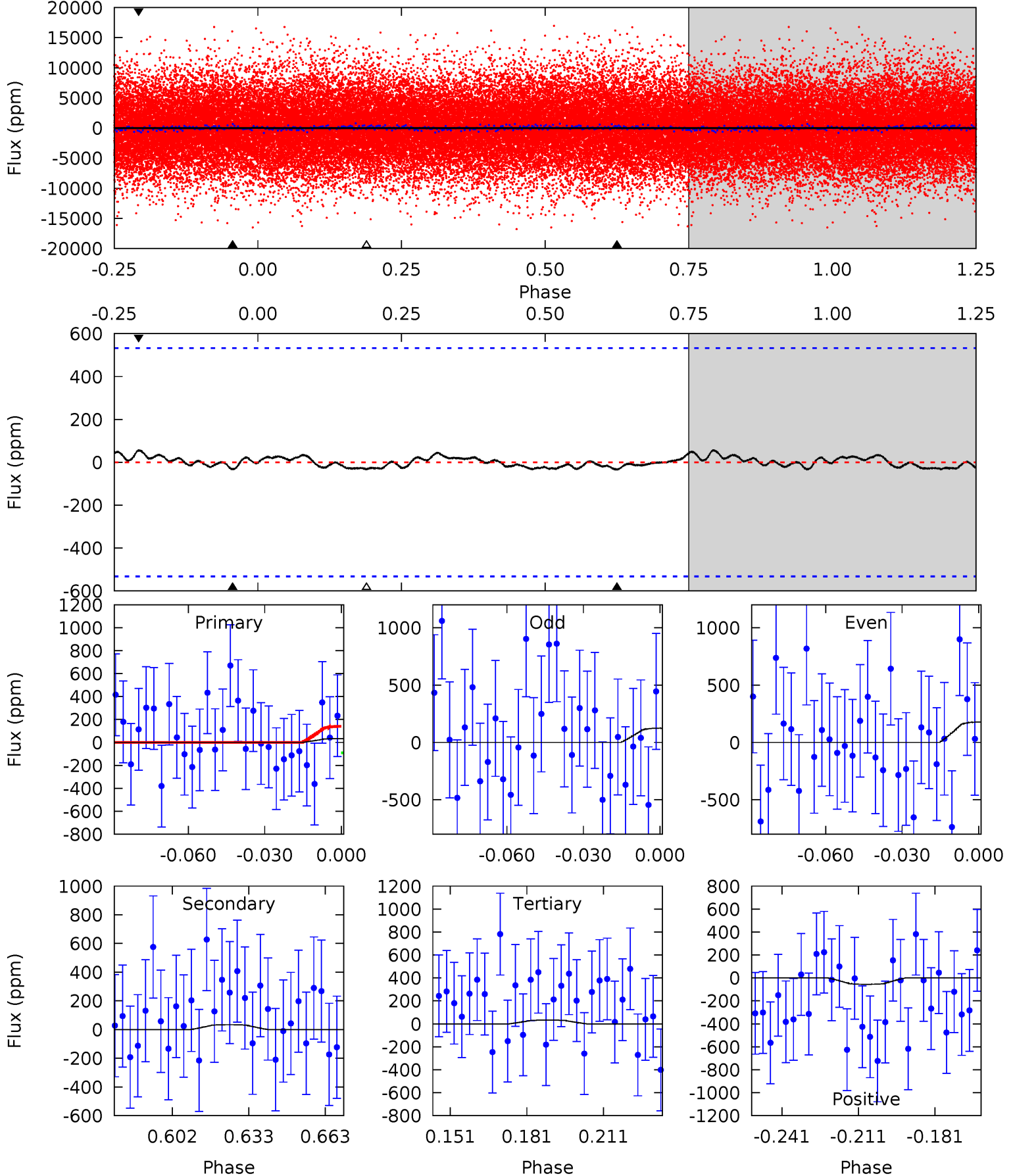
TCE 006268890-01 P= 2.331466 Days  $T_0=132.695577$  (BKJD)



# DV Model-Shift Uniqueness Test

006268890-01, P = 2.331678 Days, E = 130.424599 Days

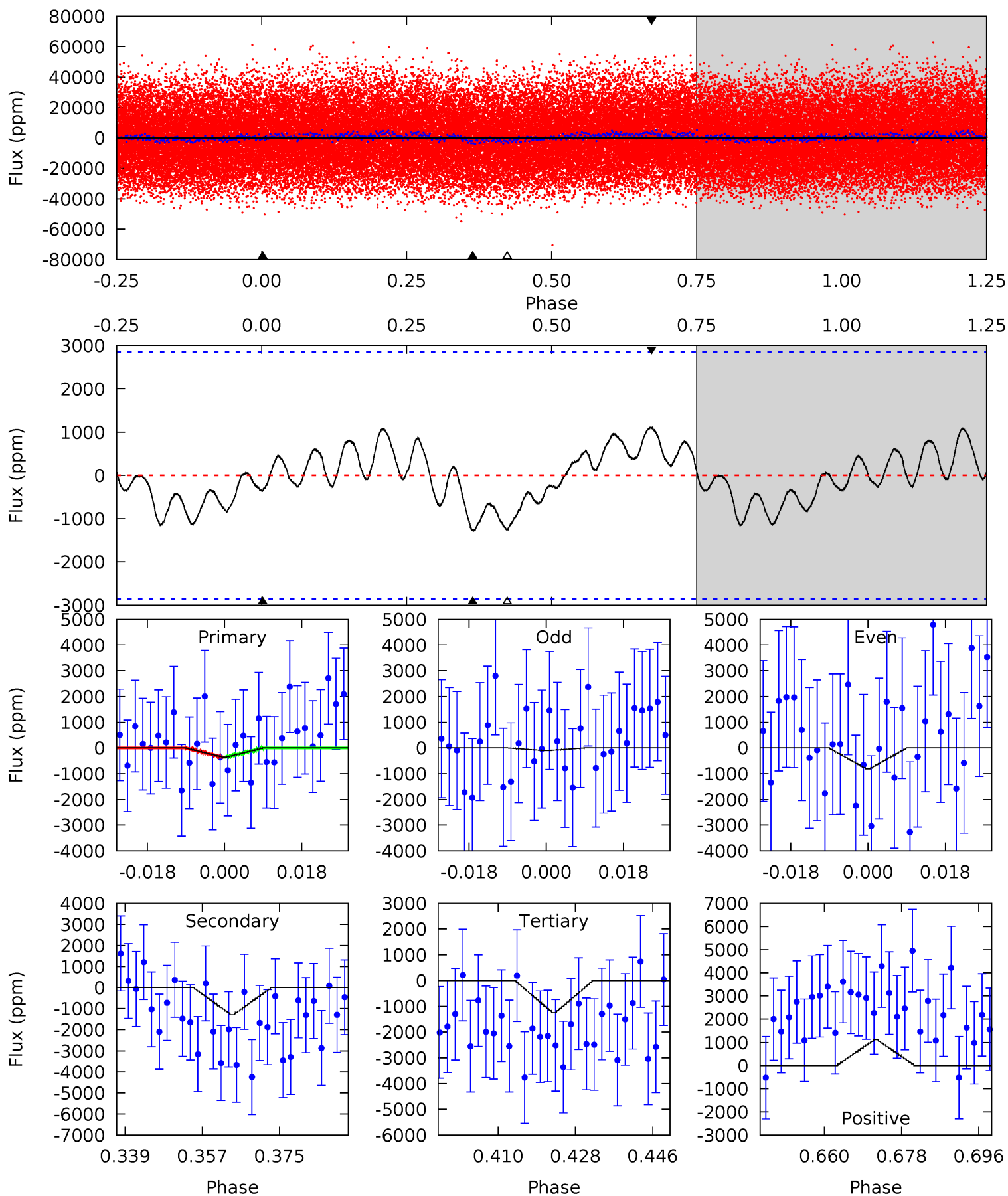
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.30	0.31	0.29	0.51	4.81	2.17	0.19	0.01	-0.21	0.01	-0.20	0.24	1.64	0.62	0.23



# Alt Model-Shift Uniqueness Test

006268890-01, P = 2.331466 Days, E = 130.364111 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
0.62	2.22	2.16	1.93	4.91	2.37	1.02	-1.54	-1.30	0.06	0.29	0.61	0.14	0.46	0.01





### Stellar Parameters For KIC 006268890

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R$ ( $R_{\odot}$ )	$M(M_{\odot})$	$p_{\star}$ ( $\text{g}\cdot\text{cm}^{-3}$ )
	$7474^{+235}_{-287}$	$3.535^{+0.585}_{-0.065}$	$-0.260^{+0.250}_{-0.300}$	$3.986^{+0.399}_{-2.262}$	$1.988^{+0.063}_{-0.571}$	$0.044^{+0.372}_{-0.009}$
	+3%/-4%	+17%/-2%	+96%/-115%	+10%/-57%	+3%/-29%	+841%/-20%
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 006268890-01 / KOI

Detrend	Depth (ppm)	$R_p$ ( $R_{\oplus}$ )	$T_{max}$ (K)	$T_{obs}$ (K)	$A_{obs}$
DV	$-34 \pm 111$	$206.39^{+262.87}_{-139.74}$	$3723^{+1778}_{-797}$	$-3489^{+512}_{-1139}$	$0.000^{+0.012}_{-0.003}$
Alt.	$-1286 \pm 580$	$218.51^{+280.77}_{-155.91}$	$3747^{+1586}_{-802}$	$-3321^{+6158}_{-1004}$	$0.032^{+0.396}_{-0.028}$

$T_{max}$  = 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

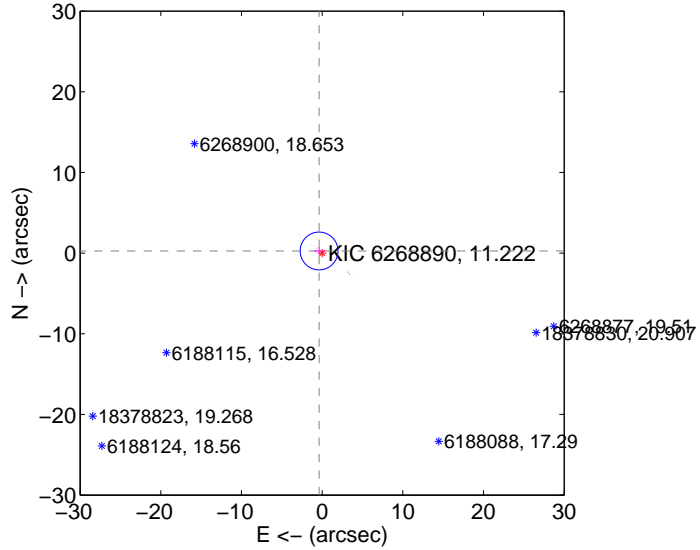
Supplemental centroid analysis for 006268890-01. **Kepler magnitude: 11.22.** Transit SNR 0.00

There are 5 quarters with good PRF difference image offsets

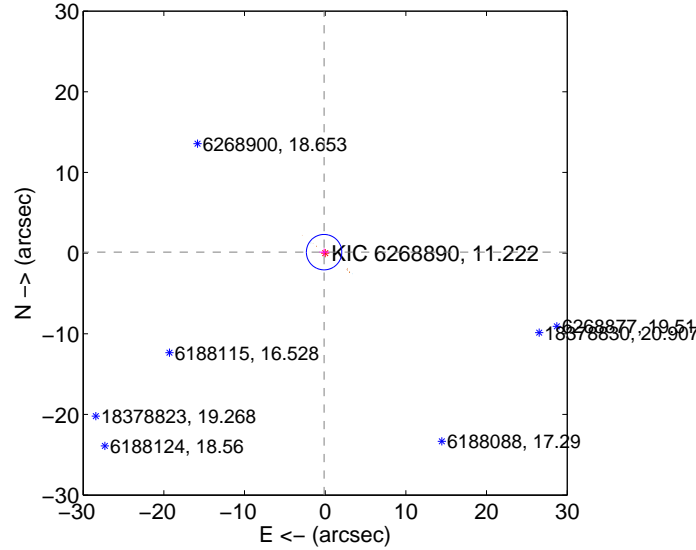
The direct PRF centroid is offset from the target star catalog position by about 0.50 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.461 \pm 0.781$	0.59	$0.380 \pm 0.623$	$0.262 \pm 0.478$
PRF-fit source offset from KIC position	$0.180 \pm 0.732$	0.25	$0.136 \pm 0.584$	$0.117 \pm 0.447$
photometric centroid source offset	—	—	—	—

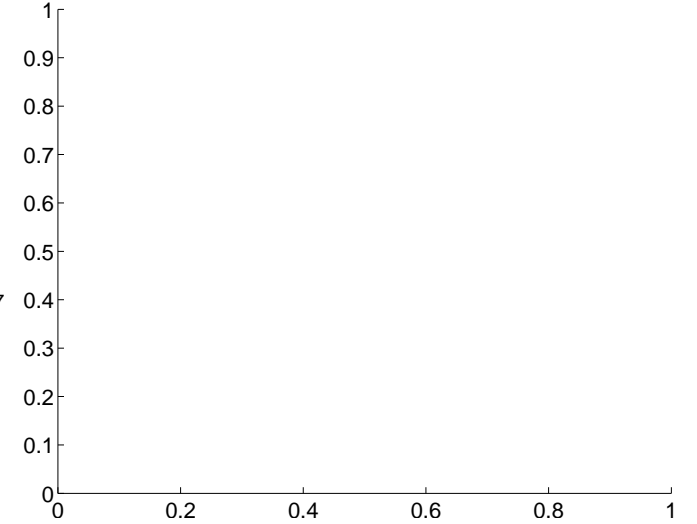
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

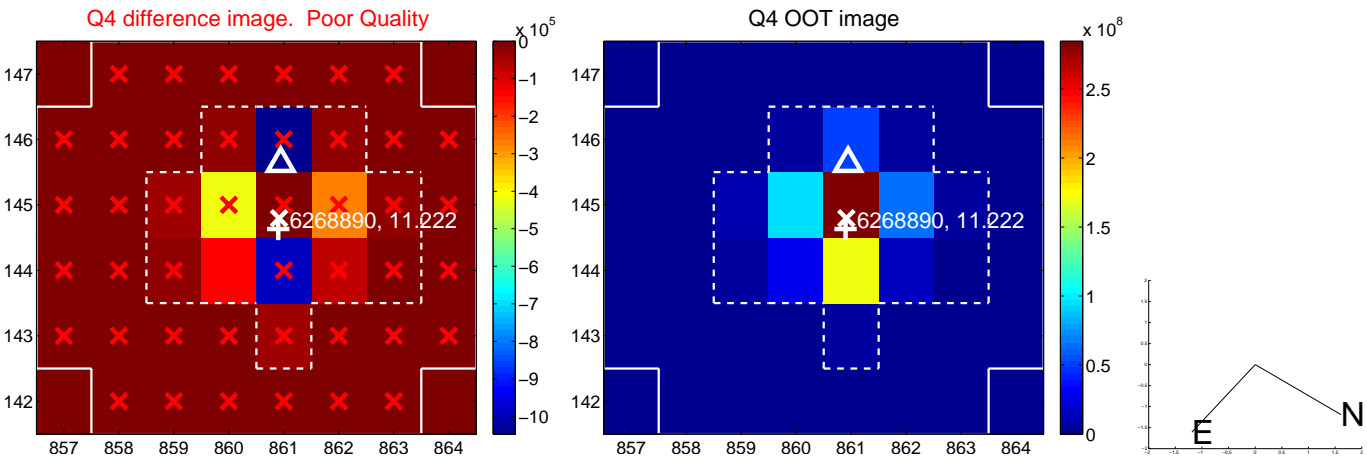
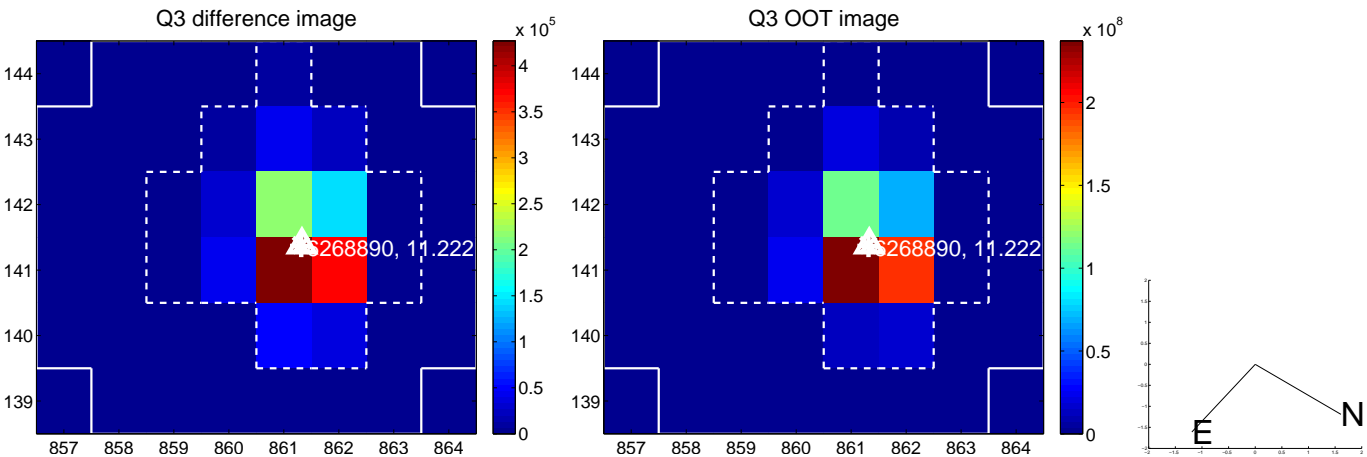
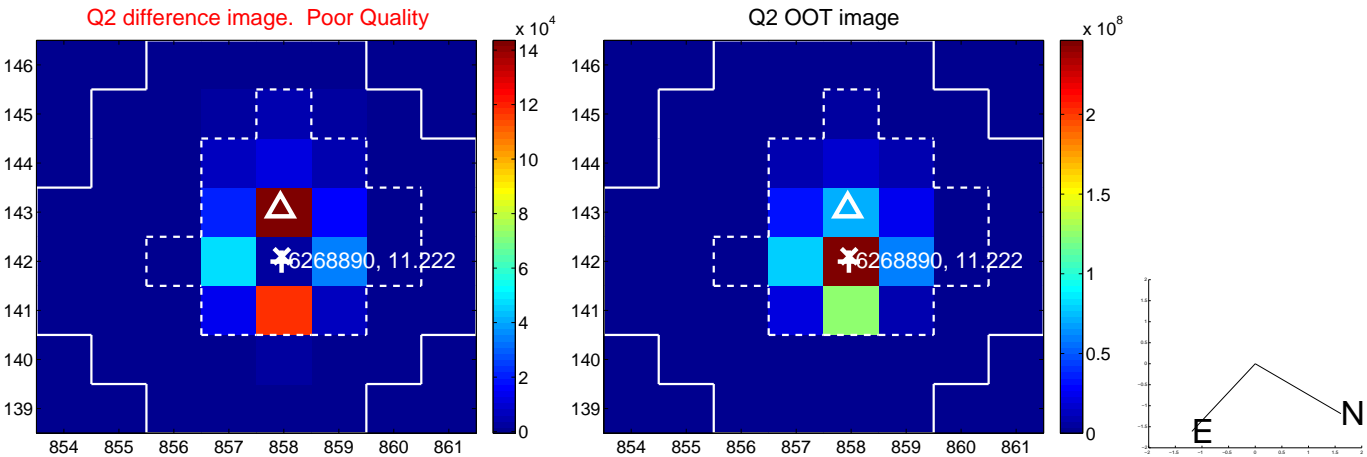
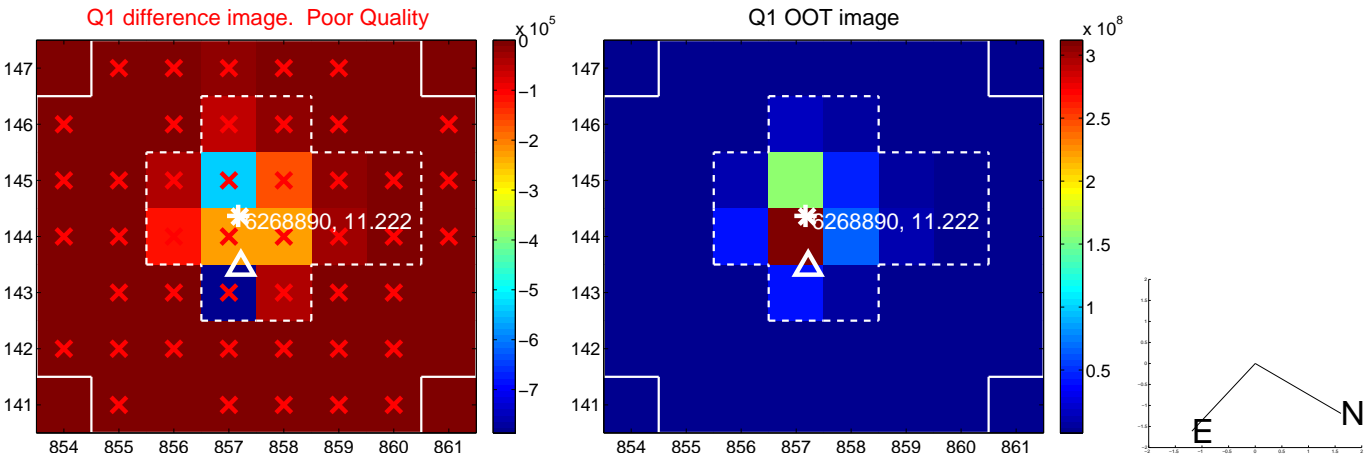


There are no photometric centroids

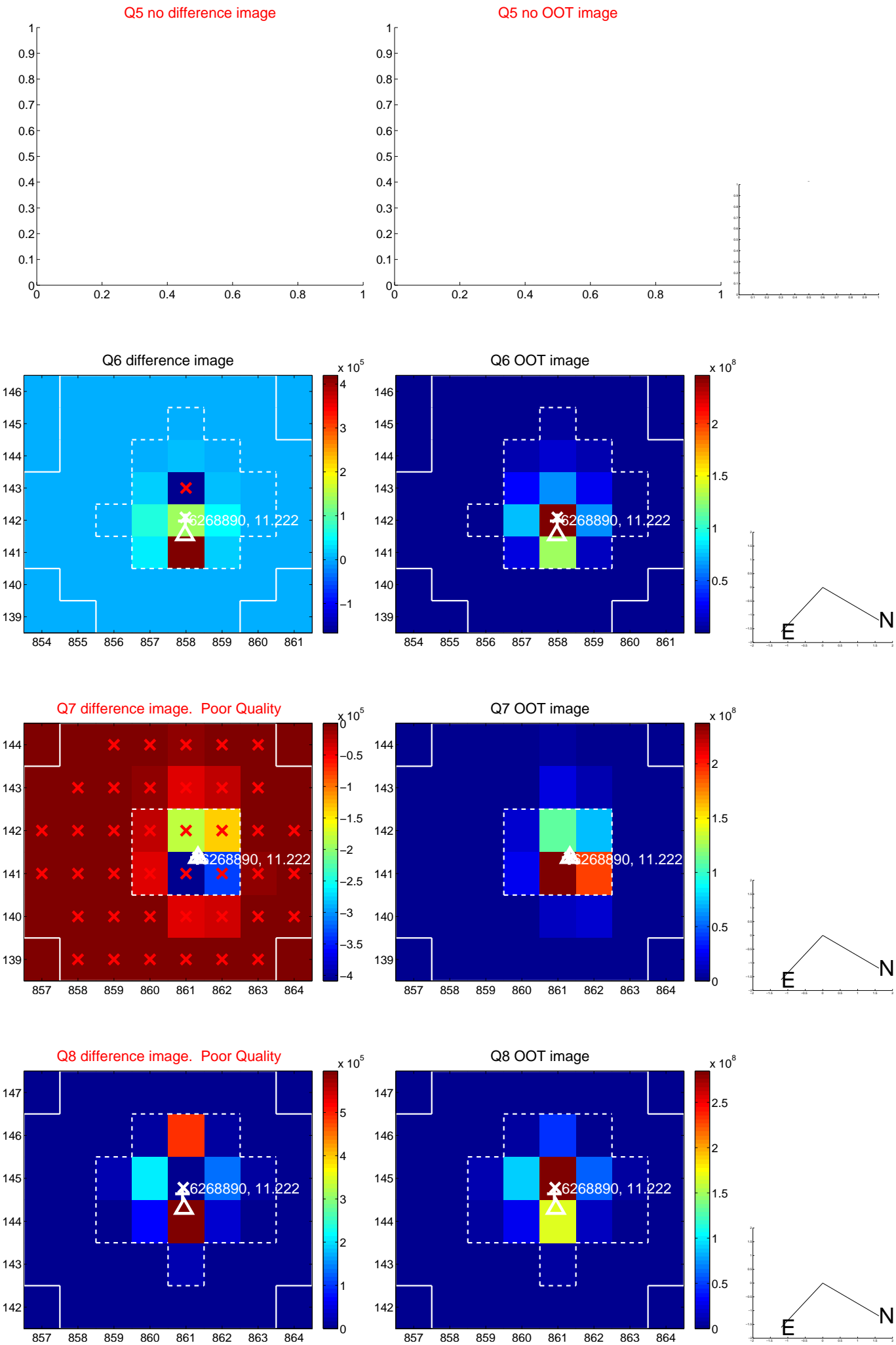


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

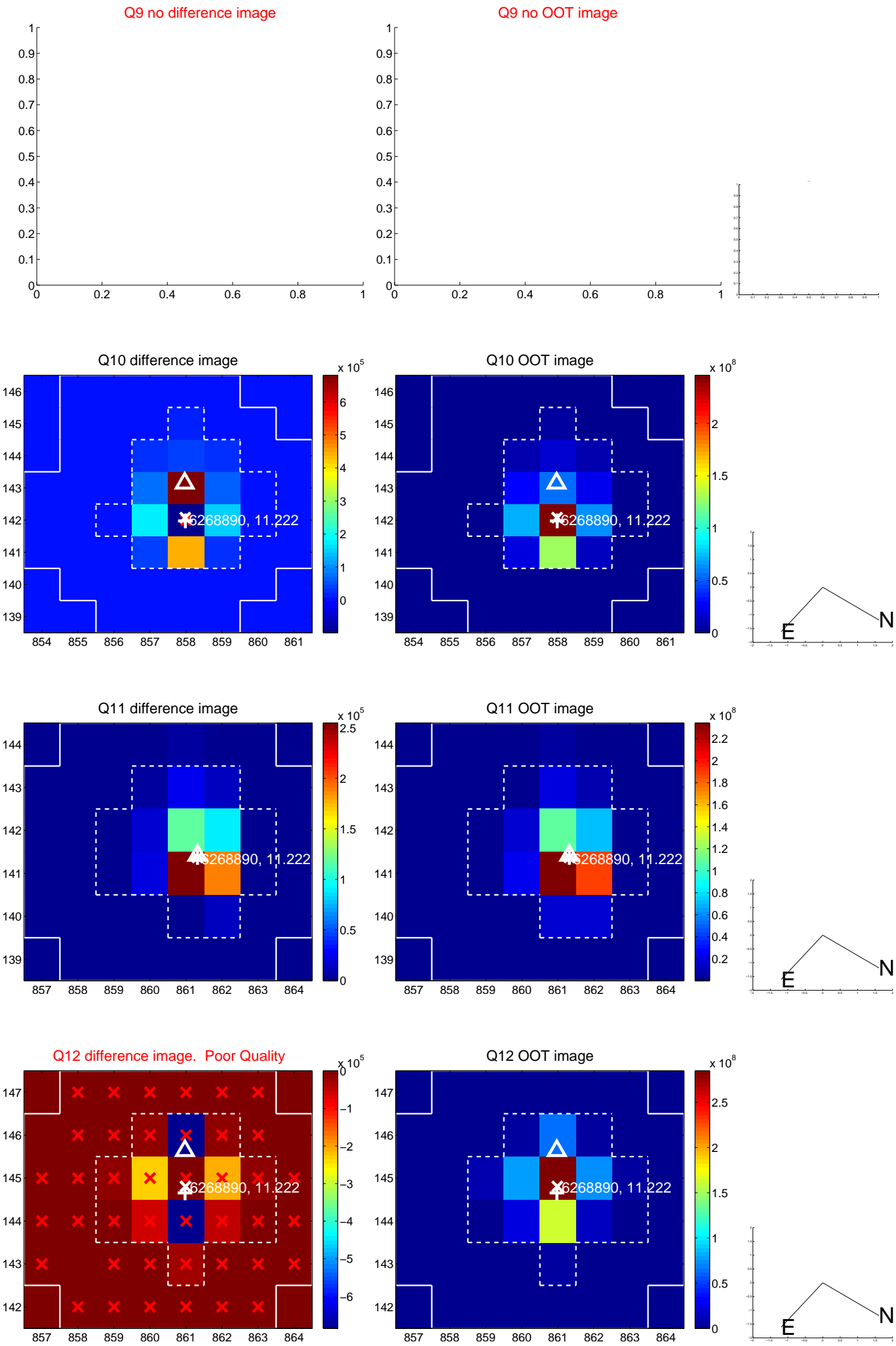


white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.

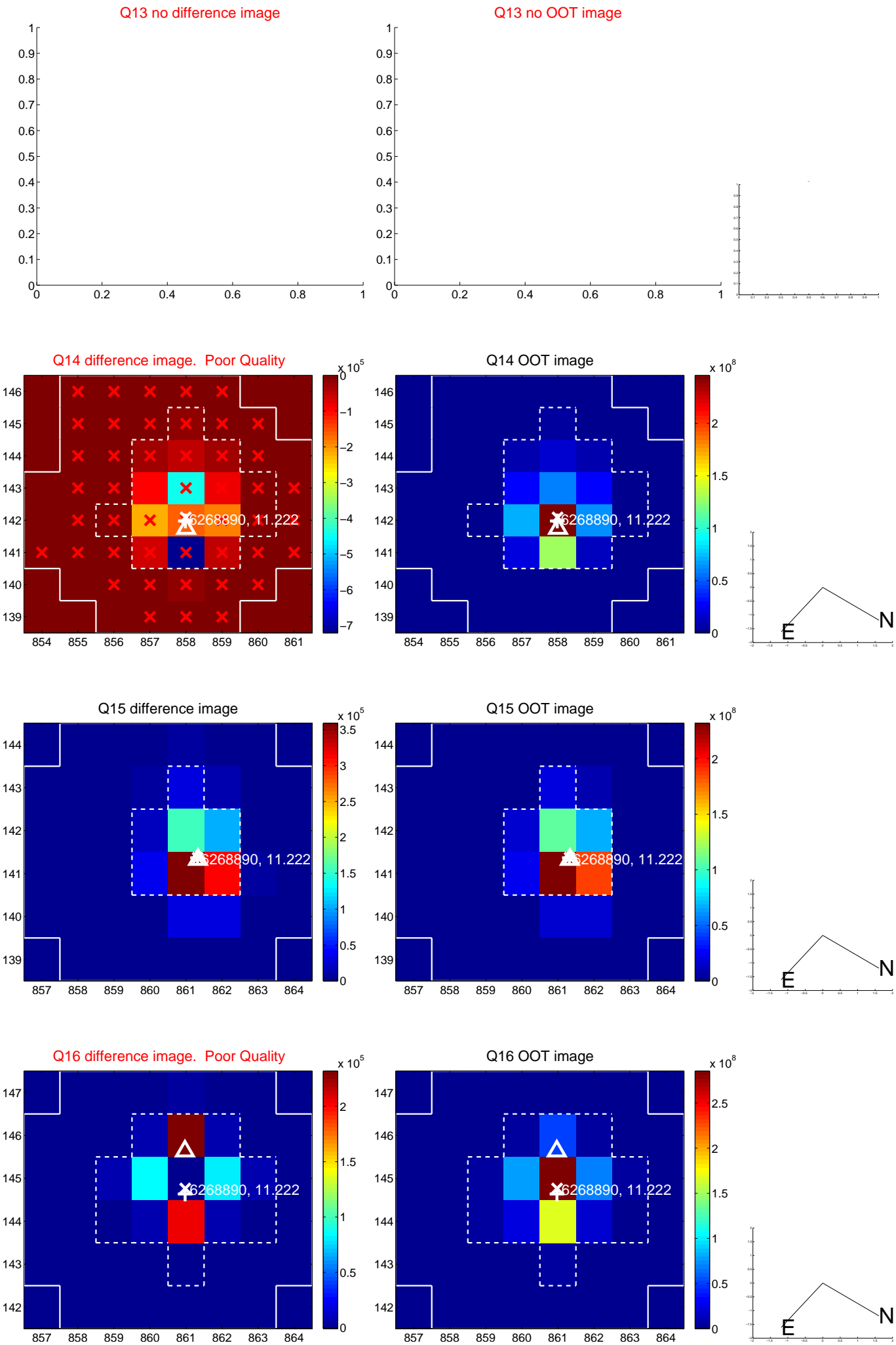




white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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



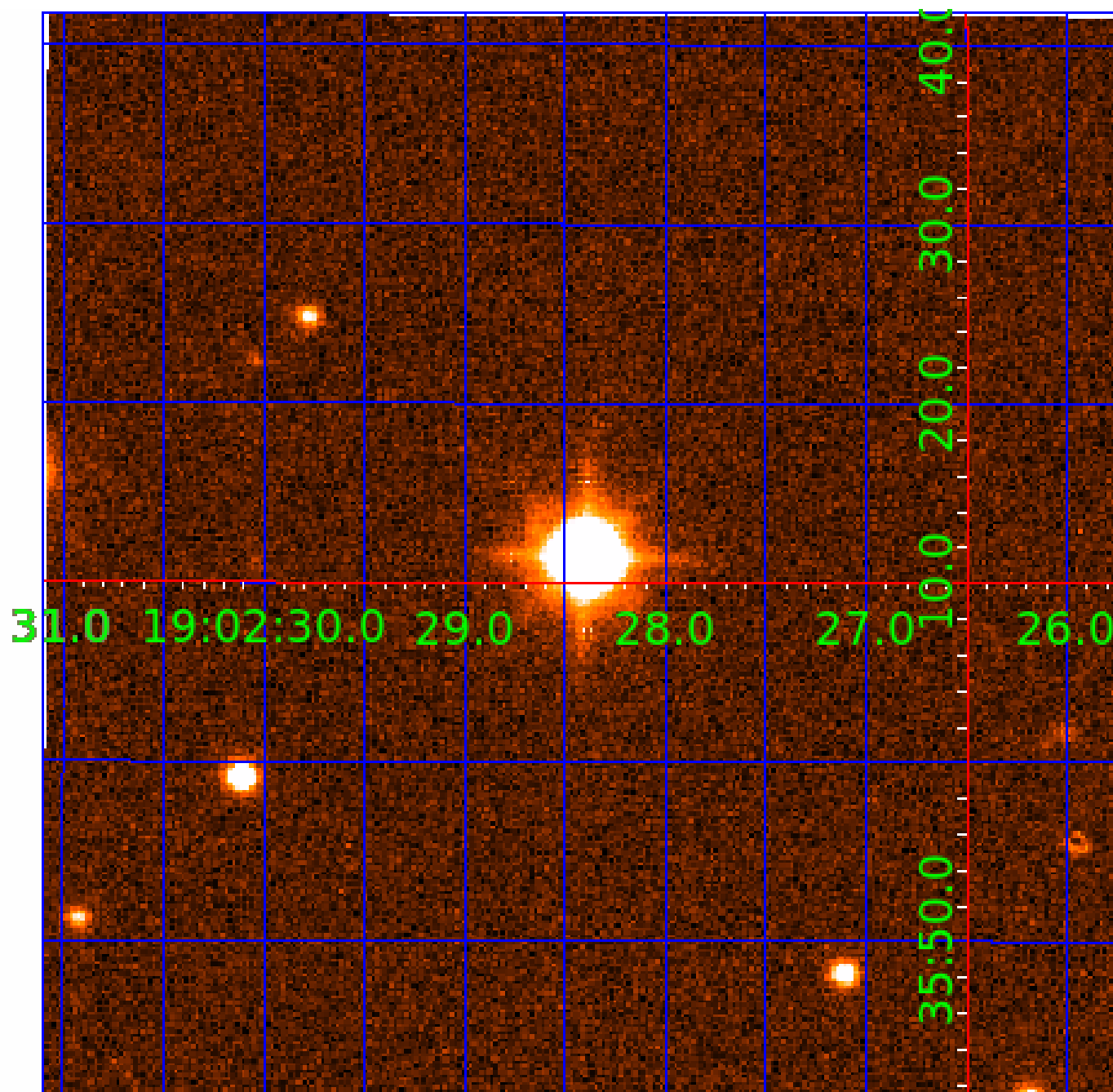
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination





# KIC 006268890

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
006268890-01	OBS	No	2.331678	132.756277	0.0	1.246	21.4	0.0	3.99	7474	0.04	23726.86
006268890-02	OBS	No	2.331505	132.312878	609.2	8.192	19.8	12.4	3.99	7474	11.02	23729.20
006268890-03	OBS	No	0.582872	131.885100	919.5	5.045	15.5	23.0	3.99	7474	12.11	0.00

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006268890-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
006268890-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED
006268890-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—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.

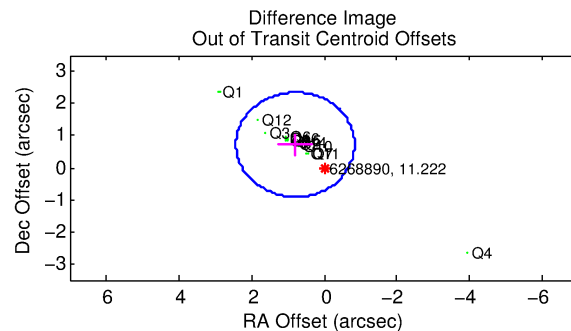
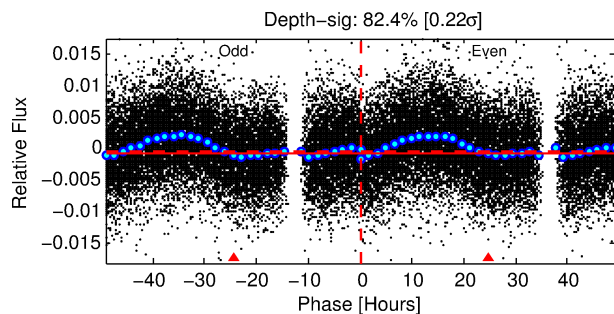
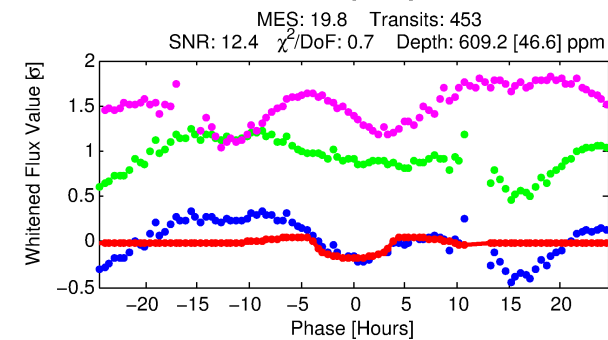
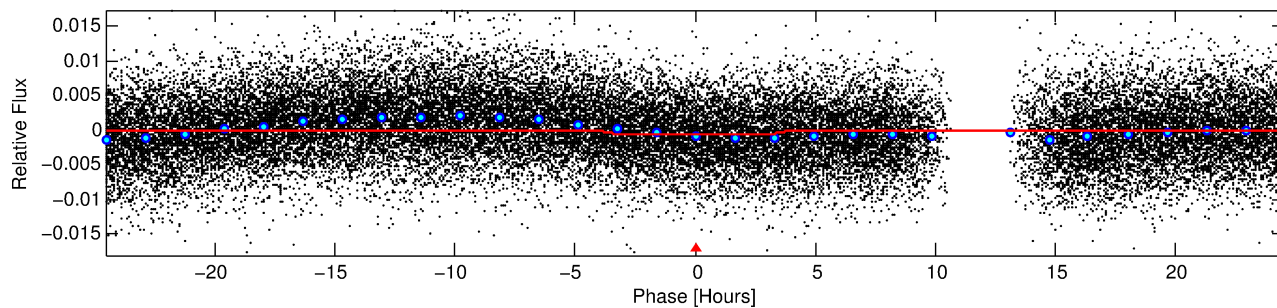
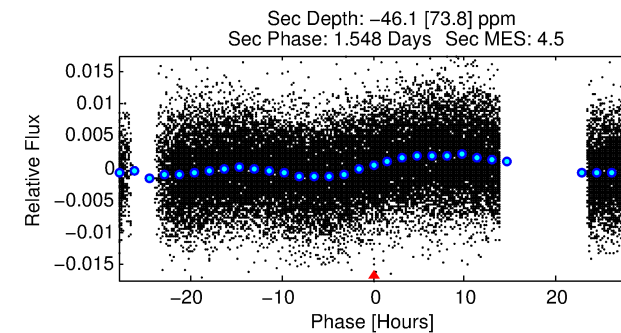
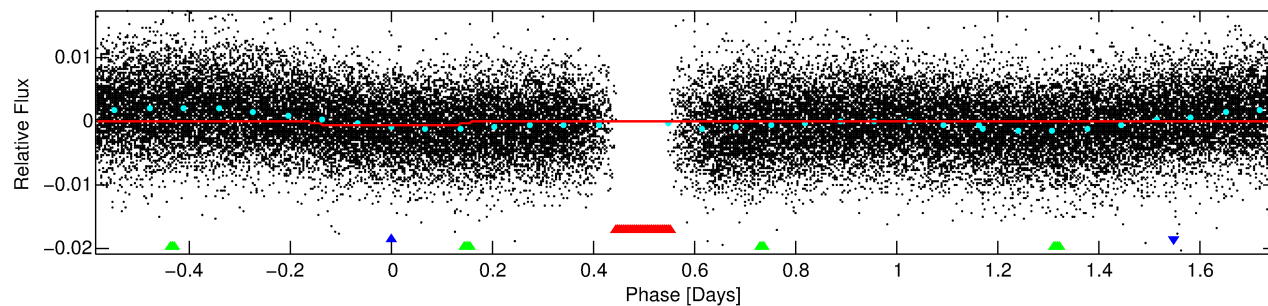
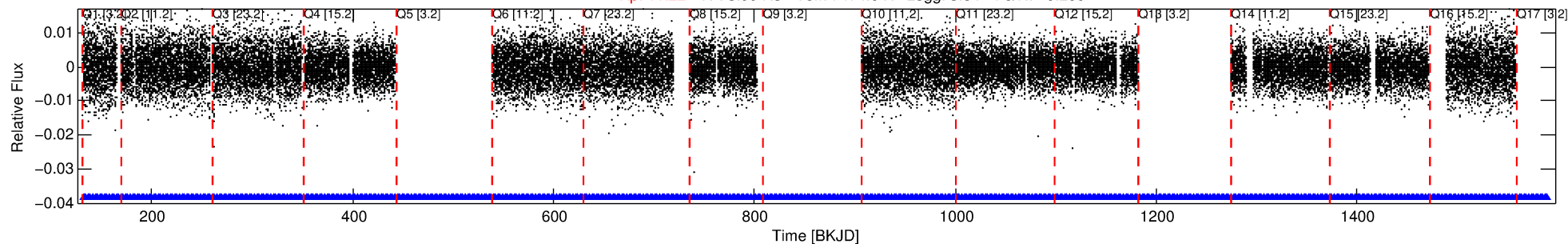
## Ephemeris Match Information For 006268890-02

No Significant Match Found

# DV One-Page Summary

KIC: 6268890 Candidate: 2 of 3 Period: 2.332 d

Kp: 11.22 R\*: 3.99 Rs Teff: 7474.0 K Logg: 3.54 Fe/H: -0.260



## DV Fit Results:

Period = 2.33151 [0.00003] d  
Epoch = 132.3129 [0.0087] BKJD  
Rp/R\* = 0.0253 [0.0048]  
a/R\* = 1.60 [0.92]  
b = 0.83 [0.37]  
Seff = 23729.20 [23408.35]  
Teq = 3165 [781] K  
Rp = 11.02 [6.60] Re  
a = 0.0433 [0.0254] AU  
Ag = N/A  
Teffp = N/A

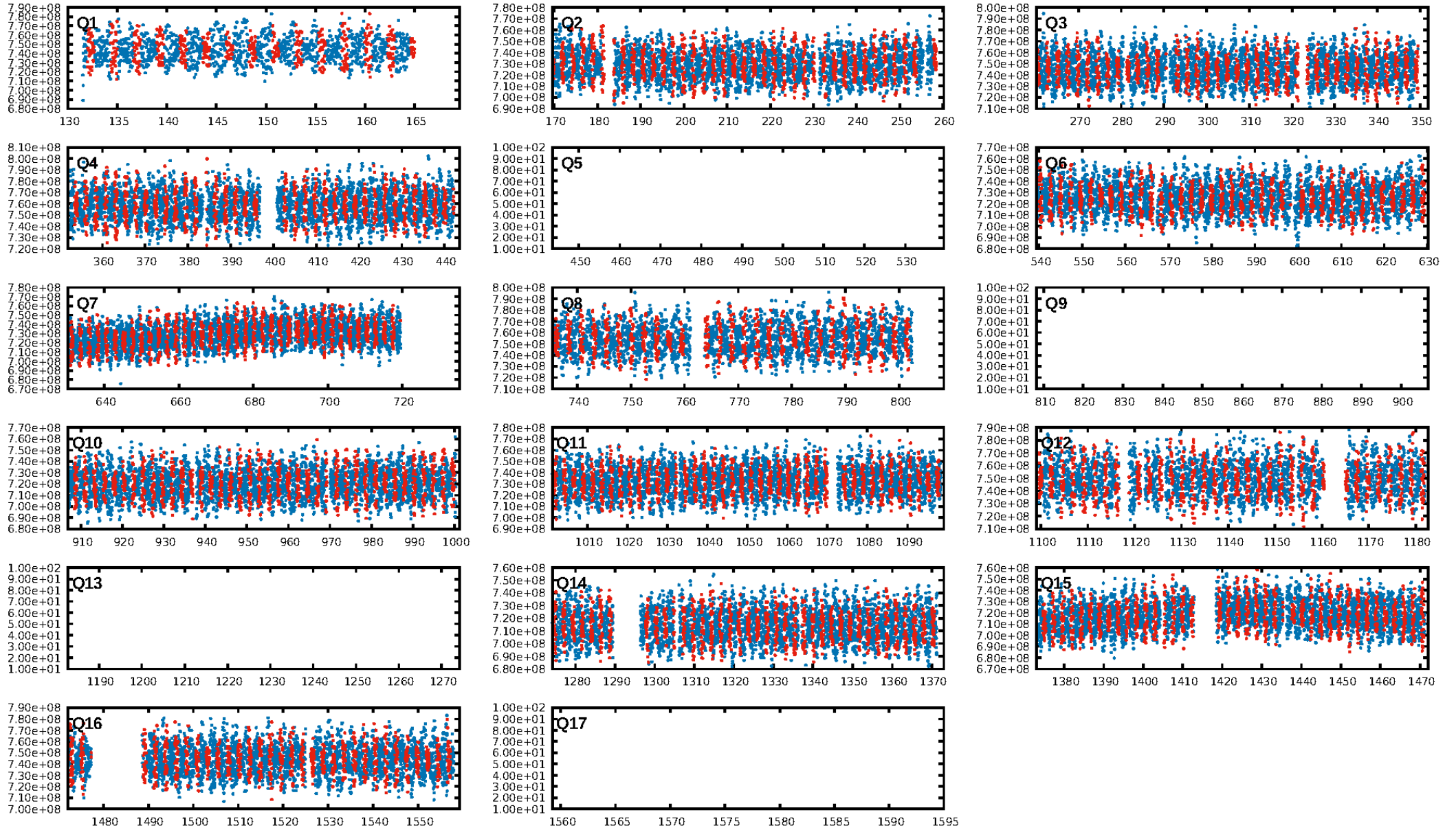
## DV Diagnostic Results:

ShortPeriod-sig: 100.0% [4.36σ]  
LongPeriod-sig: 0.0% [0.00σ]  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [438/438]  
GhostDiagnostic-chr: 1.031  
Centroid-sig: 1.0%  
Centroid-so: 0.152 arcsec [3.00σ]  
OotOffset-rm: 1.073 arcsec [1.97σ]  
KicOffset-rm: 1.477 arcsec [2.98σ]  
OotOffset-st: 4/4/4/1 [13]  
KicOffset-st: 4/4/4/1 [13]  
DiffImageQuality-fgm: 0.77 [10/13]  
DiffImageOverlap-fno: 0.00 [0/13]

Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:54:36 Z

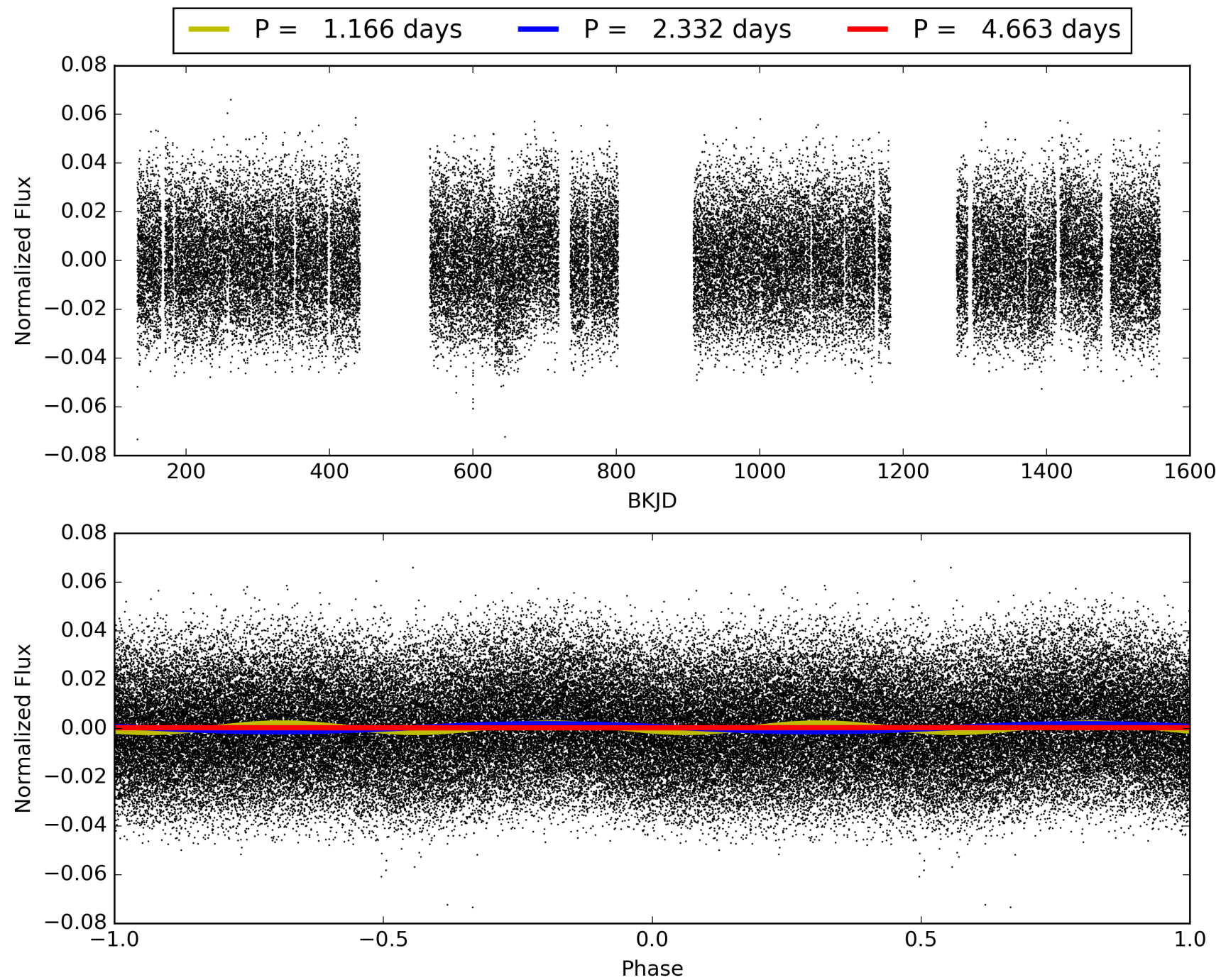
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

# TCE 006268890-02, PDC Light Curves



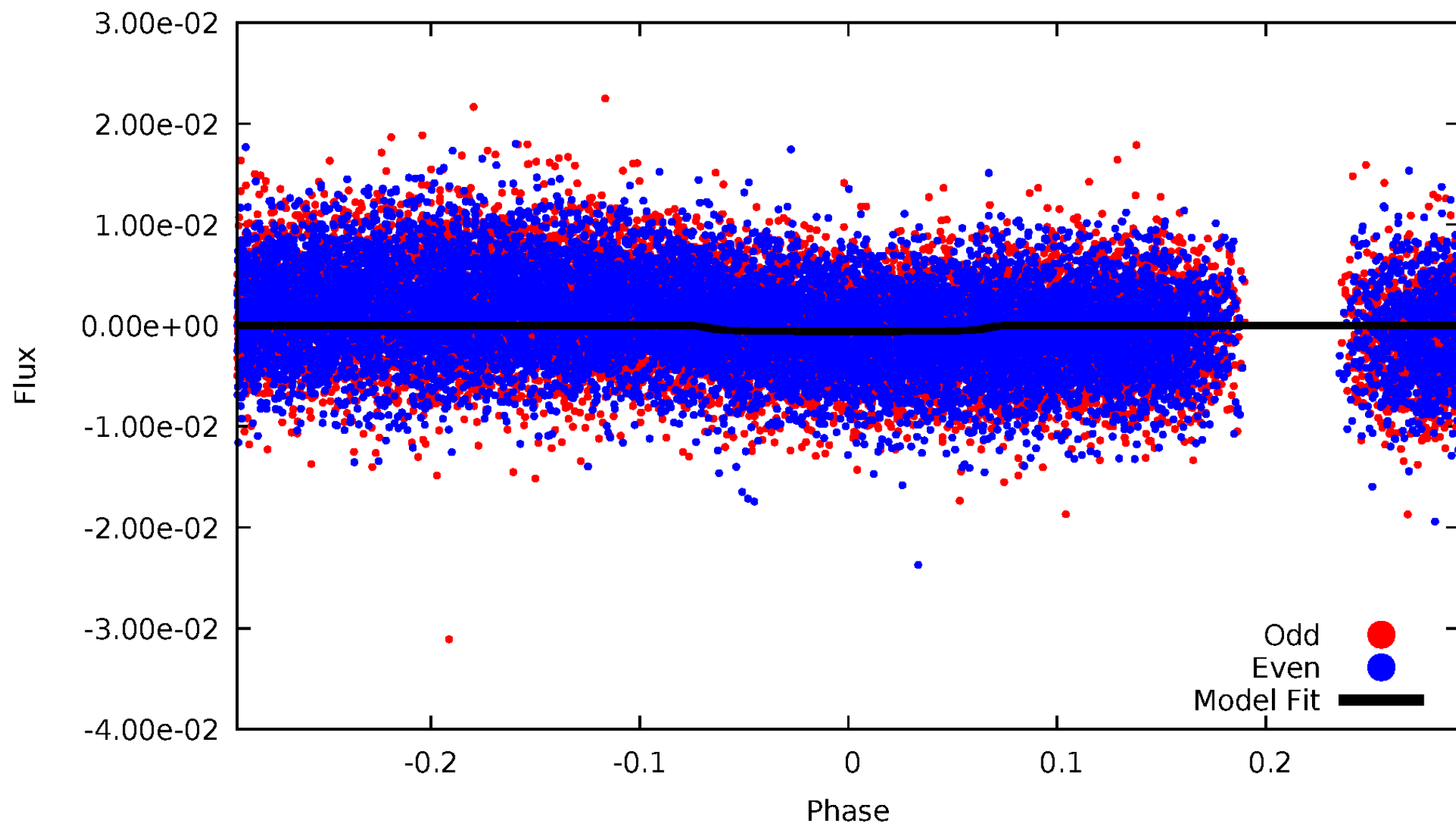


TCE 006268890-02



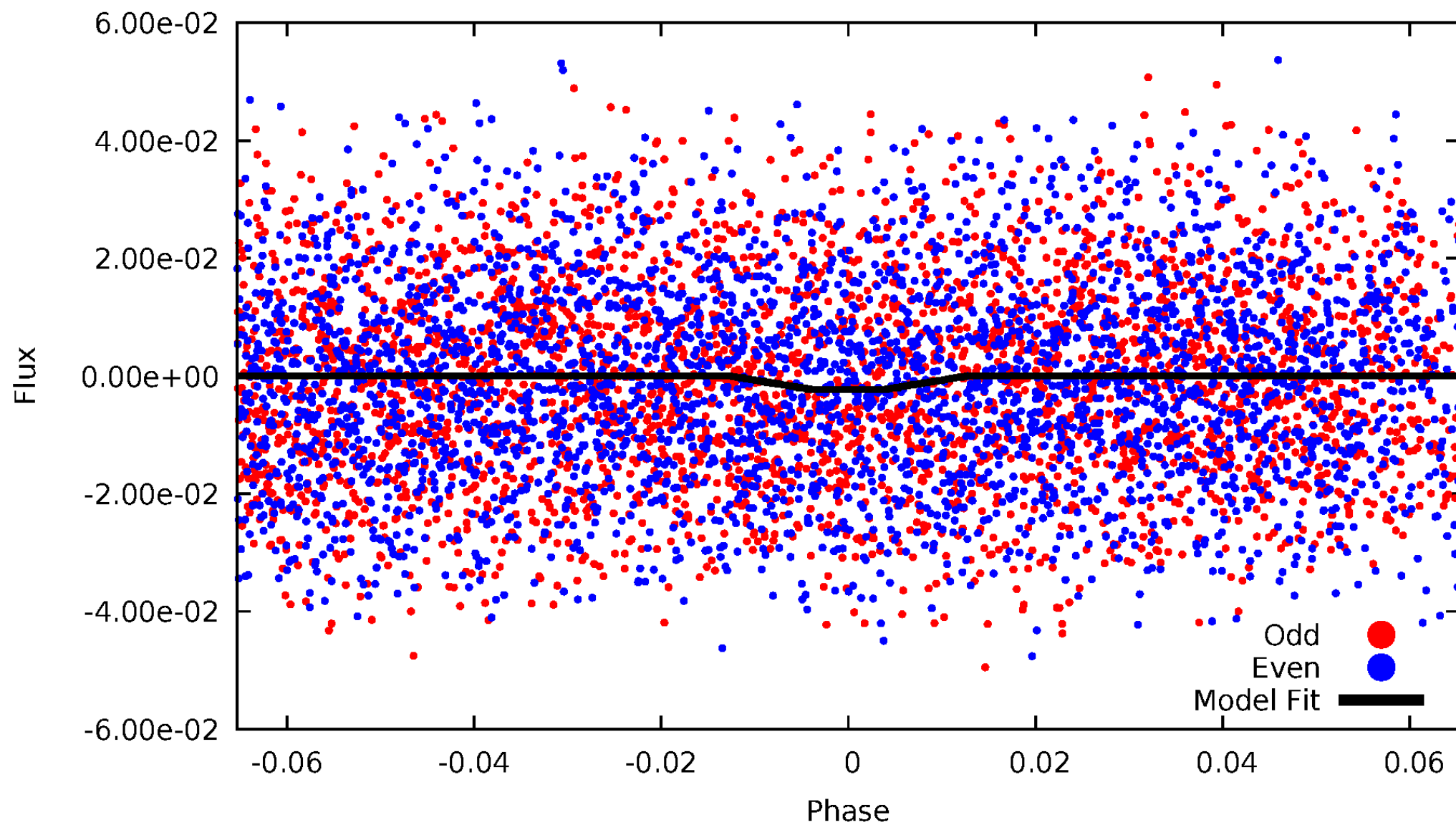
# DV Odd/Even

TCE 006268890-02



ALT Odd/Even

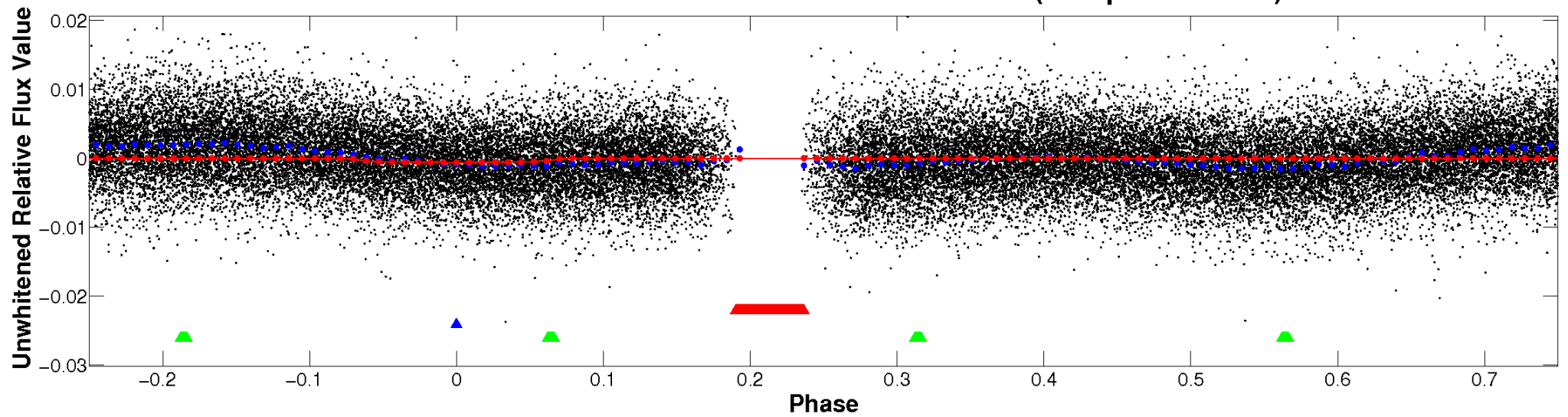
TCE 006268890-02



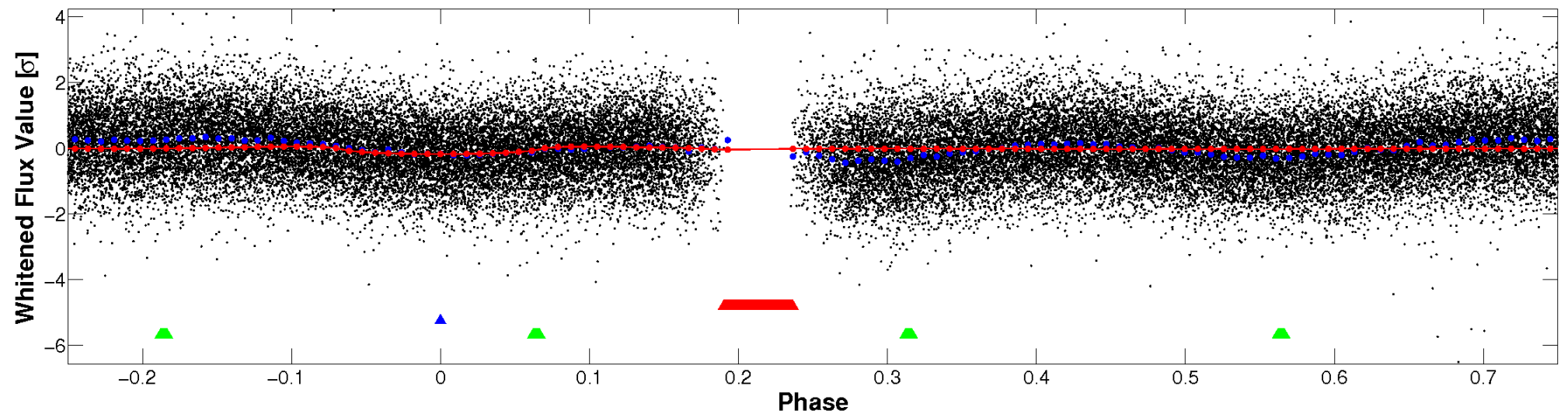


# Non-Whitened Vs. Whitened Light Curve

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

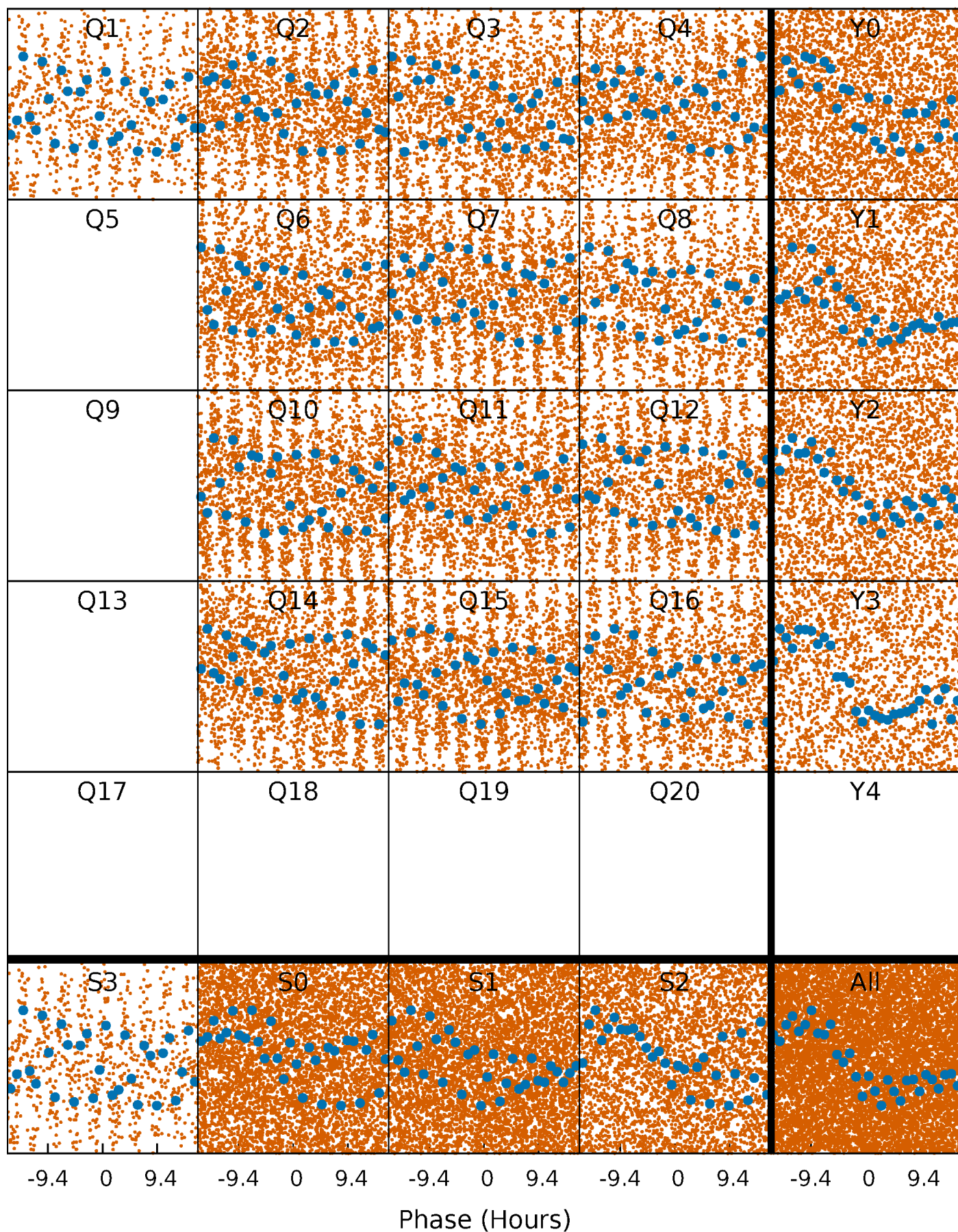


## Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



# PDC Quarter-Phased Transit Curves

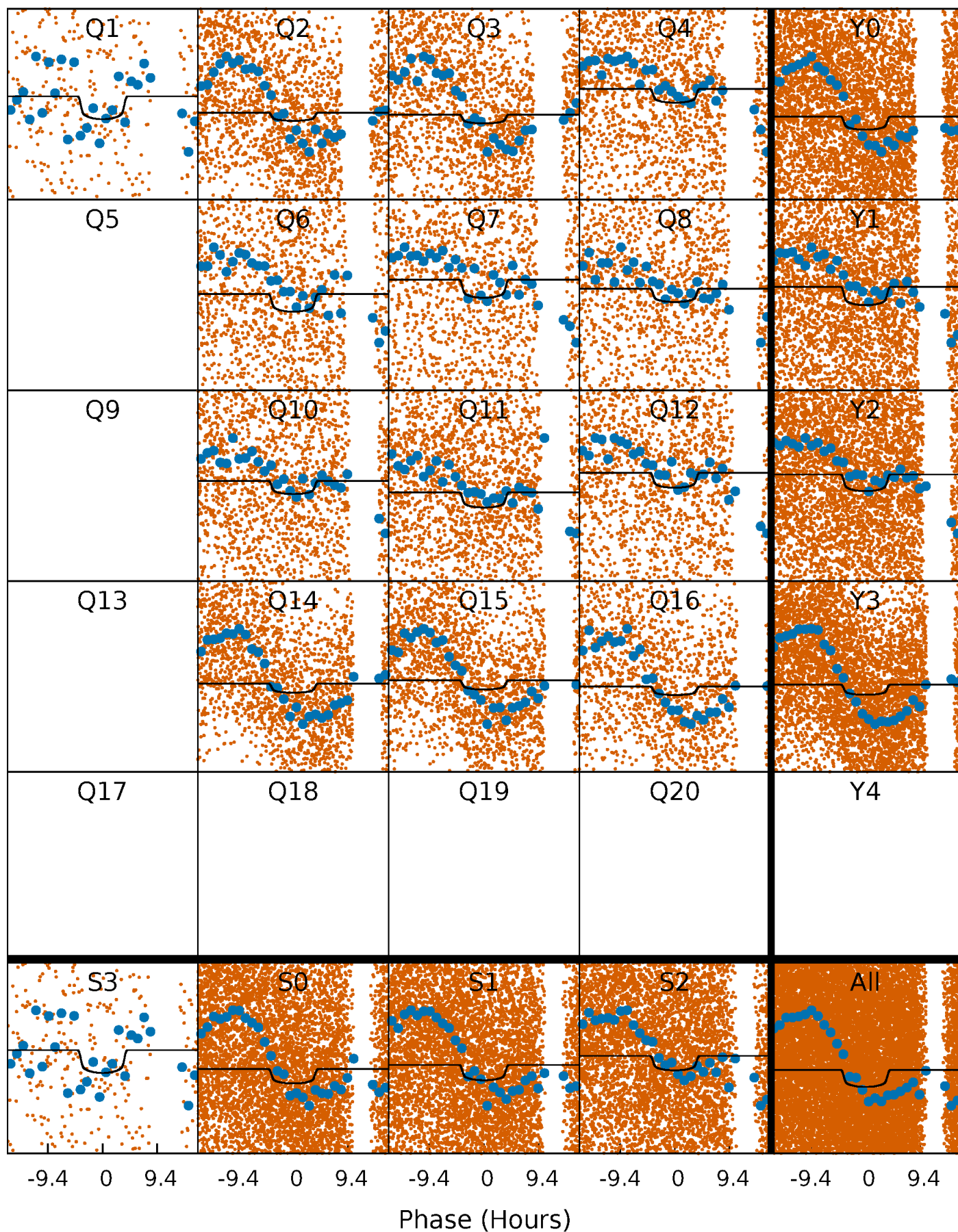
TCE 006268890-02   P= 2.331505 Days    $T_0=132.312878$  (BKJD)





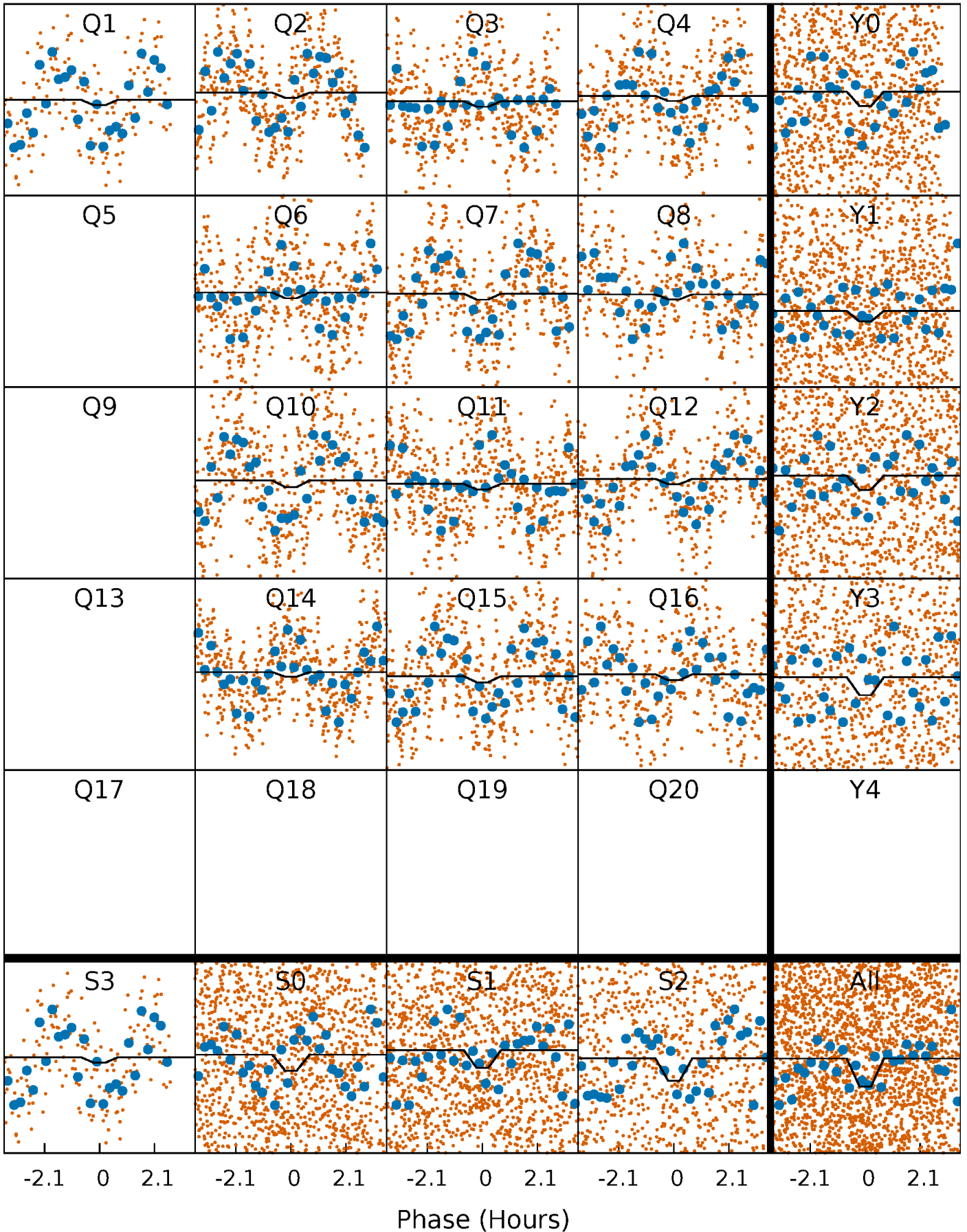
# DV Quarter-Phased Transit Curves

TCE 006268890-02   P= 2.331505 Days    $T_0=132.312878$  (BKJD)



# Alt. Detrend Quarter-Phased Transit Curves

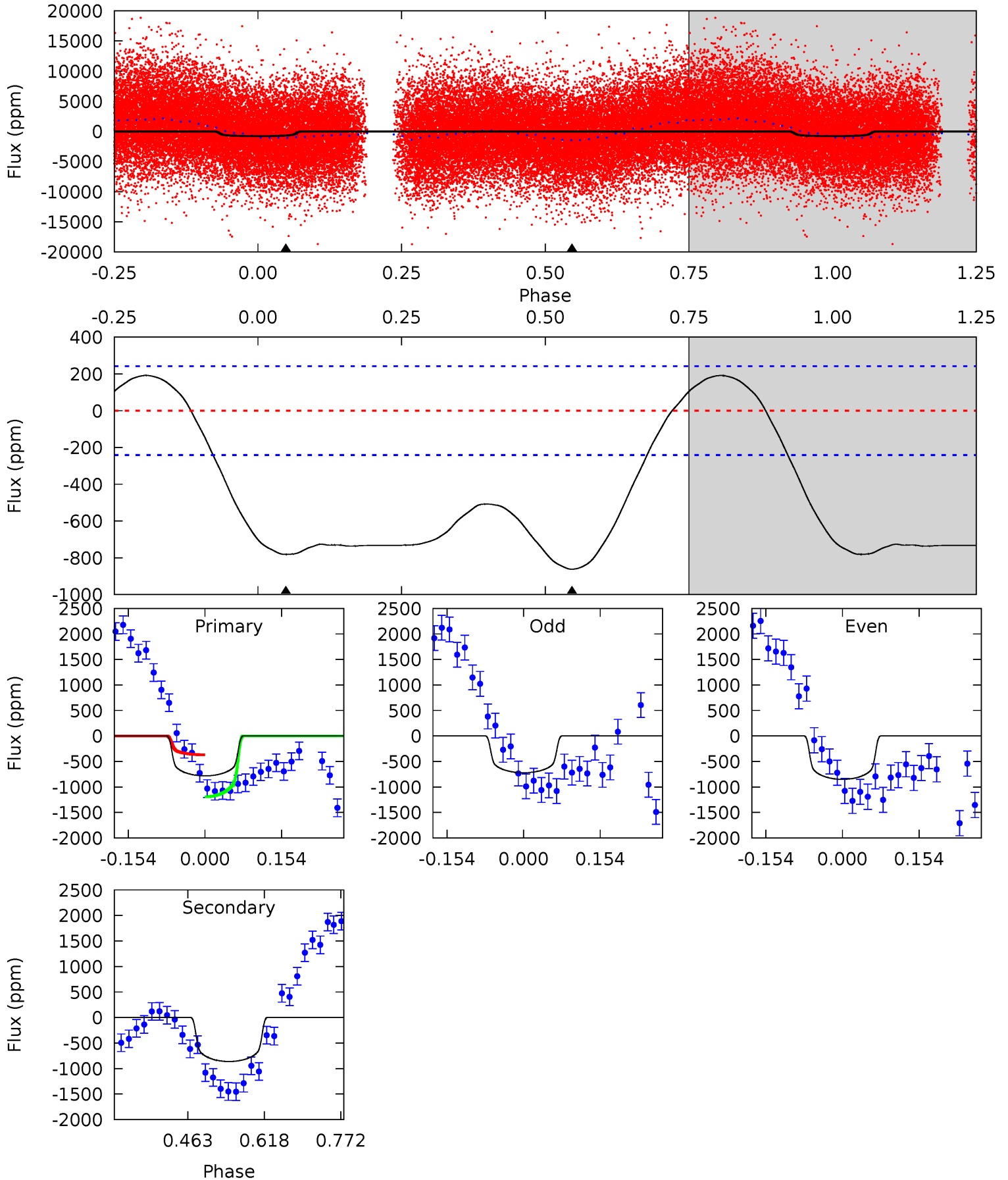
TCE 006268890-02     $P = 2.331565$  Days     $T_0 = 132.540520$  (BKJD)



# DV Model-Shift Uniqueness Test

006268890-02, P = 2.331505 Days, E = 129.981373 Days

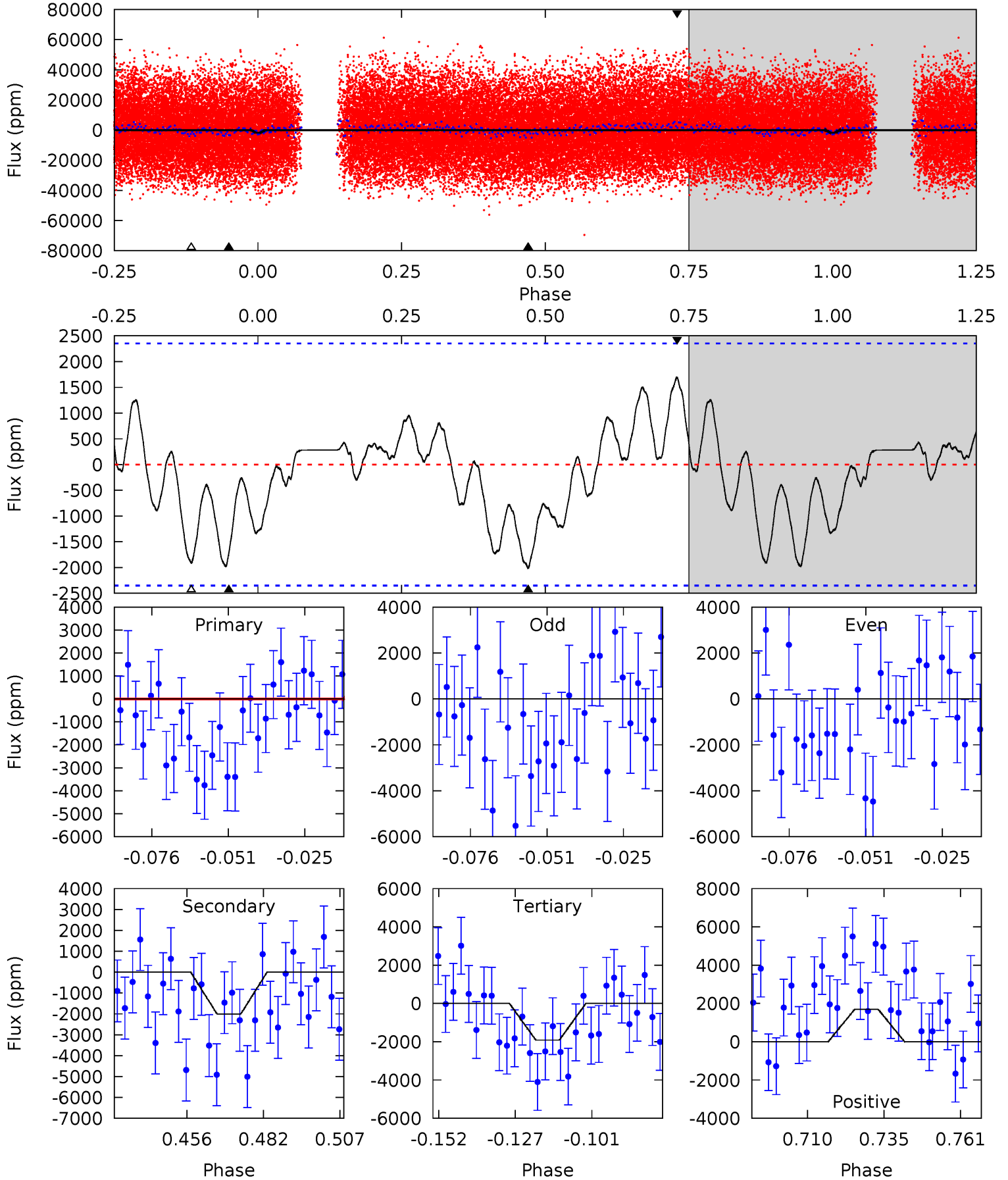
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.5	15.9	0	0	4.47	1.42	6.92	14.5	14.5	15.9	15.9	1.20	1.08	0.18	7.50



# Alt Model-Shift Uniqueness Test

006268890-02, P = 2.331565 Days, E = 130.208955 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
3.53	4.15	3.94	3.49	4.84	2.24	1.63	-0.41	0.04	0.20	0.66	0.15	1.51	0.46	0.04



### Stellar Parameters For KIC 006268890

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$7474^{+235}_{-287}$	$3.535^{+0.585}_{-0.065}$	$-0.260^{+0.250}_{-0.300}$	$3.986^{+0.399}_{-2.262}$	$1.988^{+0.063}_{-0.571}$	$0.044^{+0.372}_{-0.009}$
	+3%/-4%	+17%/-2%	+96%/-115%	+10%/-57%	+3%/-29%	+841%/-20%
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 006268890-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$-862 \pm 54$	$9.43^{+3.12}_{-3.06}$	$4245^{+311}_{-614}$	$8129^{+1357}_{-925}$	$9.556^{+10.304}_{-3.924}$
Alt.	$-2012 \pm 485$	$19.07^{+3.34}_{-5.40}$	$4264^{+290}_{-564}$	$7034^{+766}_{-625}$	$5.794^{+4.405}_{-2.032}$

$T_{\text{max}}$  = 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

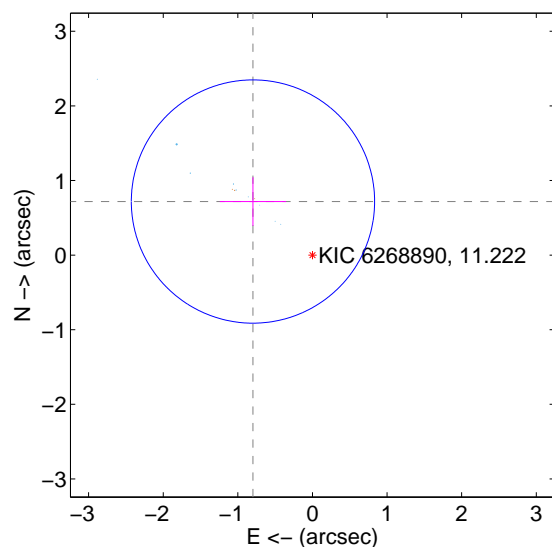
Supplemental centroid analysis for 006268890-02. **Kepler magnitude: 11.22.** Transit SNR 12.44

There are 10 quarters with good PRF difference image offsets

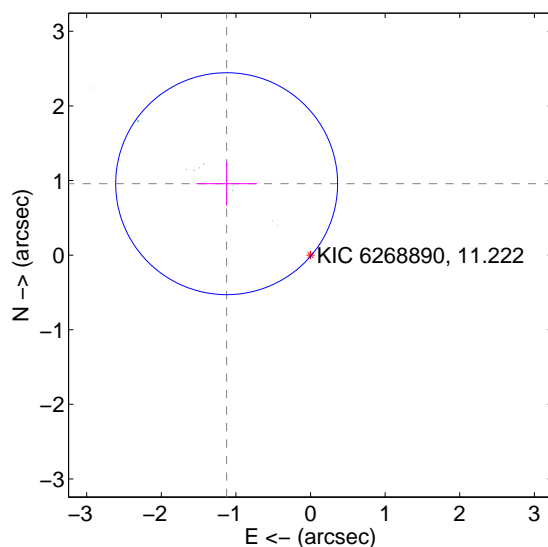
The direct PRF centroid is offset from the target star catalog position by about 0.51 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$1.073 \pm 0.543$	1.97	$0.797 \pm 0.445$	$0.718 \pm 0.325$
PRF-fit source offset from KIC position	$1.477 \pm 0.496$	2.98	$1.124 \pm 0.406$	$0.957 \pm 0.295$
photometric centroid source offset	$0.15 \pm 0.05$	3.00	$0.13 \pm 0.05$	$0.08 \pm 0.05$

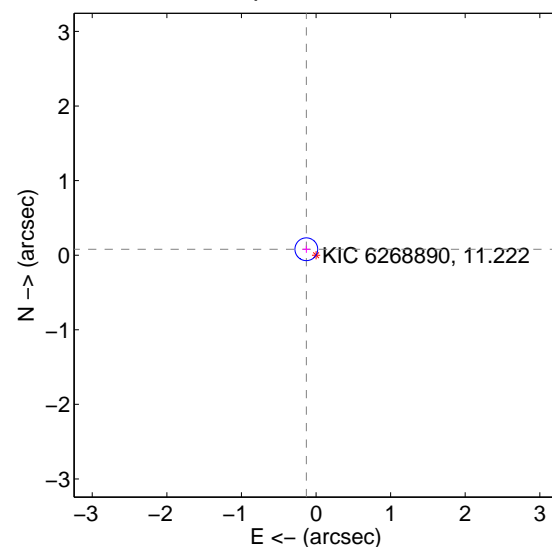
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

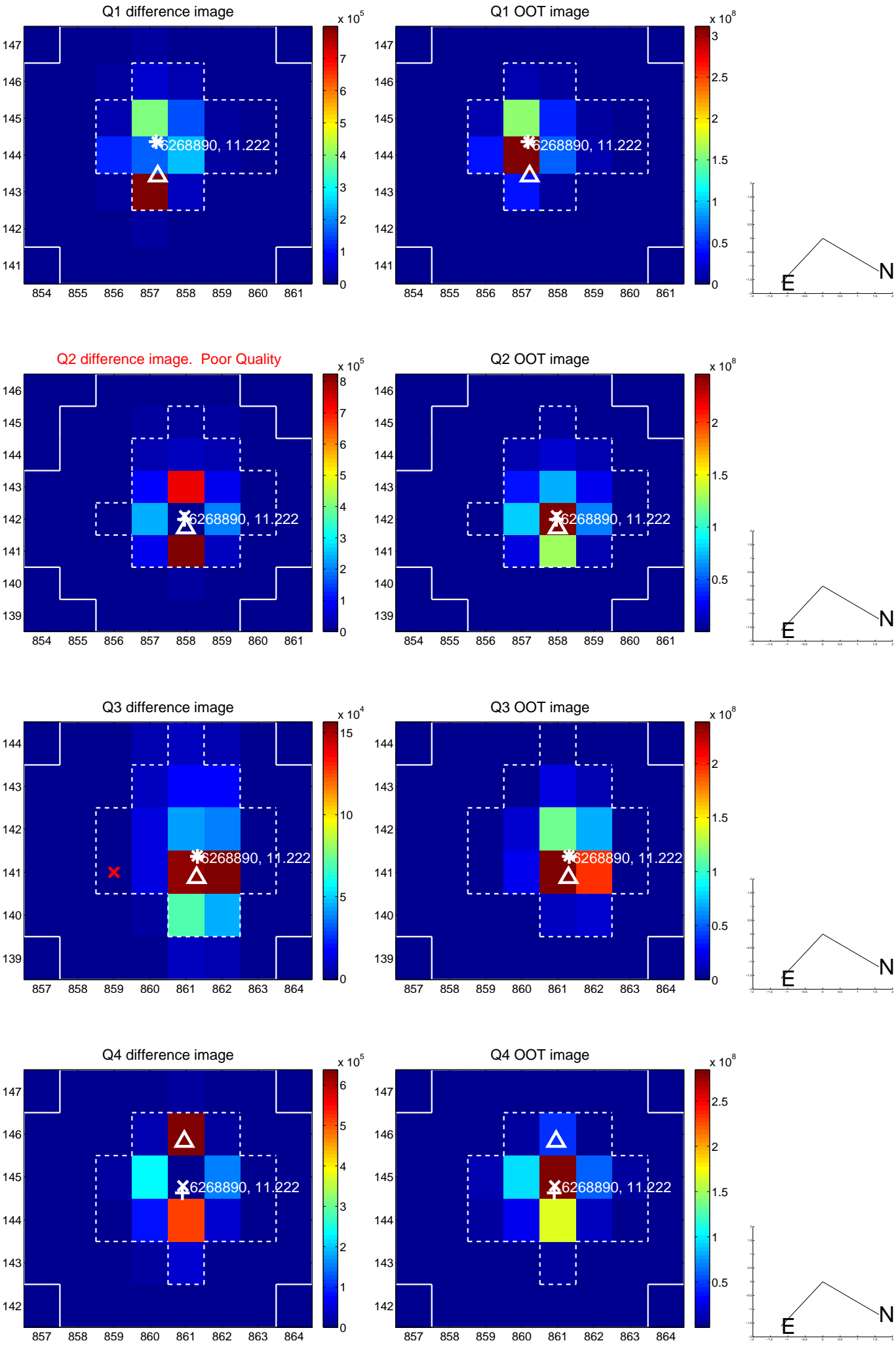


offset from photometric centroids

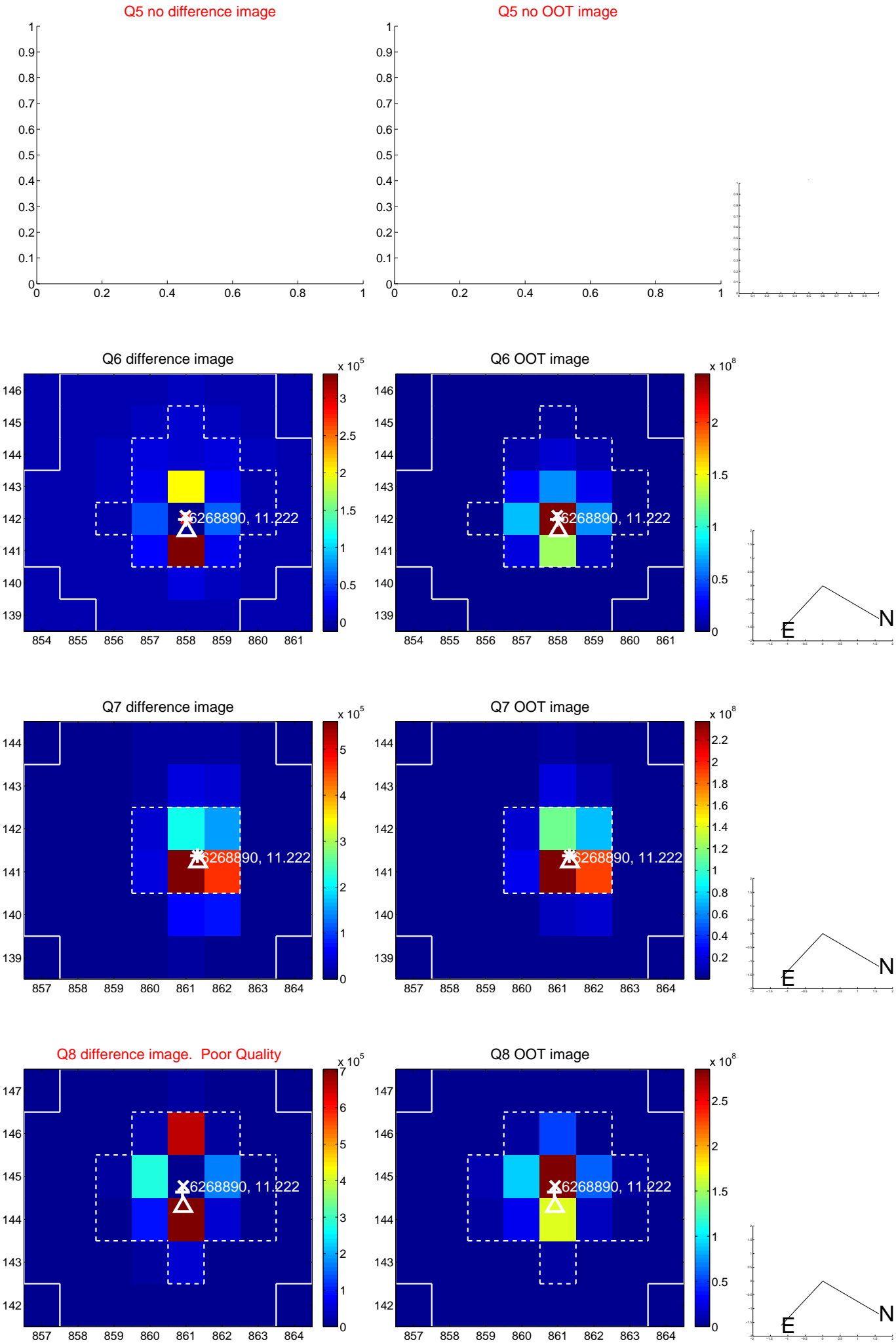


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

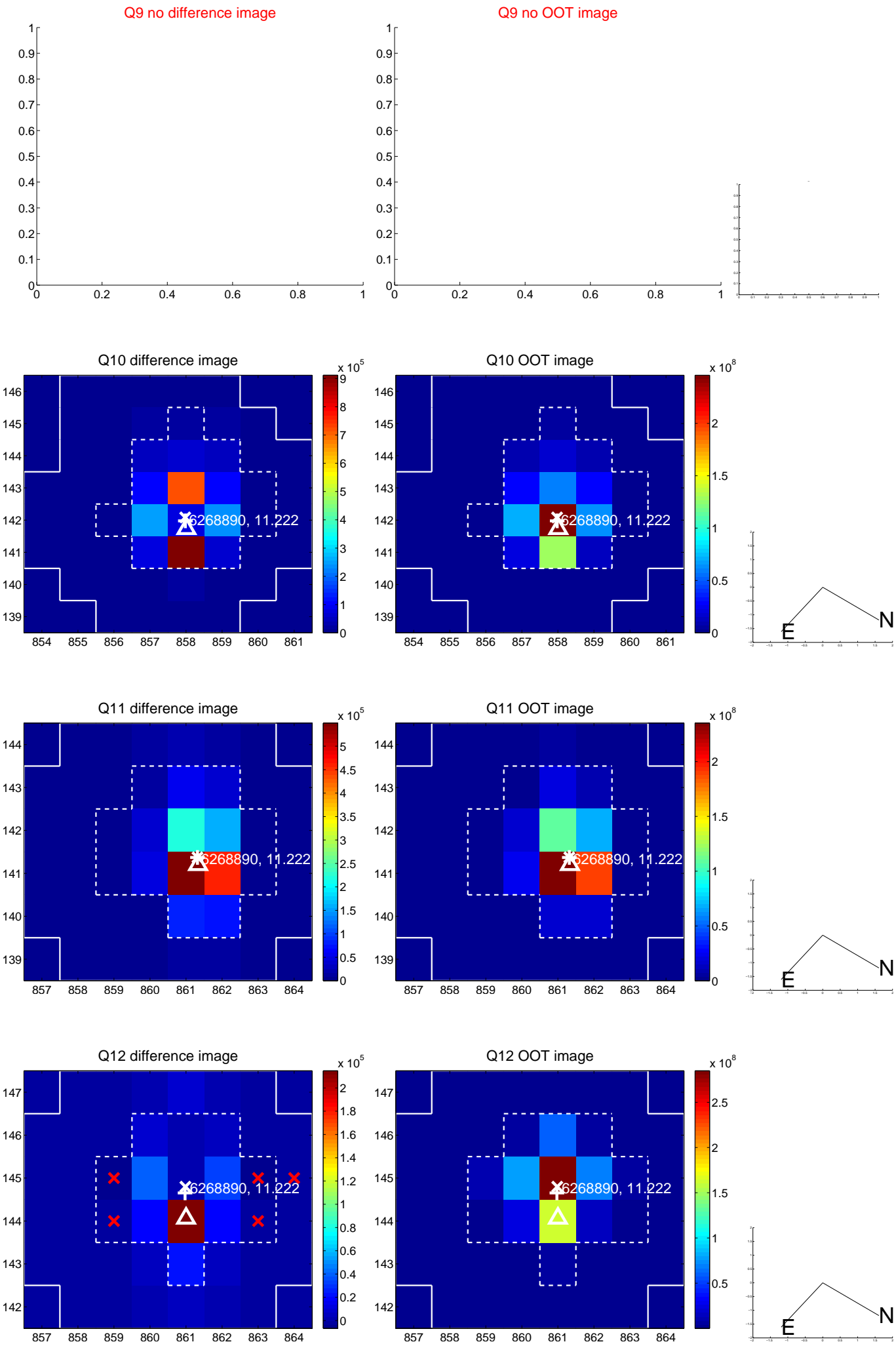
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



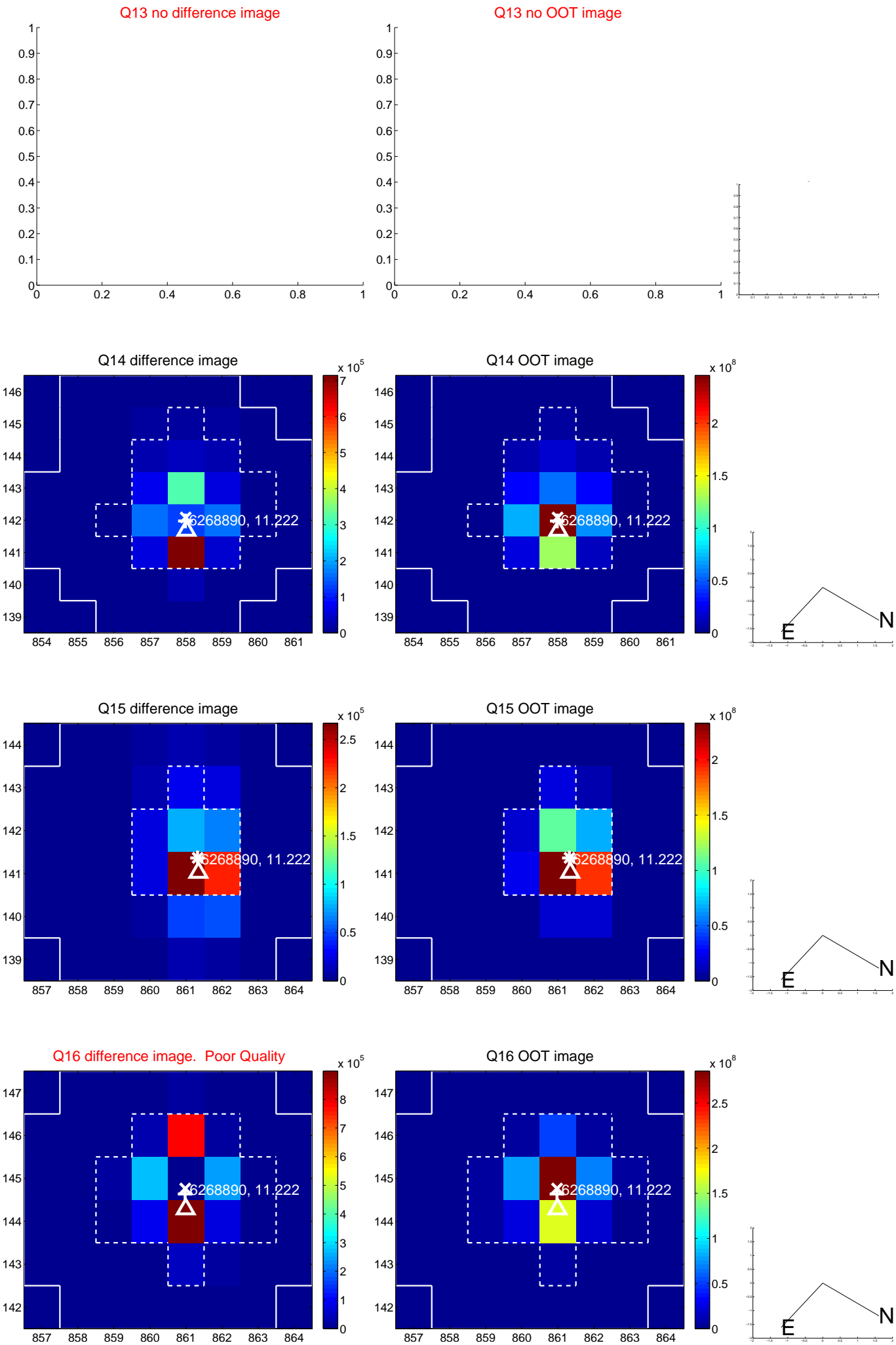
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



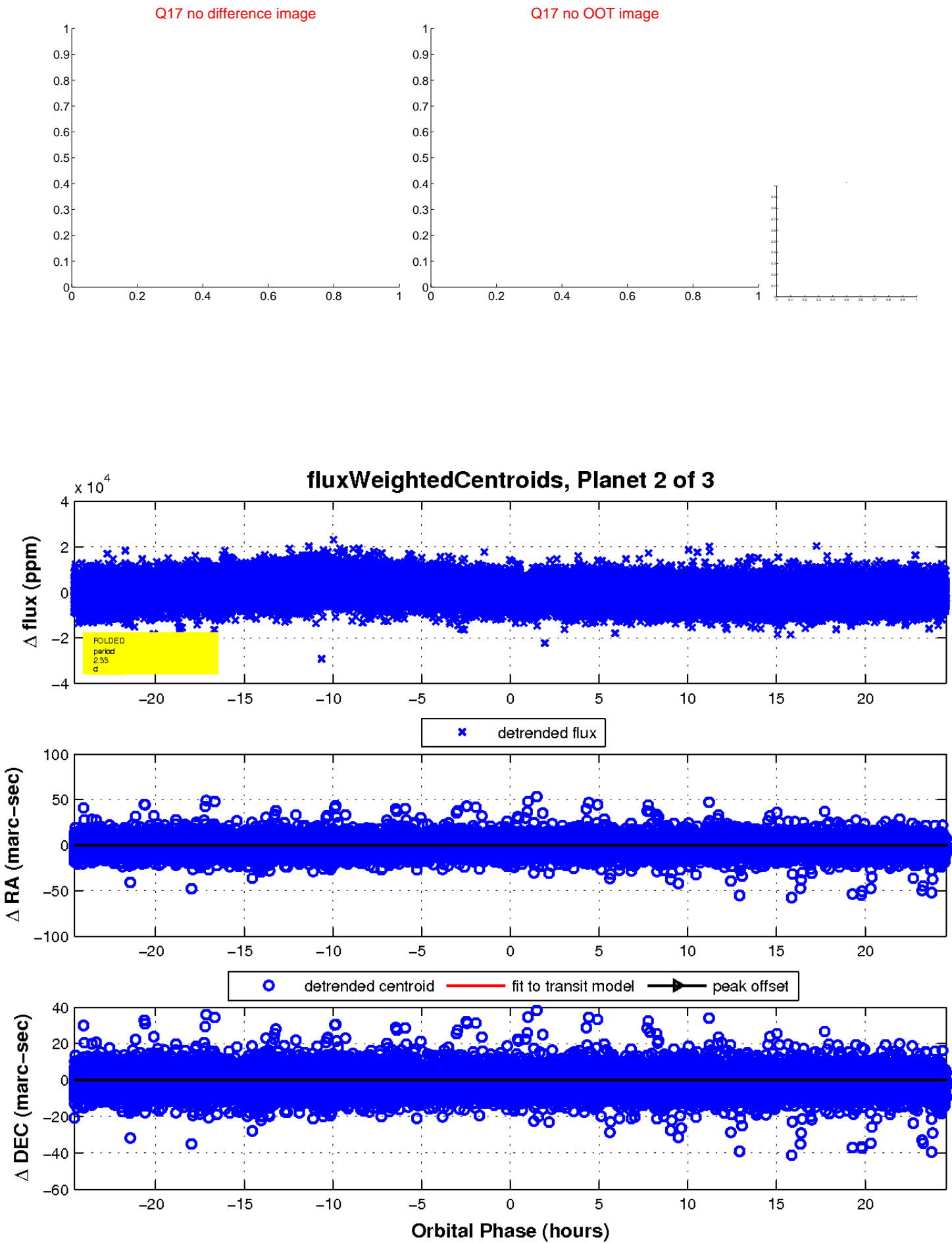
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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

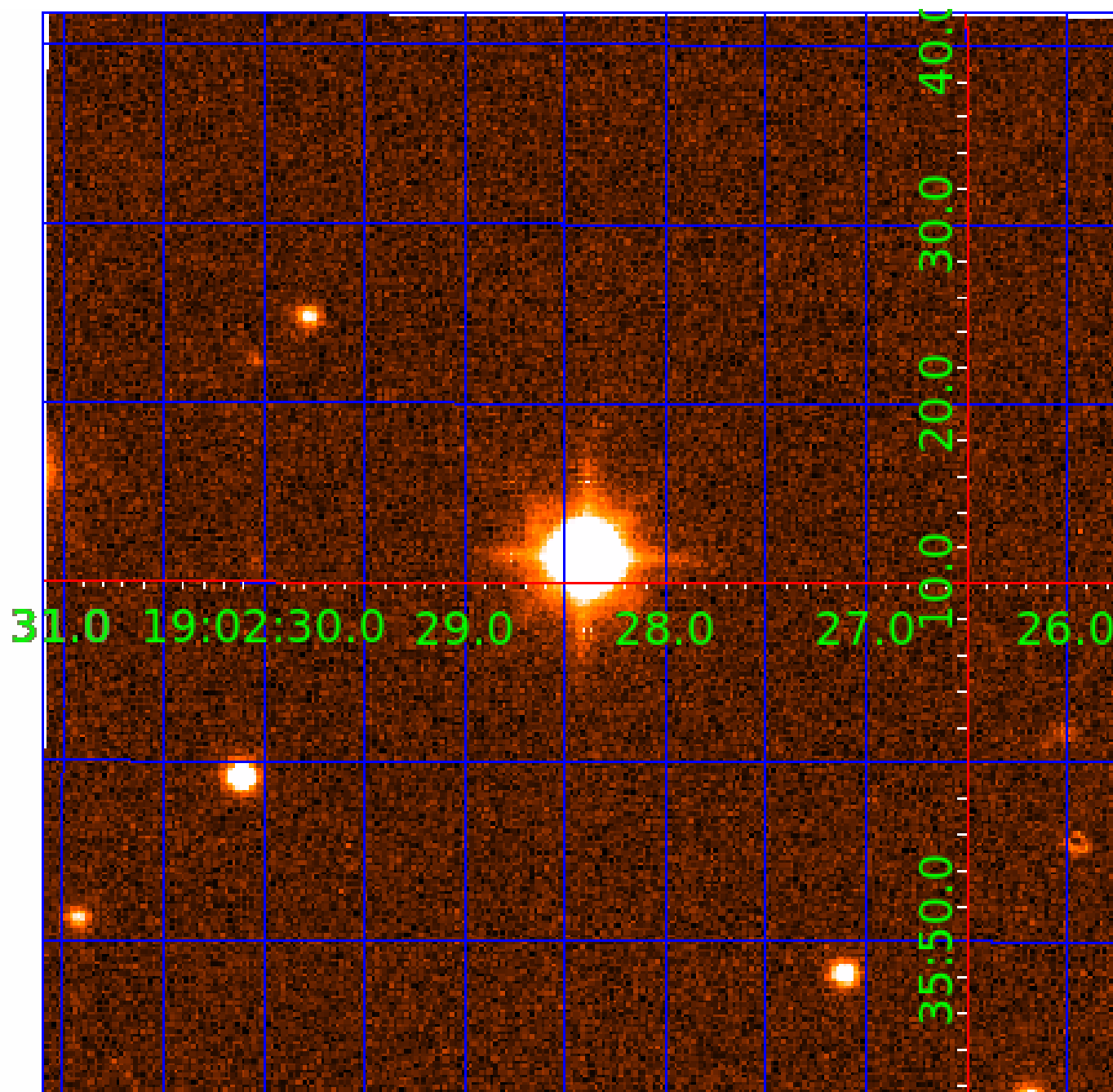


white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



UKIRT Image

Declination





# KIC 006268890

## 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)	$R_p$ ( $R_{\oplus}$ )	$S_p$ ( $S_{\oplus}$ )
006268890-01	OBS	No	2.331678	132.756277	0.0	1.246	21.4	0.0	3.99	7474	0.04	23726.86
006268890-02	OBS	No	2.331505	132.312878	609.2	8.192	19.8	12.4	3.99	7474	11.02	23729.20
006268890-03	OBS	No	0.582872	131.885100	919.5	5.045	15.5	23.0	3.99	7474	12.11	0.00

## Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006268890-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
006268890-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_SATURATED
006268890-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—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.

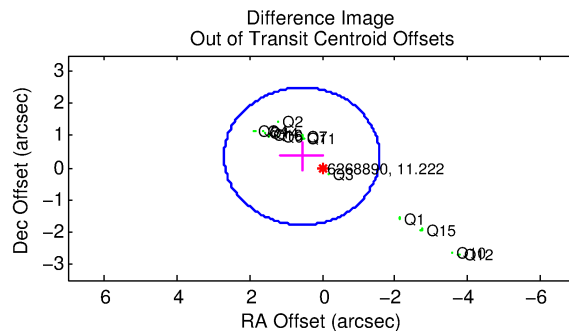
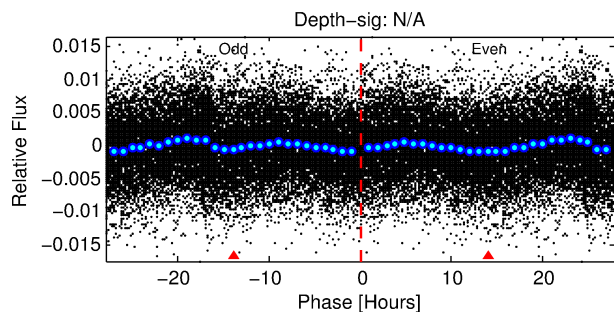
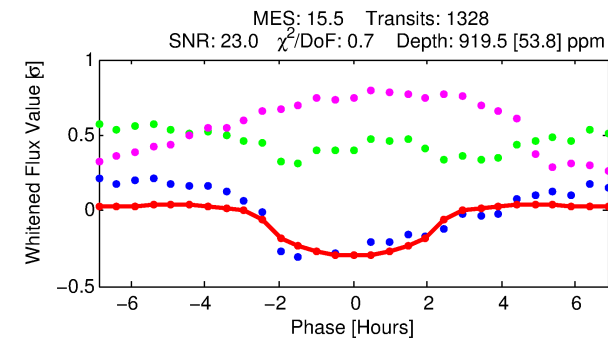
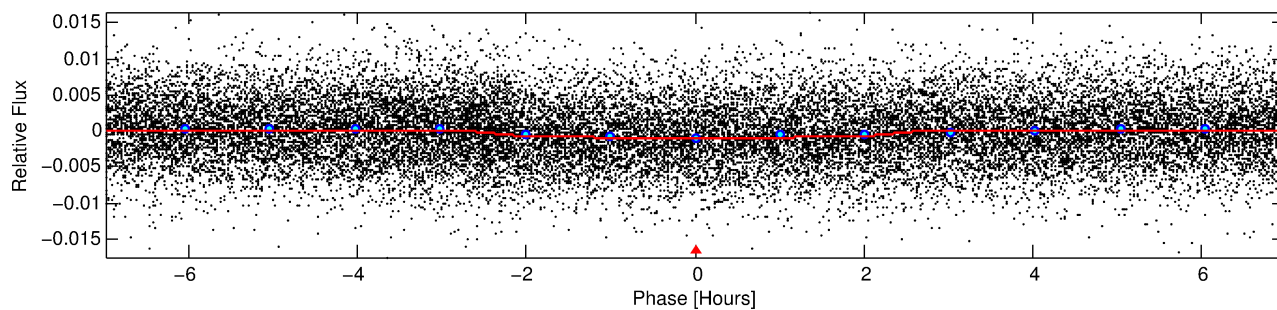
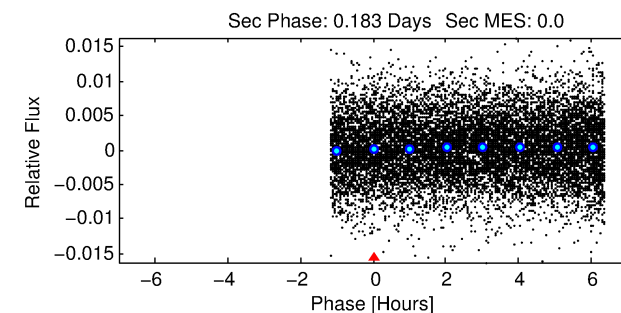
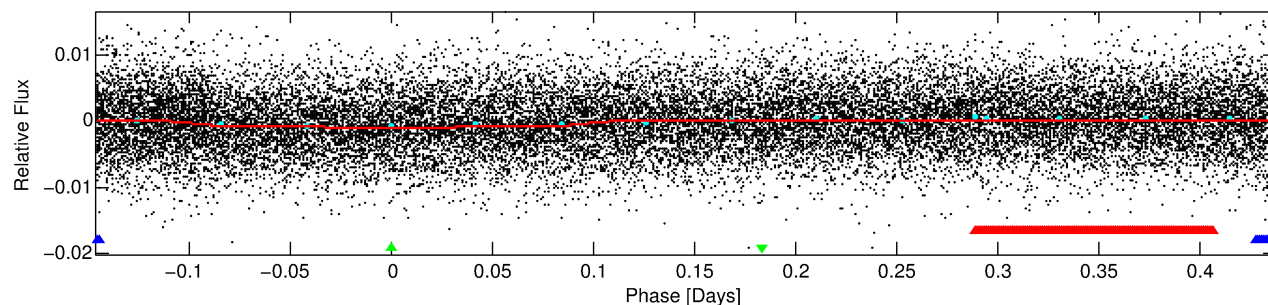
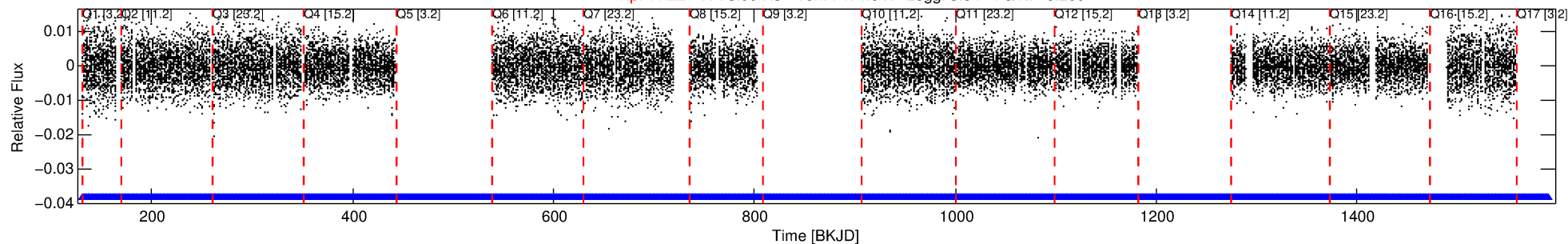
Ephemeris Match Information For 006268890-03

No Significant Match Found

# DV One-Page Summary

KIC: 6268890 Candidate: 3 of 3 Period: 0.583 d

Kp: 11.22 R\*: 3.99 Rs Teff: 7474.0 K Logg: 3.54 Fe/H: -0.260



## DV Fit Results:

Period = 0.58287 [0.00000] d  
Epoch = 131.8851 [0.0026] BKJD  
Rp/R\* = 0.0278 [0.0136]  
a/R\* = 1.13 [0.62]  
b = 0.01 [256.12]  
Seff = N/A  
Teq = N/A  
Rp = 12.11 [9.07] Re  
a = N/A  
Ag = N/A  
Teffp = N/A

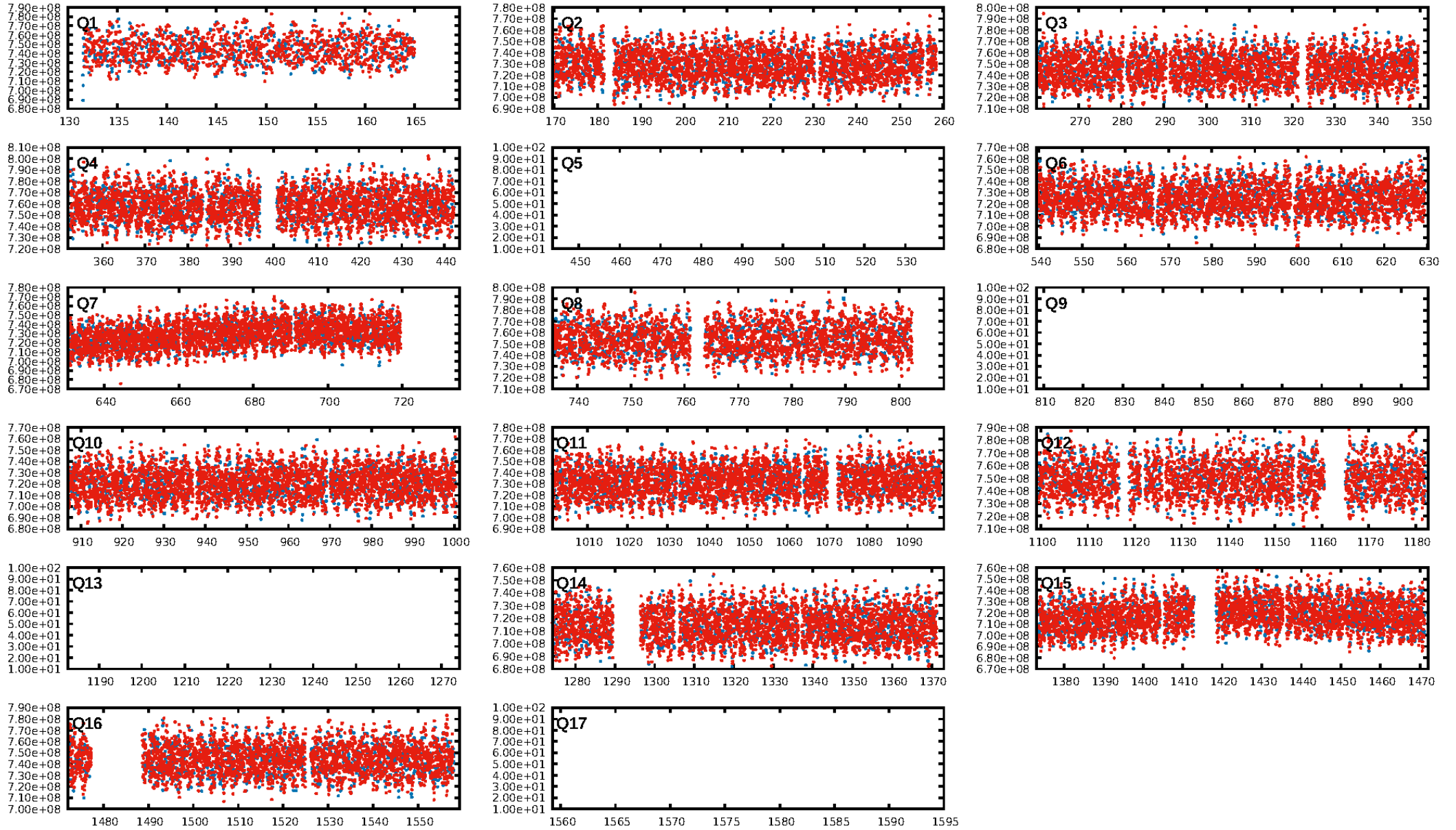
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: 100.0% [4.36σ]  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: N/A  
RollingBand-fgt: 1.00 [1285/1285]  
GhostDiagnostic-chr: 0.822  
Centroid-sig: 0.0%  
Centroid-so: 0.115 arcsec [6.50σ]  
OotOffset-rm: 0.662 arcsec [0.93σ]  
KicOffset-rm: 0.932 arcsec [1.29σ]  
OotOffset-st: 4/4/4/1 [13]  
KicOffset-st: 4/4/4/1 [13]  
DiffImageQuality-fgm: 0.46 [6/13]  
DiffImageOverlap-fno: 1.00 [13/13]

Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:54:49 Z

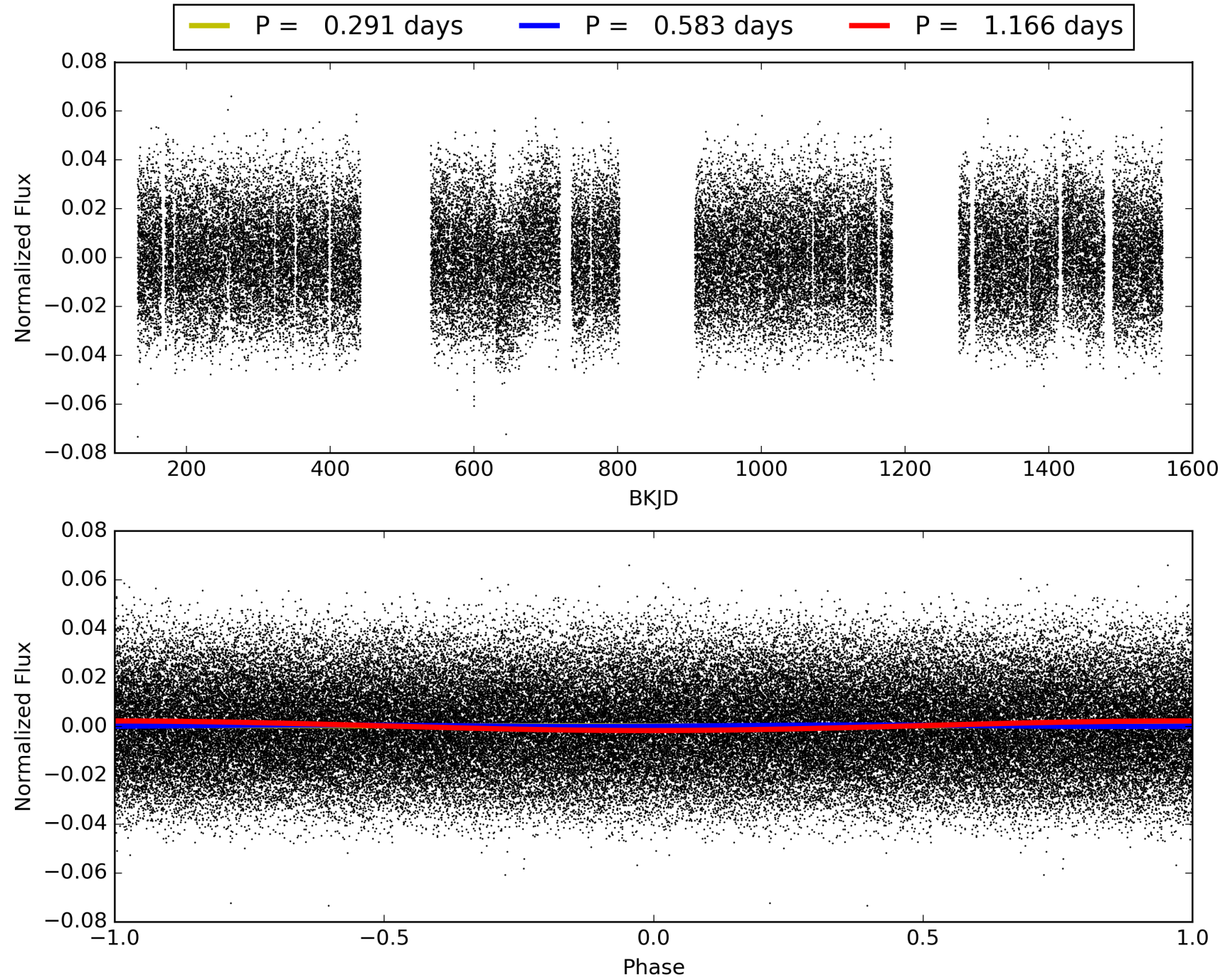
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

# TCE 006268890-03, PDC Light Curves



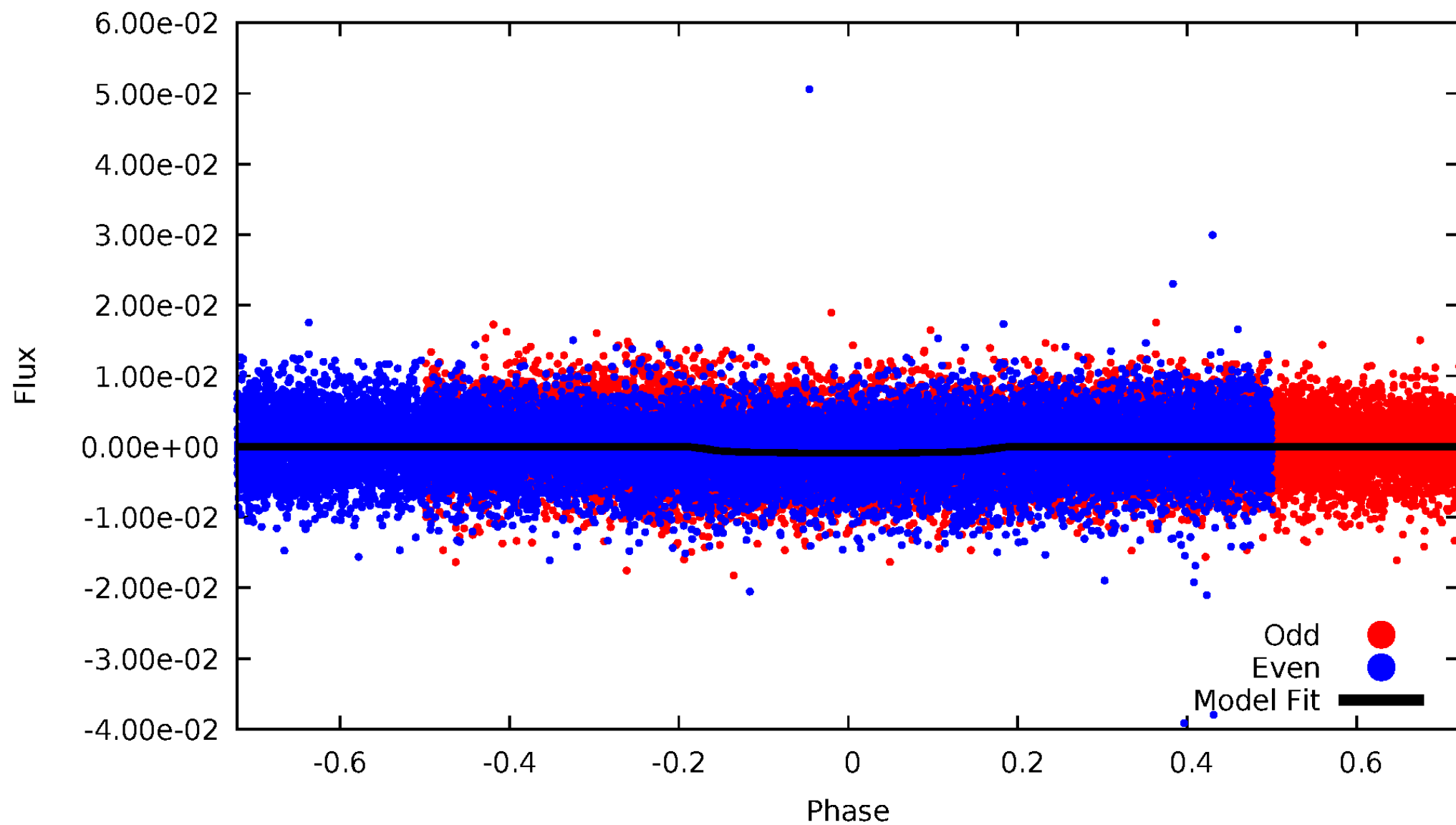


# TCE 006268890-03



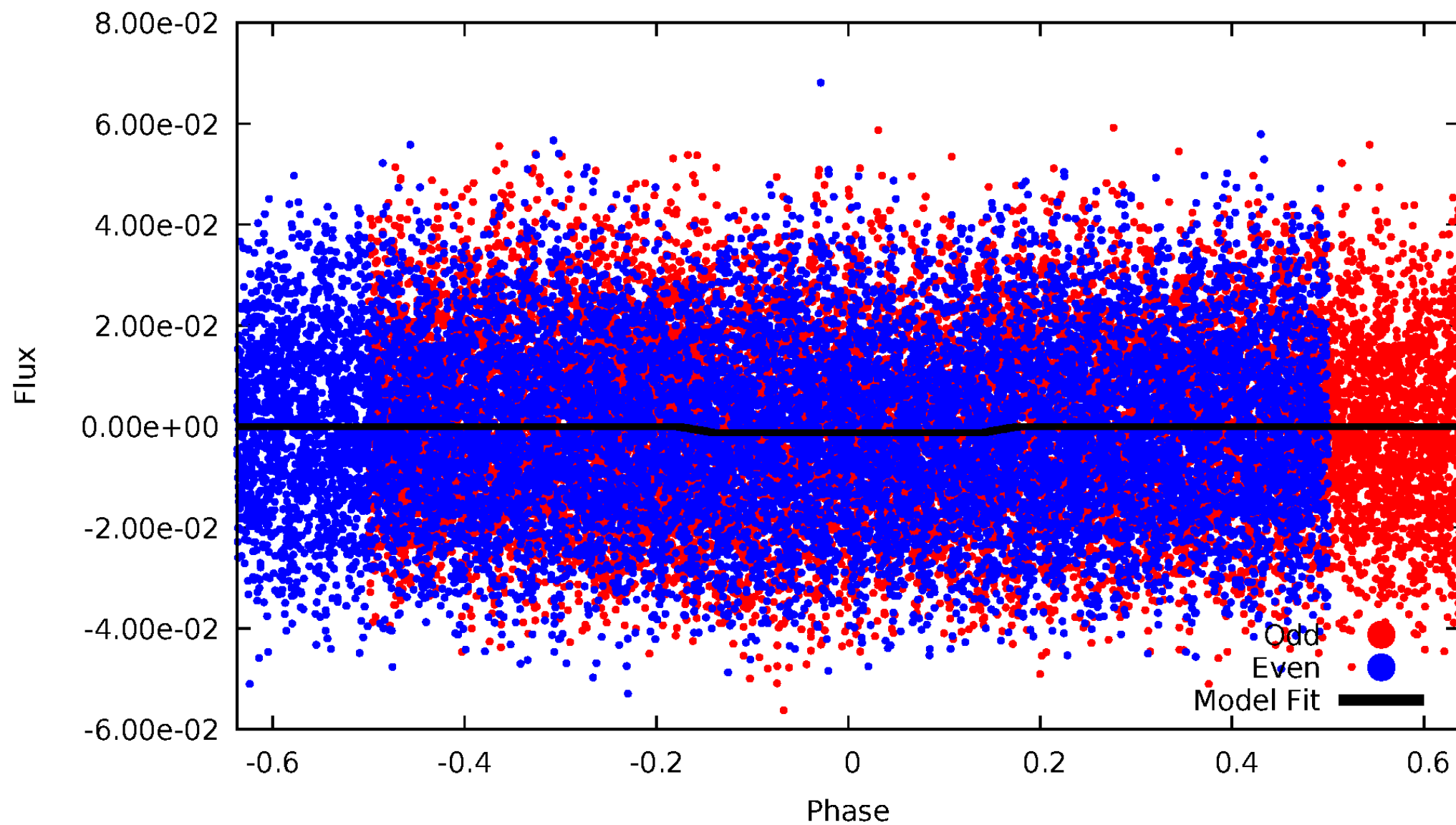
# DV Odd/Even

TCE 006268890-03



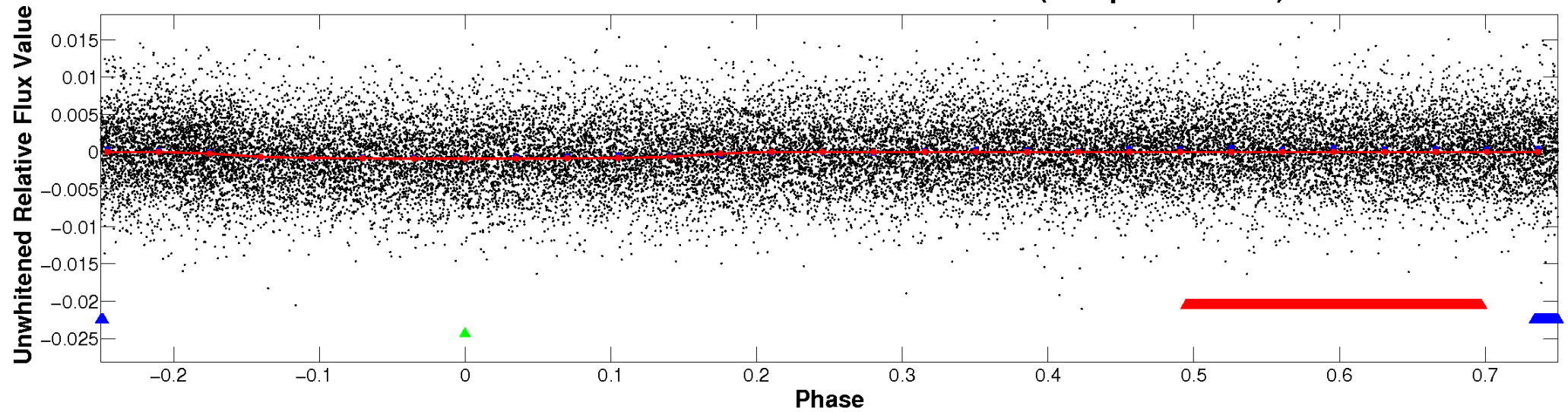
# ALT Odd/Even

TCE 006268890-03

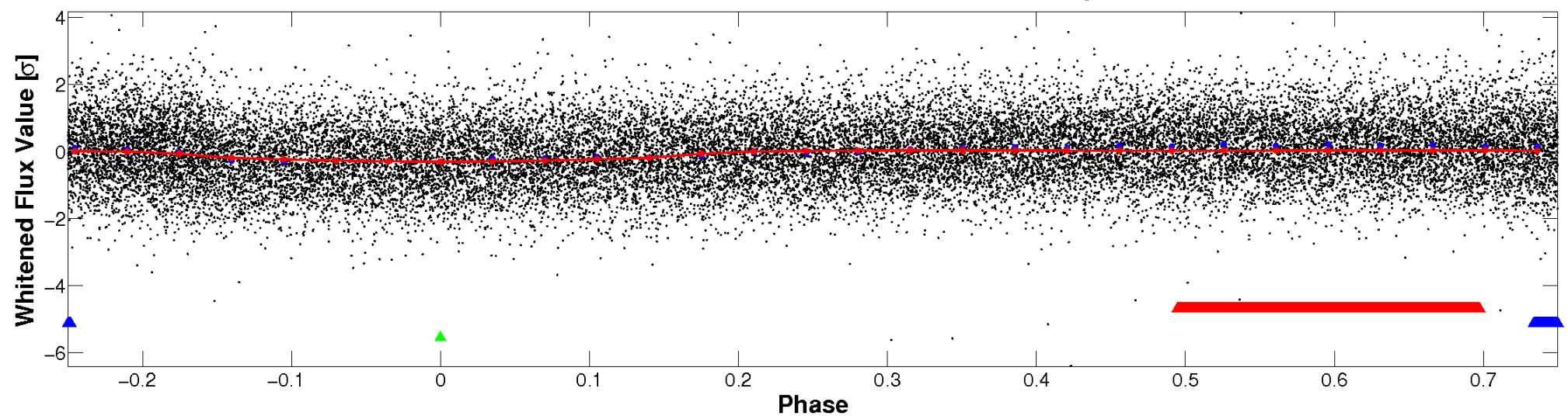


# Non-Whitened Vs. Whitened Light Curve

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



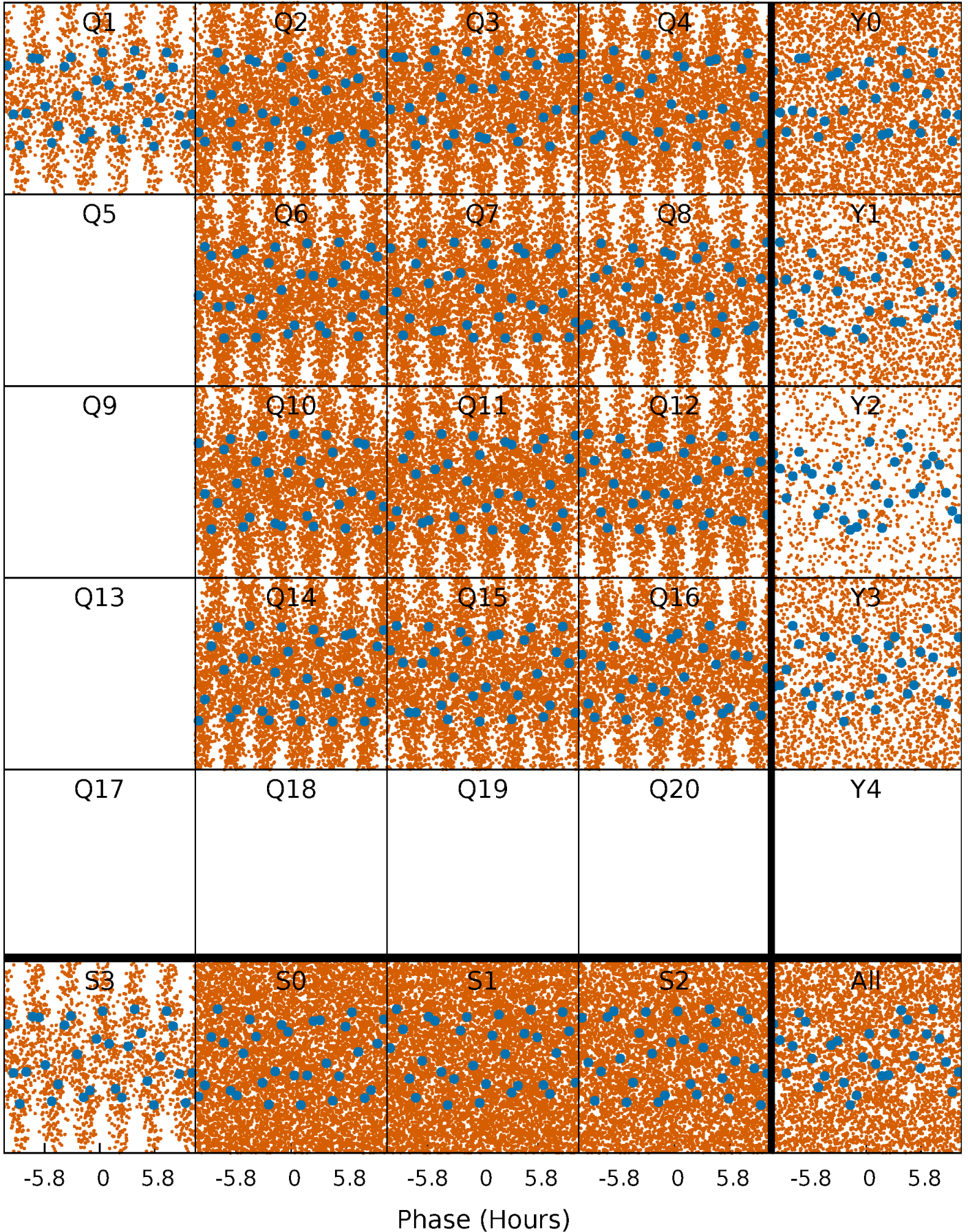
**Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)**





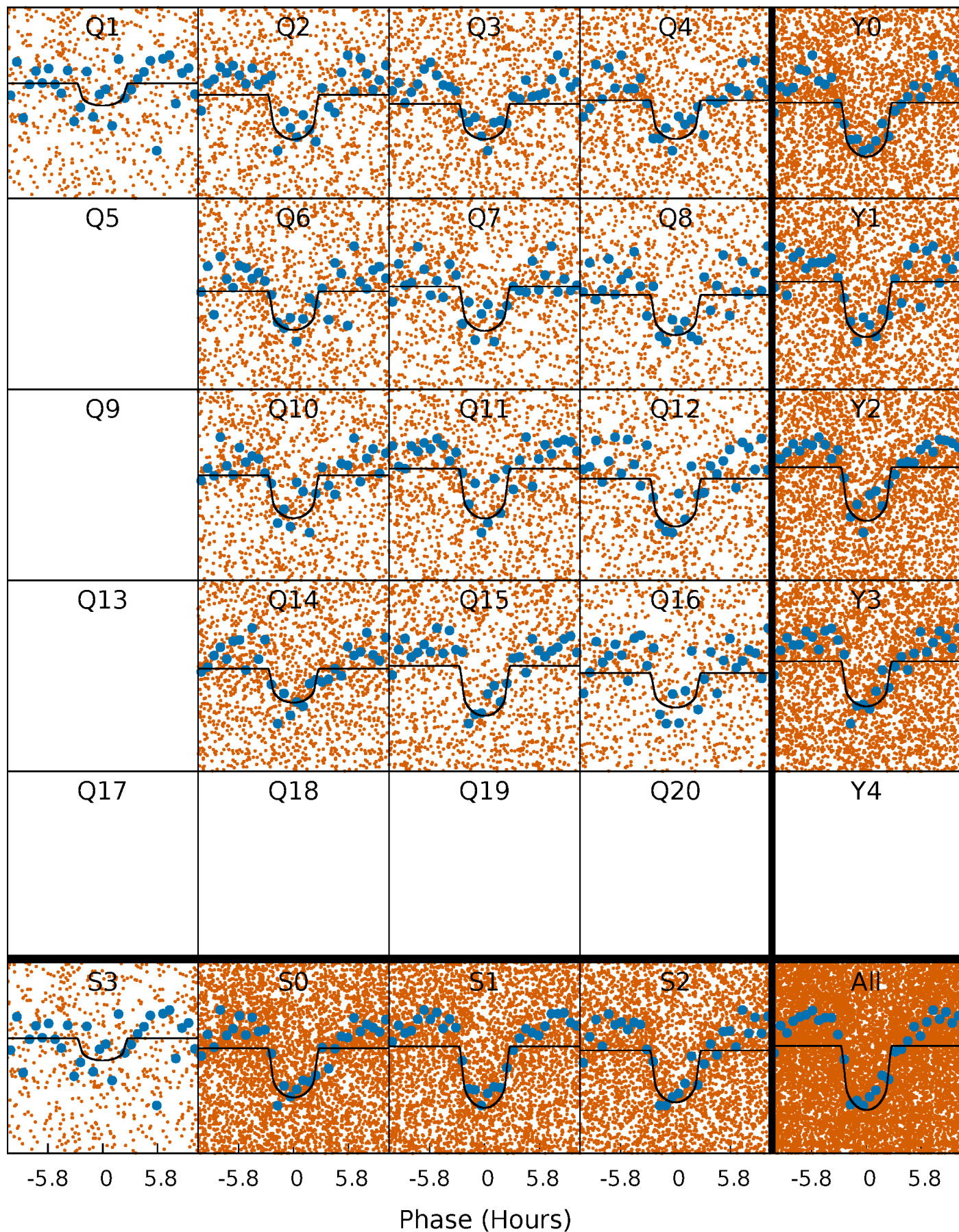
# PDC Quarter-Phased Transit Curves

TCE 006268890-03 P= 0.582872 Days  $T_0=131.885100$  (BKJD)



# DV Quarter-Phased Transit Curves

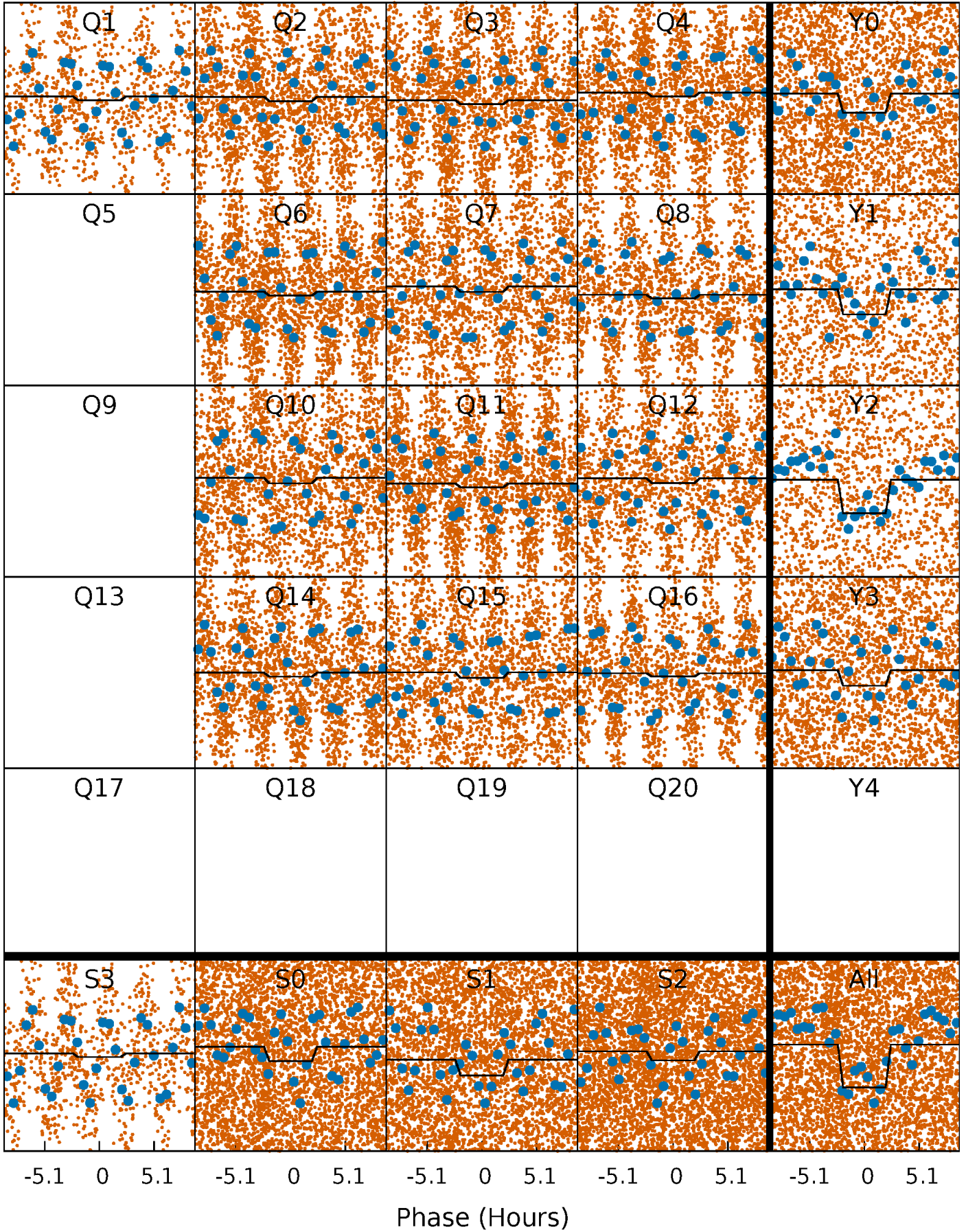
TCE 006268890-03     $P = 0.582872$  Days     $T_0 = 131.885100$  (BKJD)





# Alt. Detrend Quarter-Phased Transit Curves

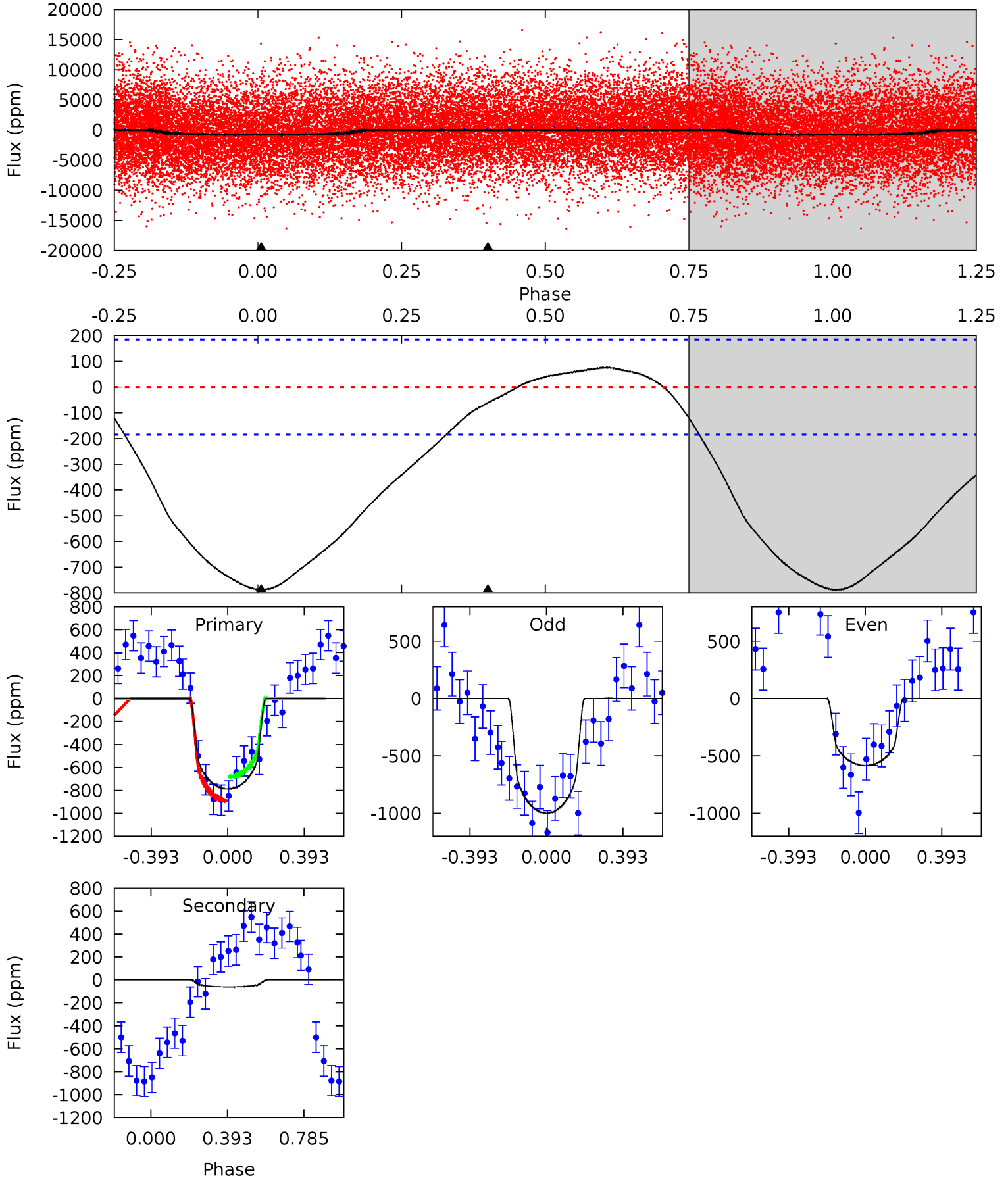
TCE 006268890-03 P= 0.582879 Days  $T_0=131.873403$  (BKJD)



# DV Model-Shift Uniqueness Test

006268890-03, P = 0.582872 Days, E = 131.302228 Days

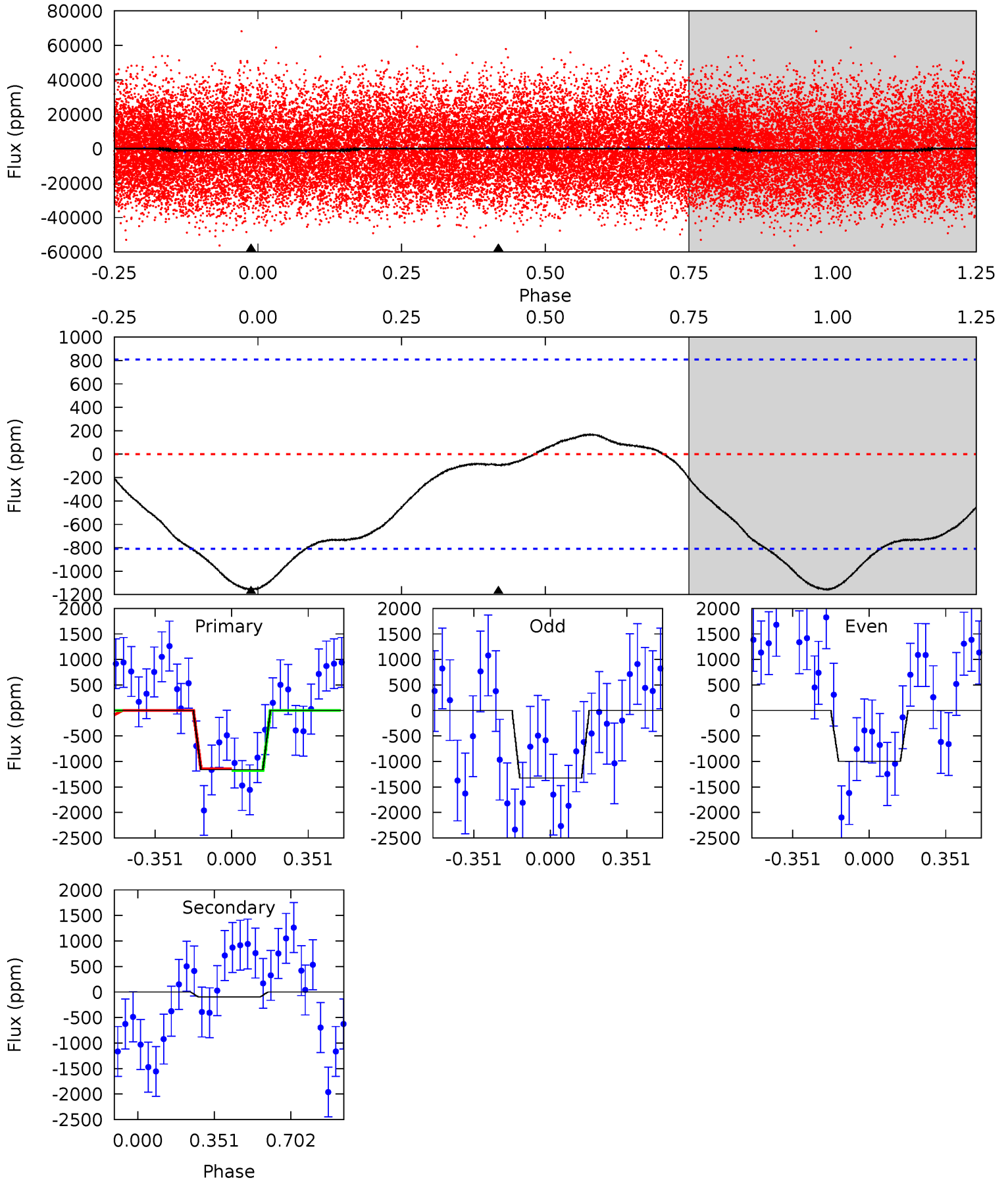
Pri	Sec	Ter	Pos	FA <sub>1</sub>	FA <sub>2</sub>	F <sub>Red</sub>	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.2	1.41	0	0	4.27	0.85	1.23	18.2	18.2	1.41	1.41	4.77	0.66	0.09	2.37



# Alt Model-Shift Uniqueness Test

006268890-03, P = 0.582879 Days, E = 131.290524 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
6.15	0.52	0	0	4.29	0.93	0.46	6.15	6.15	0.52	0.52	0.89	1.06	0.13	0.10



### Stellar Parameters For KIC 006268890

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	$7474^{+235}_{-287}$	$3.535^{+0.585}_{-0.065}$	$-0.260^{+0.250}_{-0.300}$	$3.986^{+0.399}_{-2.262}$	$1.988^{+0.063}_{-0.571}$	$0.044^{+0.372}_{-0.009}$
	+3%/-4%	+17%/-2%	+96%/-115%	+10%/-57%	+3%/-29%	+841%/-20%
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 006268890-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	$A_{\text{obs}}$
DV	$-61 \pm 43$	$10.67^{+6.09}_{-5.39}$	$6767^{+459}_{-952}$	$-5015^{+8197}_{-597}$	$0.073^{+0.259}_{-0.057}$
Alt.	$-99 \pm 189$	$12.99^{+6.33}_{-5.68}$	$6734^{+514}_{-1007}$	$-5098^{+9108}_{-733}$	$0.071^{+0.329}_{-0.144}$

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



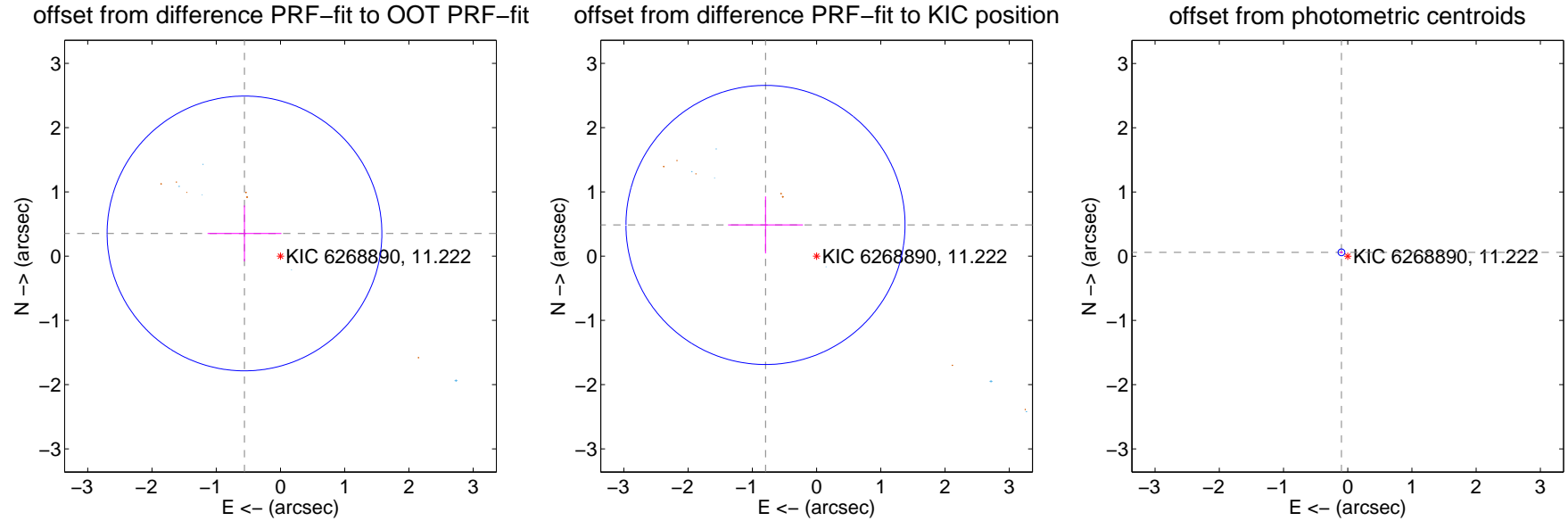
## DV Centroid Data

Supplemental centroid analysis for 006268890-03. **Kepler magnitude: 11.22.** Transit SNR 22.98

There are 6 quarters with good PRF difference image offsets

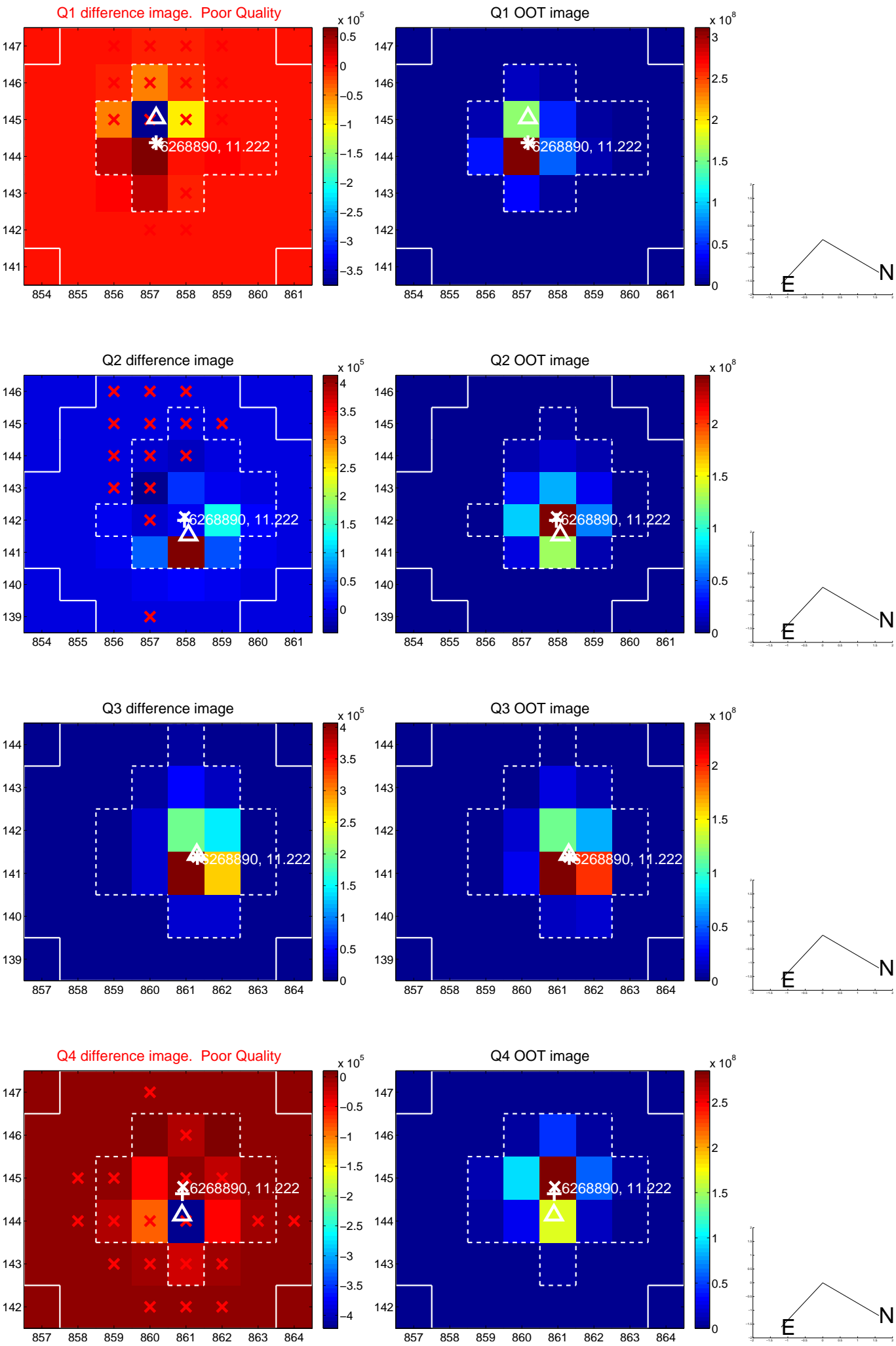
The direct PRF centroid is offset from the target star catalog position by about 0.51 arcsec

	Distance in arcsec	Distance / $\sigma$	$\Delta$ RA	$\Delta$ Dec
PRF-fit source offset from OOT	$0.662 \pm 0.713$	0.93	$0.560 \pm 0.575$	$0.353 \pm 0.435$
PRF-fit source offset from KIC position	$0.932 \pm 0.724$	1.29	$0.795 \pm 0.583$	$0.485 \pm 0.444$
photometric centroid source offset	$0.11 \pm 0.02$	6.50	$0.10 \pm 0.02$	$0.06 \pm 0.02$

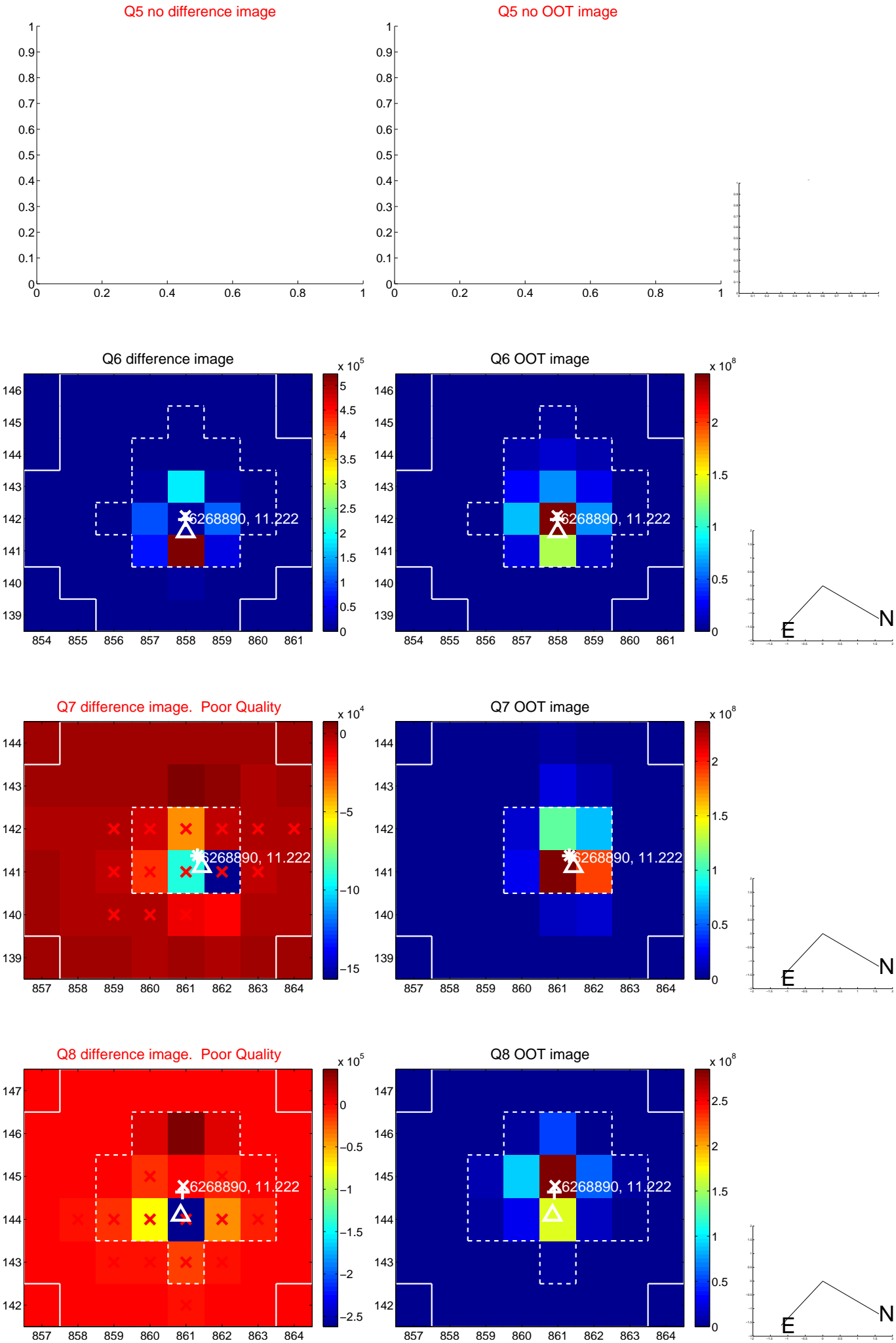


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

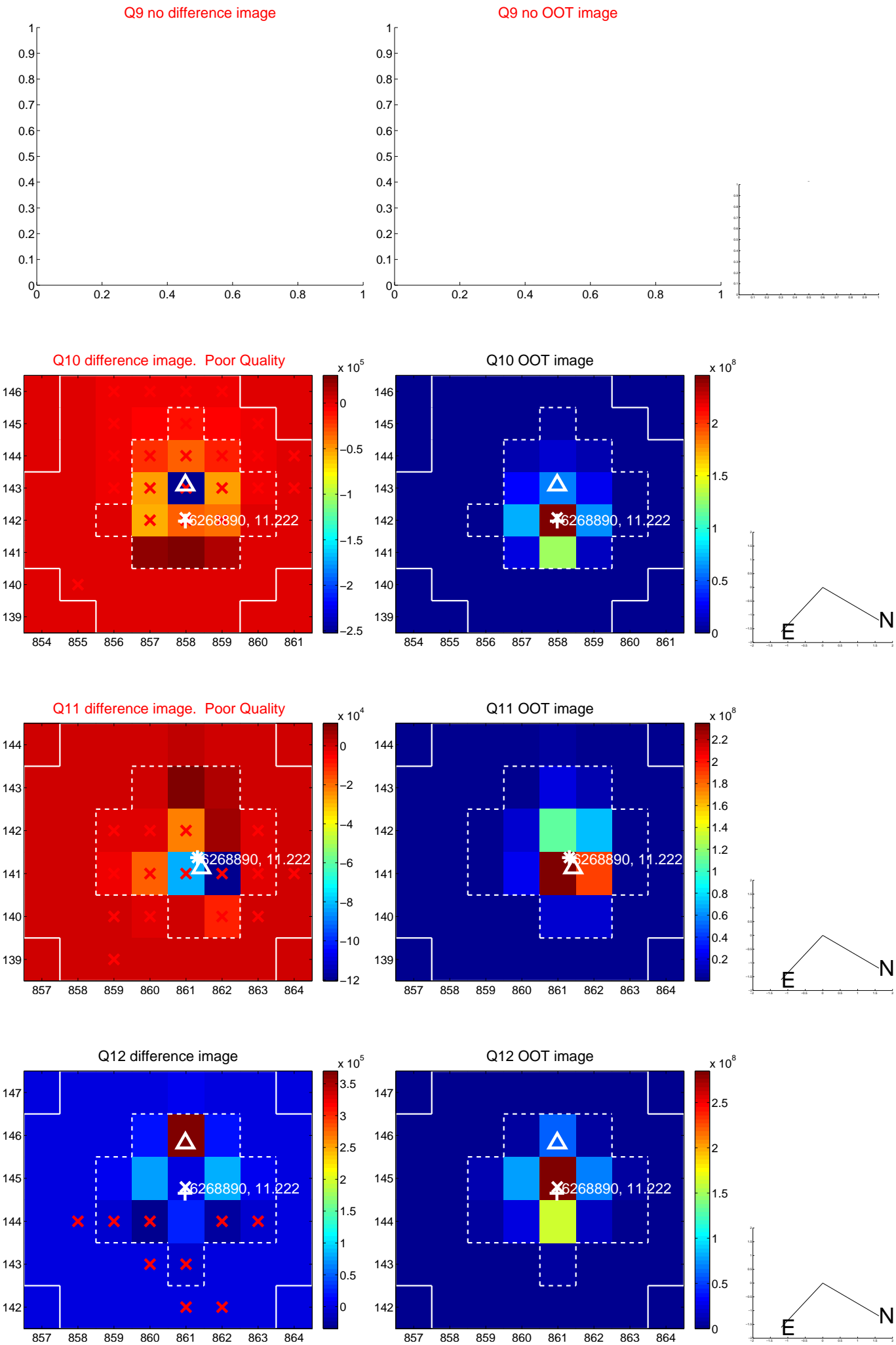
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



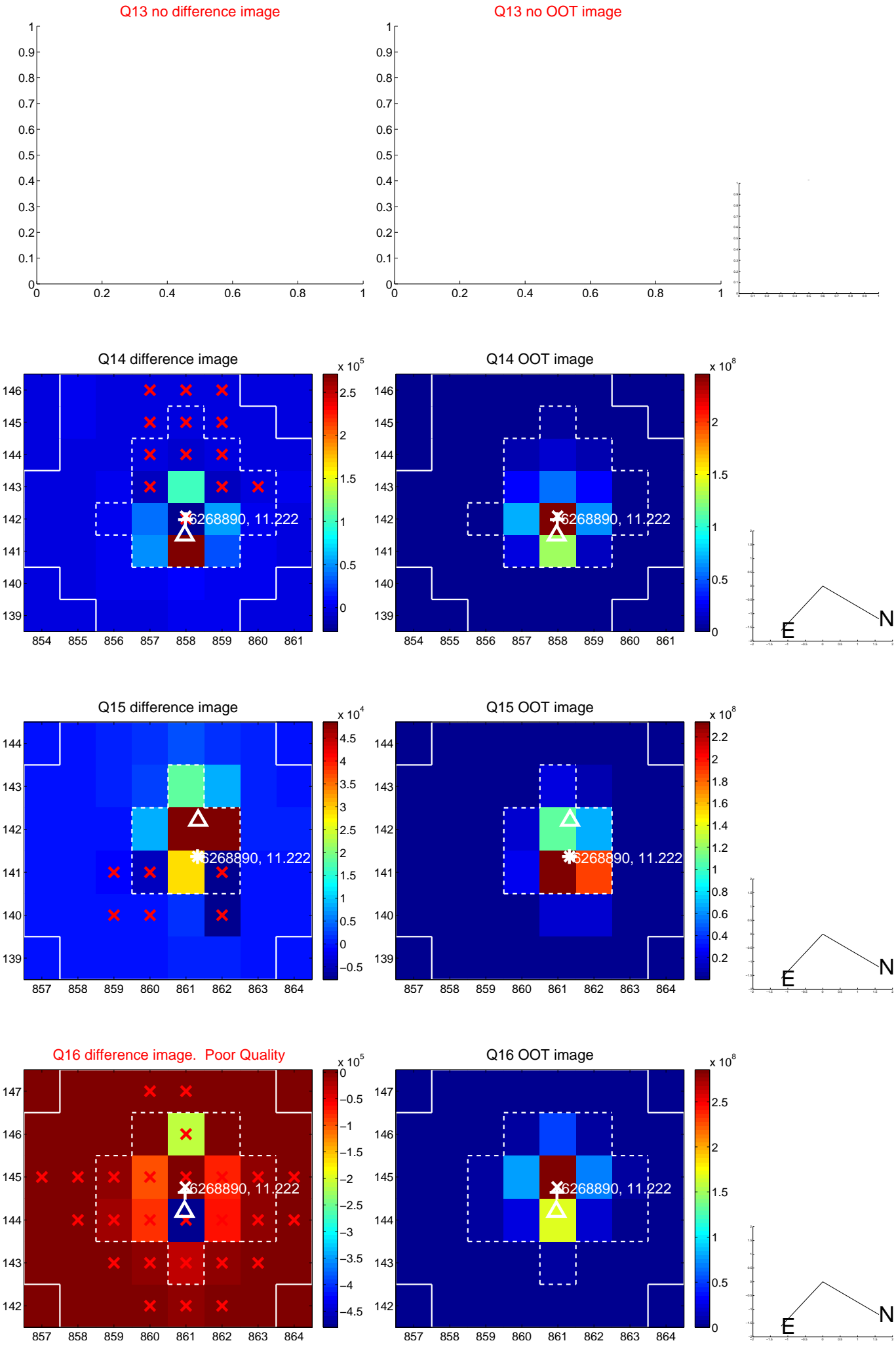
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



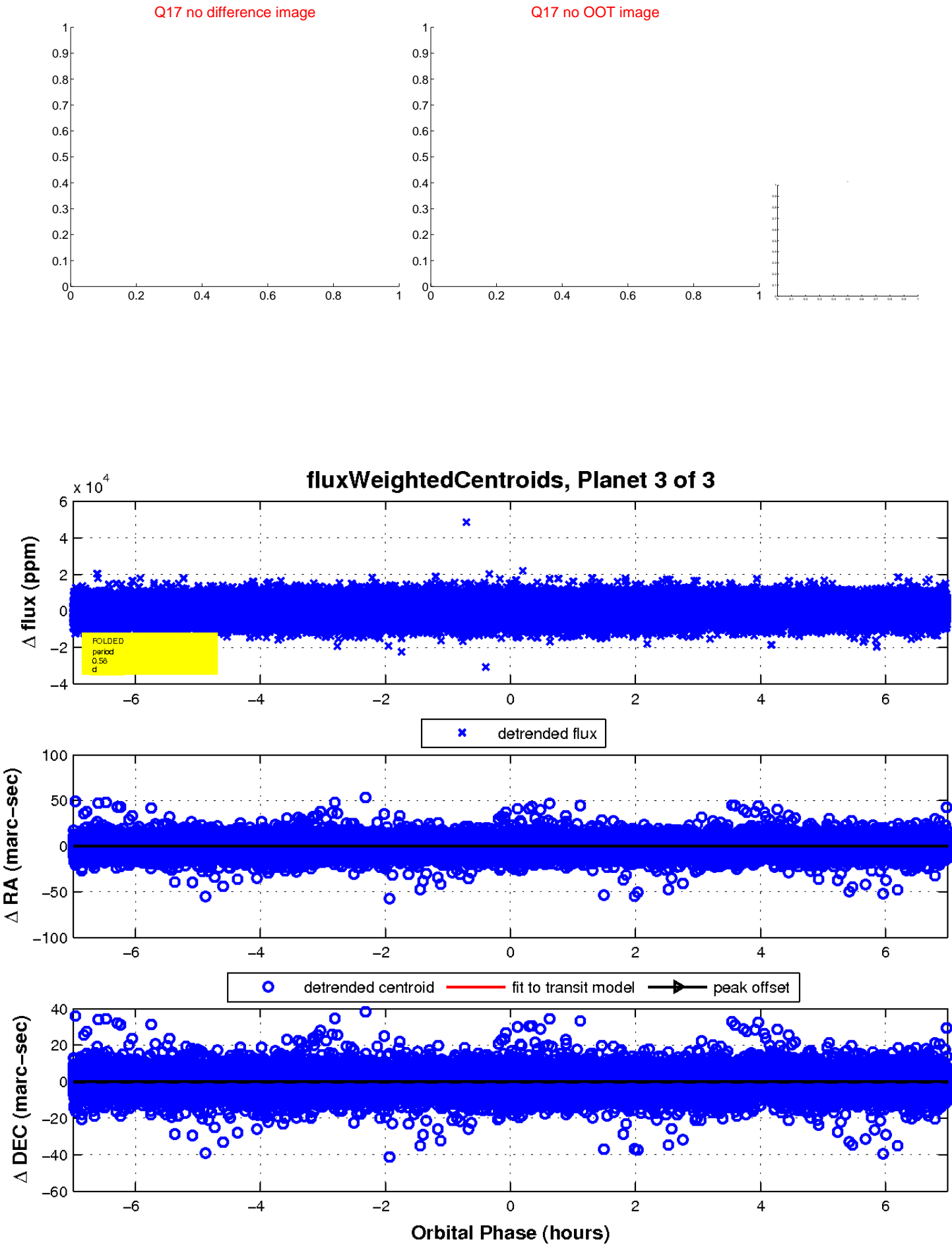
white  $\times$ : KIC target position;  $+$ : OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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

