

KIC 007621172

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})
007621172-01	OBS	No	0.688117	132.090196	30.9	1.738	13.9	9.9	1.74	7052	1.11	21238.63
007621172-02	OBS	No	0.688143	131.851078	45.4	2.540	13.5	16.1	1.74	7052	1.36	21237.57
007621172-03	OBS	No	0.688158	131.616859	64.3	1.586	9.5	18.7	1.74	7052	1.42	21236.94

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007621172-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_SATURATED
007621172-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_SATURATED
007621172-03	OBS	FP	0.00	1	0	0	0	LPP_DV—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.

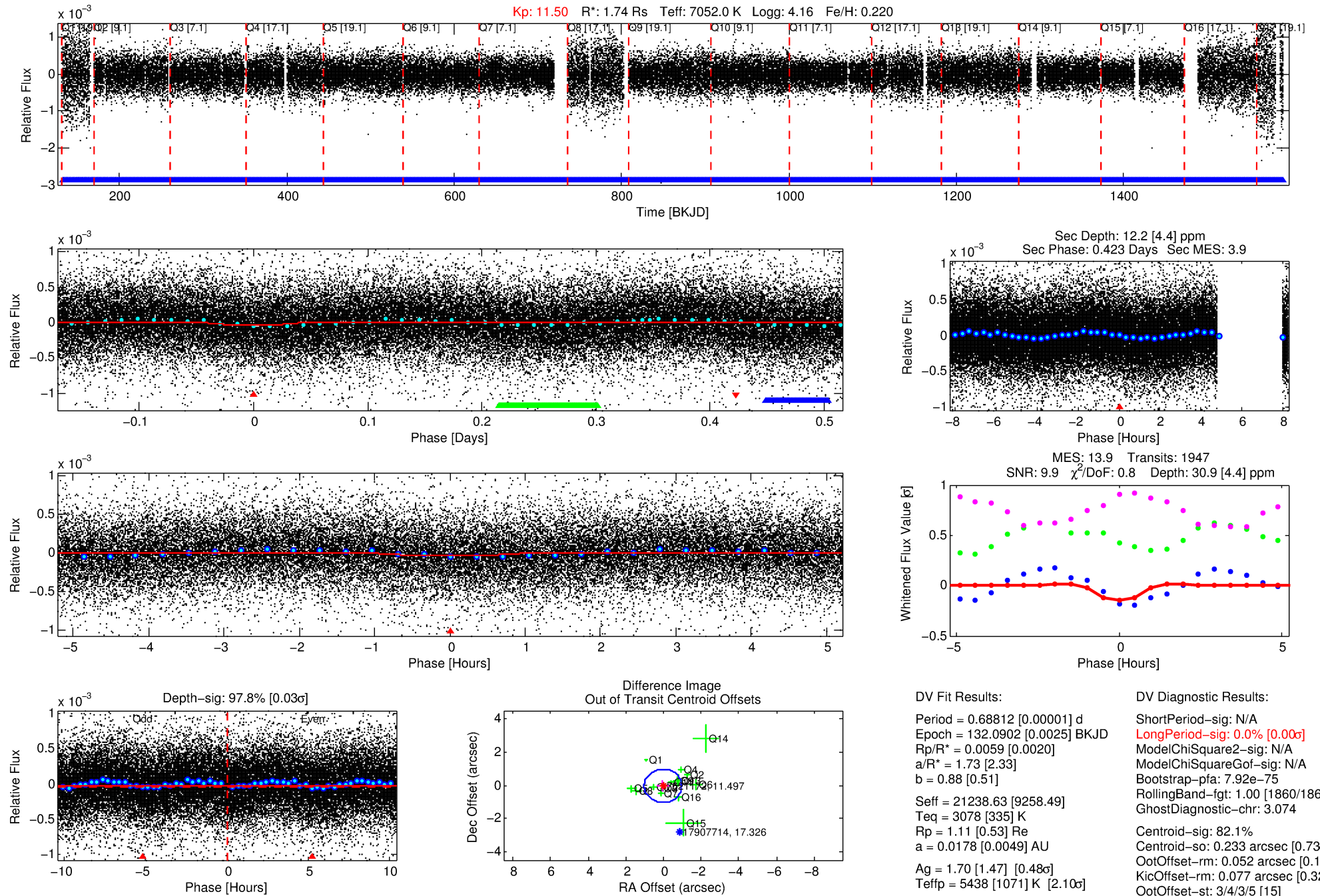
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007621172-01

No Significant Match Found

DV One-Page Summary

KIC: 7621172 Candidate: 1 of 3 Period: 0.688 d



DV Fit Results:

Period = 0.68812 [0.00001] d
Epoch = 132.0902 [0.0025] BKJD
Rp/R* = 0.0059 [0.0020]
a/R* = 1.73 [2.33]
b = 0.88 [0.51]
Seff = 21238.63 [9258.49]
Teq = 3078 [335] K
Rp = 1.11 [0.53] Re
a = 0.0178 [0.0049] AU
Ag = 1.70 [1.47] [0.48σ]
Teff = 5438 [1071] K [2.10σ]

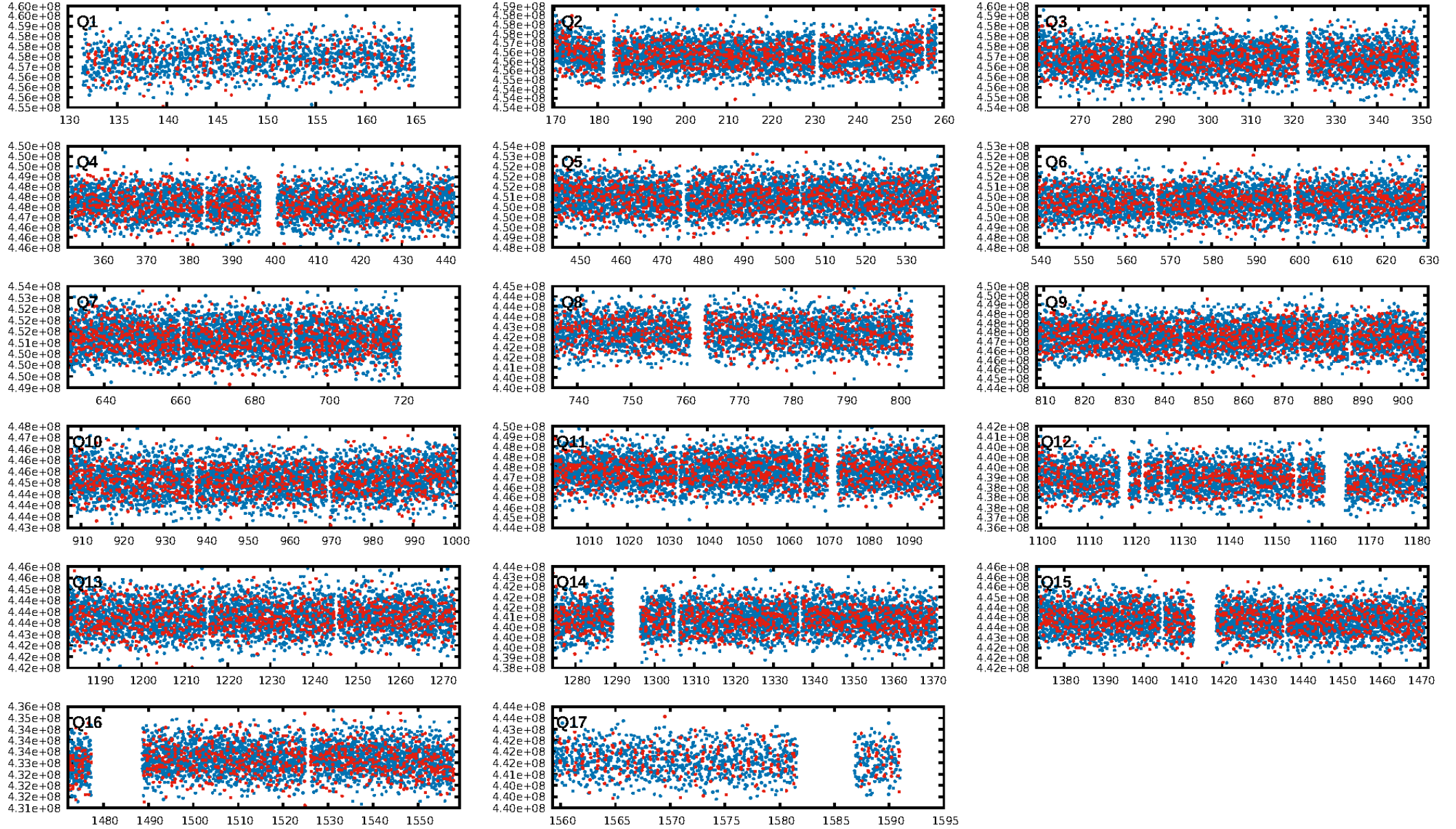
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.92e-75
RollingBand-fgt: 1.00 [1860/1860]
GhostDiagnostic-chr: 3.074
Centroid-sig: 82.1%
Centroid-so: 0.233 arcsec [0.73σ]
OotOffset-rm: 0.052 arcsec [0.16σ]
KicOffset-rm: 0.077 arcsec [0.32σ]
OotOffset-st: 3/4/3/5 [15]
KicOffset-st: 3/4/3/5 [15]
DiffImageQuality-fgm: 0.80 [12/15]
DiffImageOverlap-fno: 0.00 [0/17]

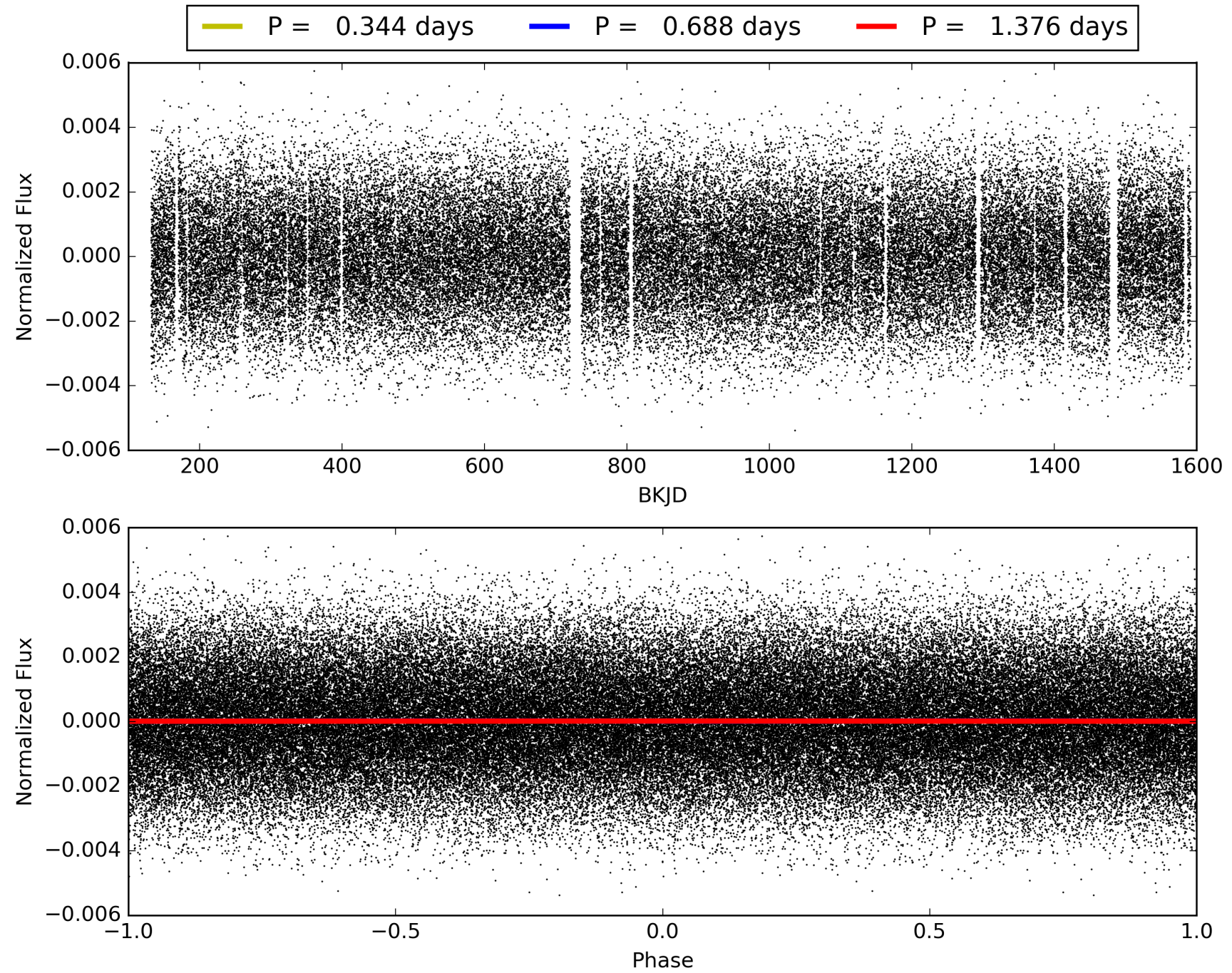
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 13:29:41 Z

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

TCE 007621172-01, PDC Light Curves

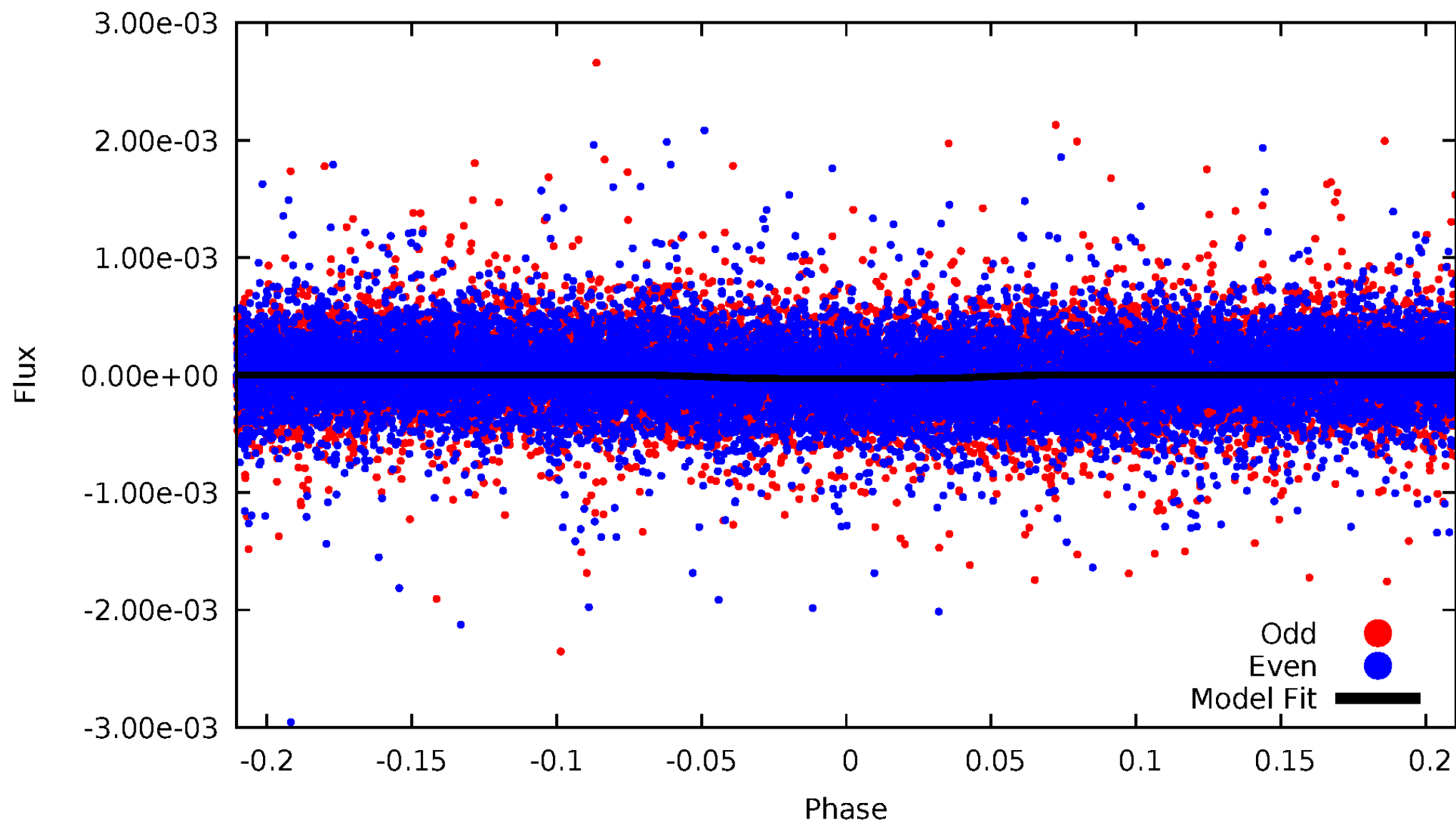


TCE 007621172-01



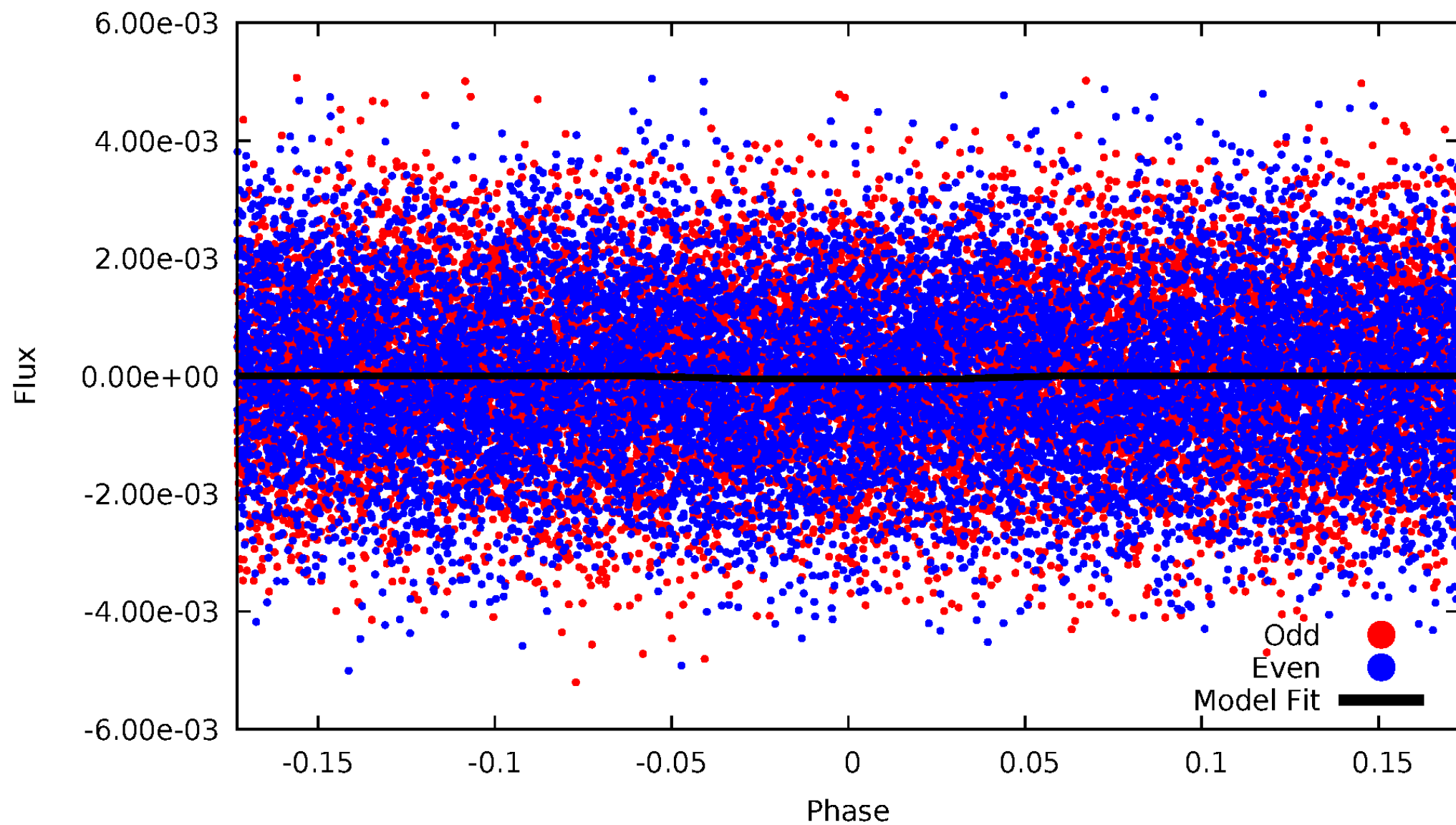
DV Odd/Even

TCE 007621172-01



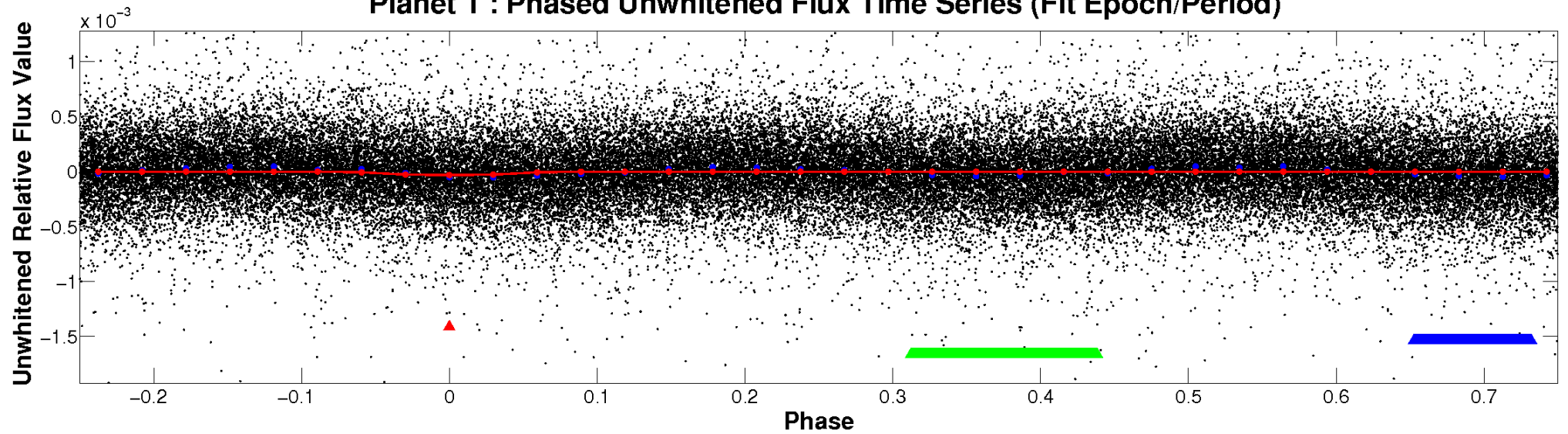
ALT Odd/Even

TCE 007621172-01

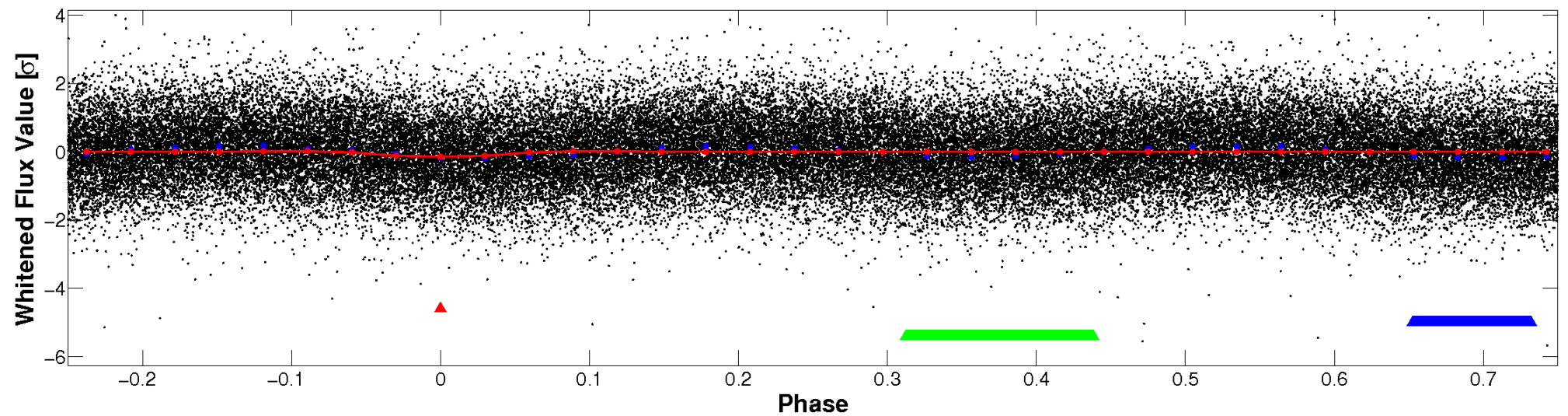


Non-Whitened Vs. Whitened Light Curve

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

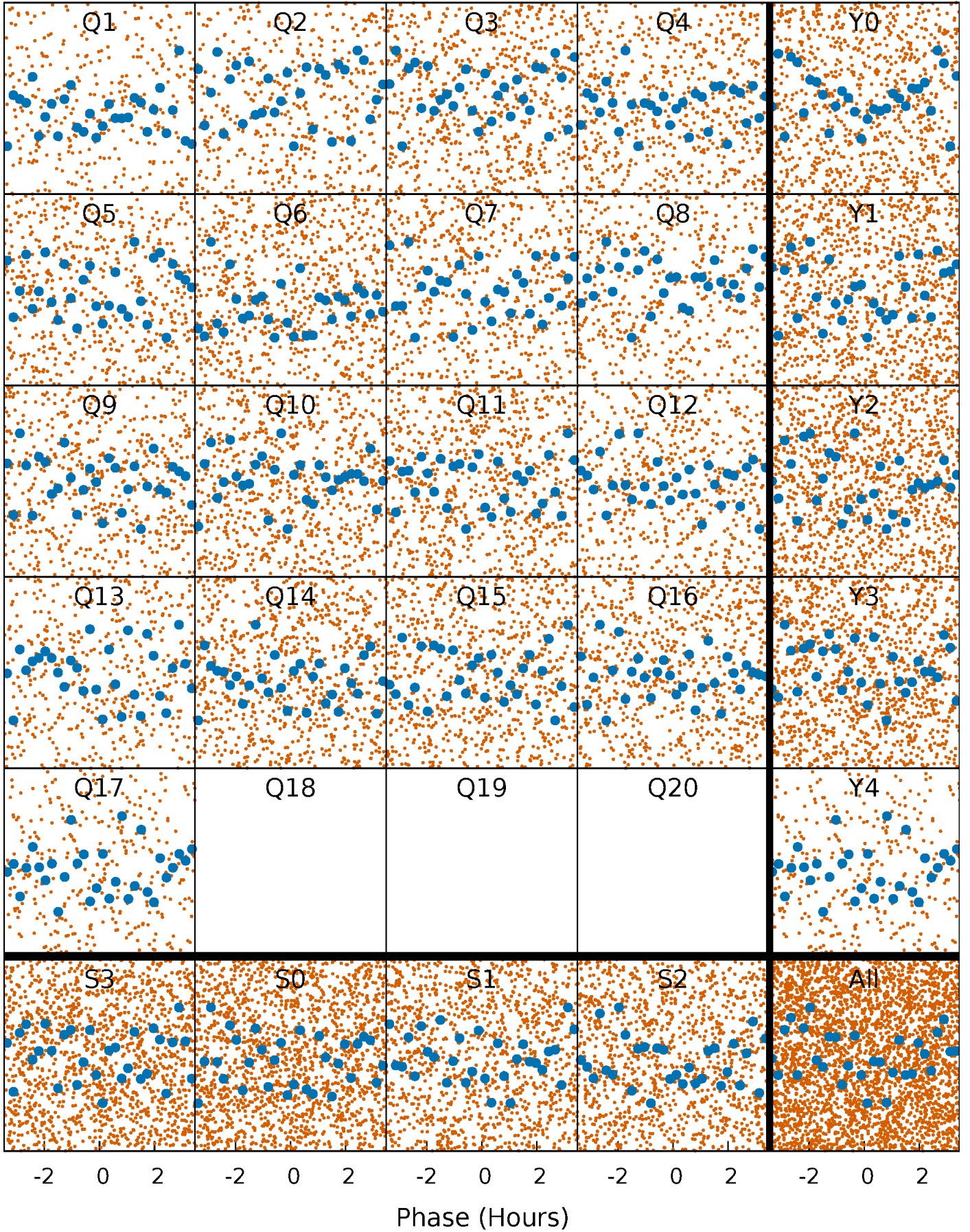


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



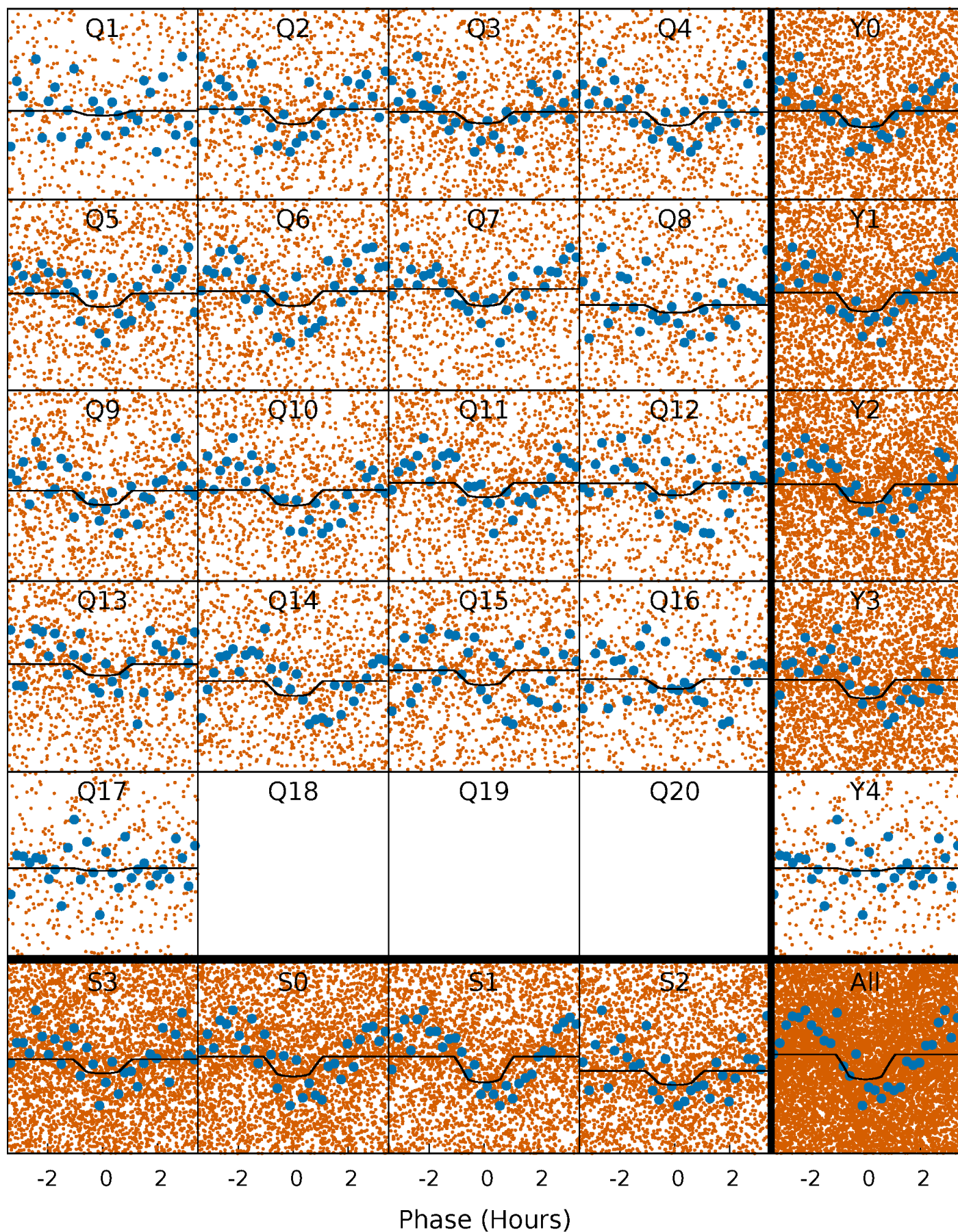
PDC Quarter-Phased Transit Curves

TCE 007621172-01 P= 0.688117 Days $T_0=132.090196$ (BKJD)



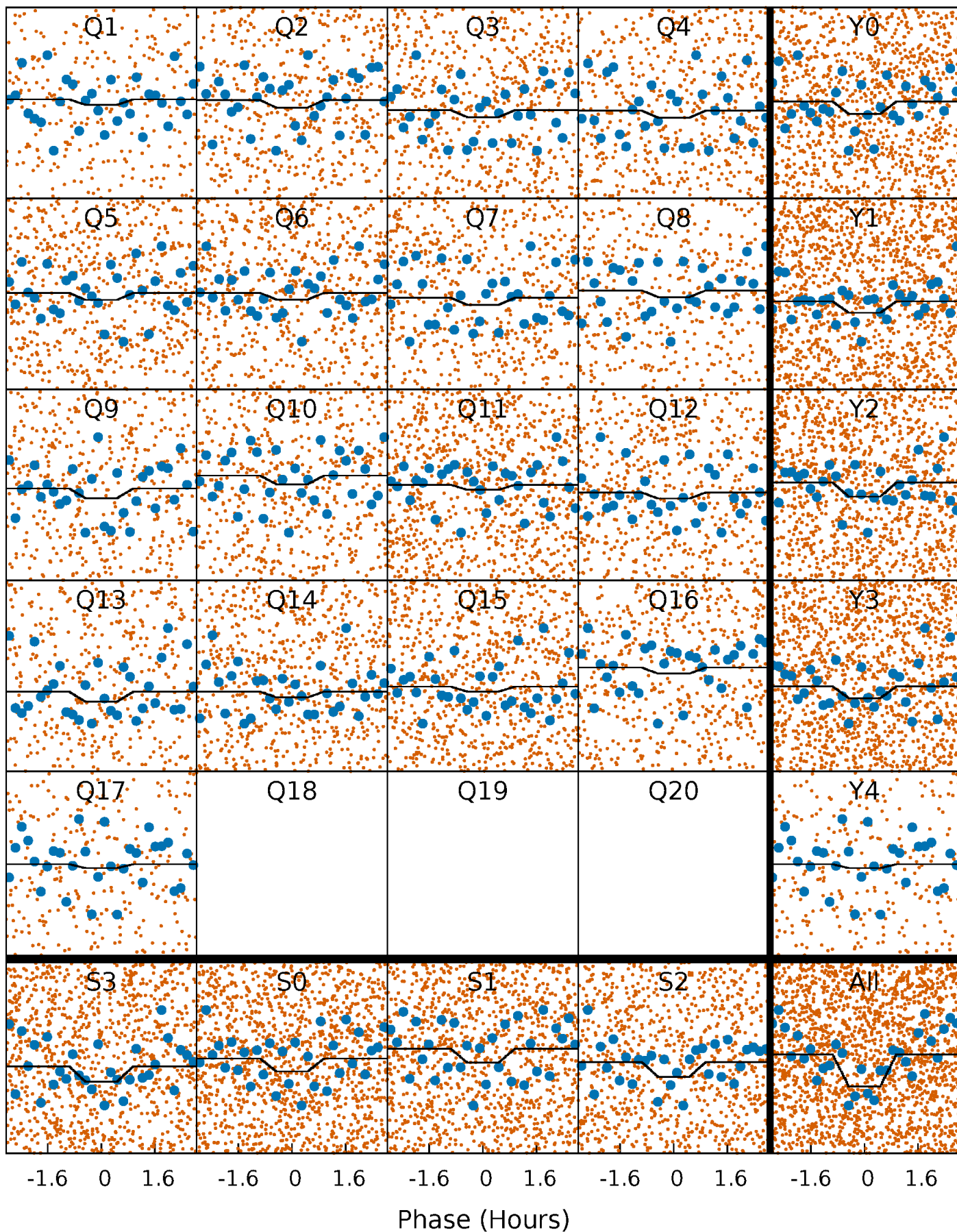
DV Quarter-Phased Transit Curves

TCE 007621172-01 P= 0.688117 Days $T_0=132.090196$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

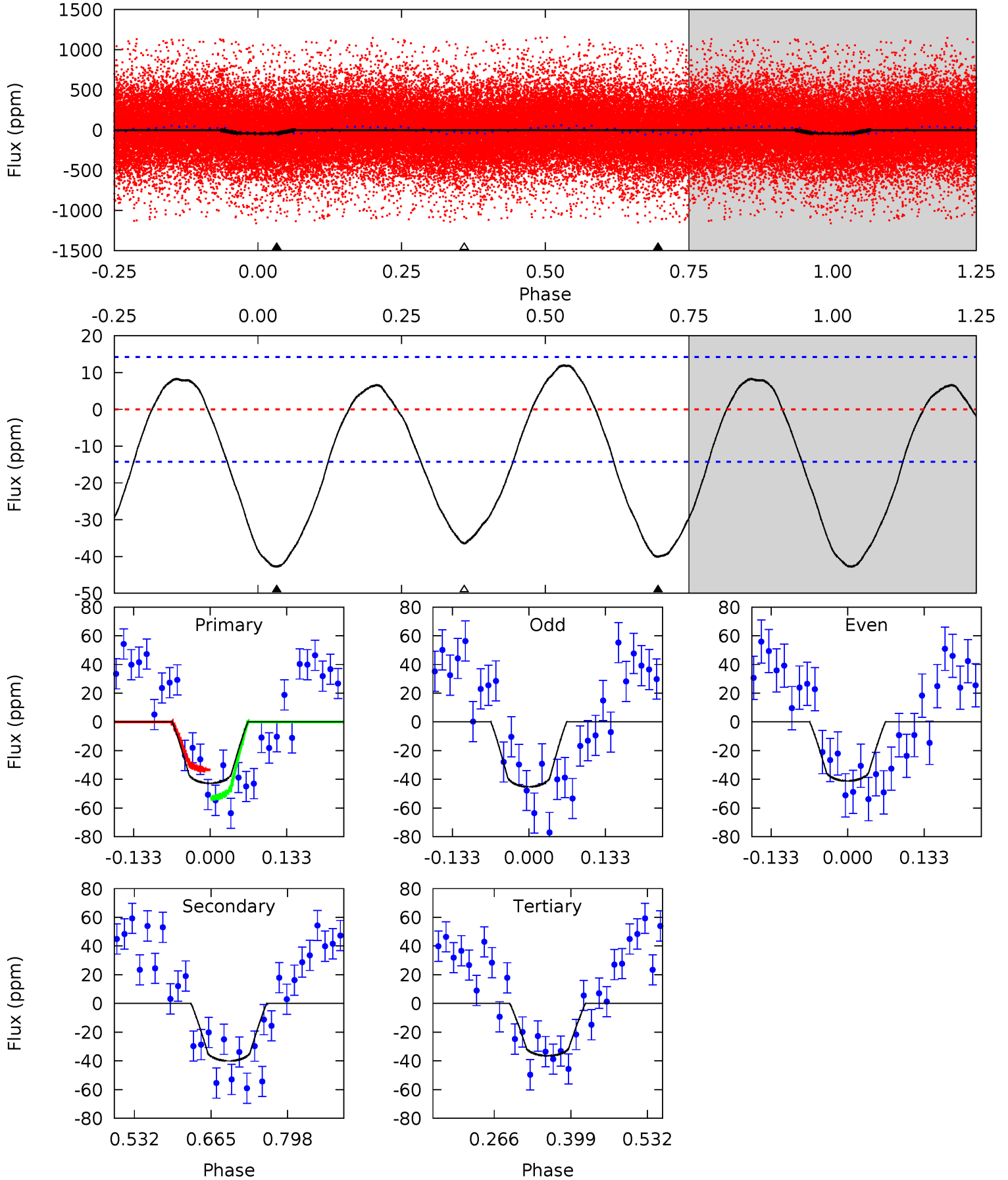
TCE 007621172-01 P= 0.688146 Days $T_0=132.087425$ (BKJD)



DV Model-Shift Uniqueness Test

007621172-01, P = 0.688117 Days, E = 131.402079 Days

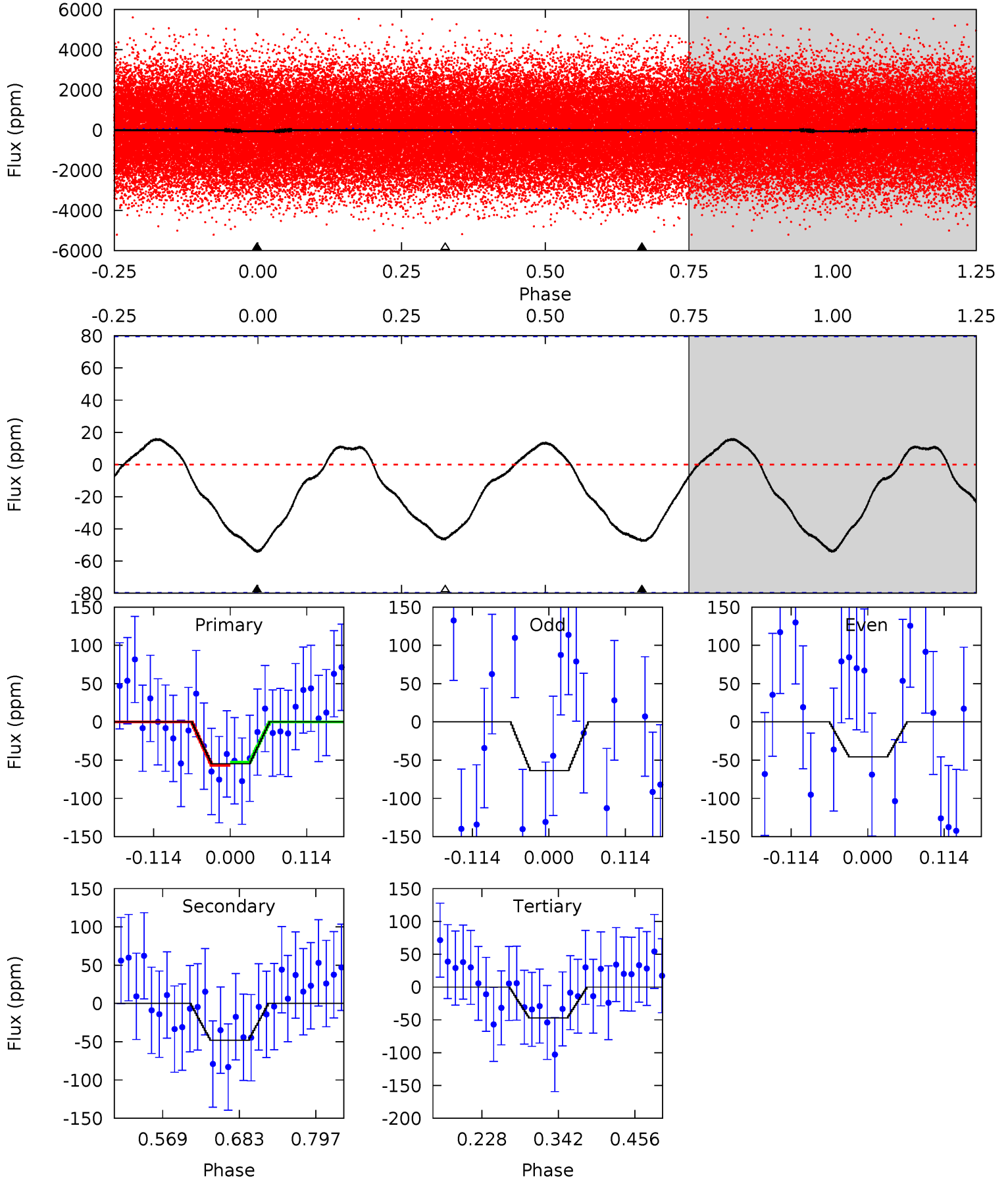
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.5	12.7	11.5	0	4.50	1.50	5.12	2.00	13.5	1.15	12.7	0.66	1.01	0.22	3.11



Alt Model-Shift Uniqueness Test

007621172-01, P = 0.688146 Days, E = 131.399279 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.11	2.73	2.67	0	4.54	1.58	1.10	0.43	3.11	0.06	2.73	0.50	0.95	0.23	0.11



Stellar Parameters For KIC 007621172

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7052^{+195}_{-335}	$4.156^{+0.105}_{-0.210}$	$0.220^{+0.150}_{-0.350}$	$1.741^{+0.584}_{-0.270}$	$1.583^{+0.214}_{-0.236}$	$0.423^{+0.215}_{-0.226}$
	+3%/-5%	+3%/-5%	+68%/-159%	+34%/-16%	+14%/-15%	+51%/-53%
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 007621172-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-40 ± 3	$1.13^{+0.41}_{-0.40}$	4319^{+351}_{-269}	7234^{+2376}_{-1118}	$5.345^{+7.612}_{-2.431}$
Alt.	-48 ± 18	$1.44^{+0.47}_{-0.41}$	4327^{+351}_{-262}	6513^{+1563}_{-1098}	$3.709^{+3.991}_{-1.915}$

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

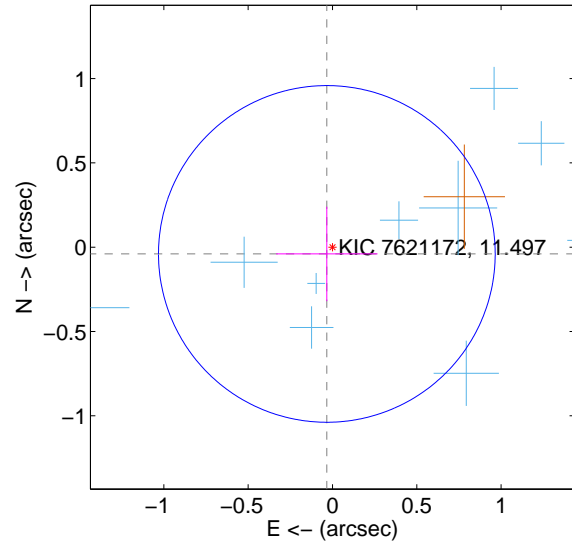
Supplemental centroid analysis for 007621172-01. **Kepler magnitude: 11.50.** Transit SNR 9.95

There are 12 quarters with good PRF difference image offsets

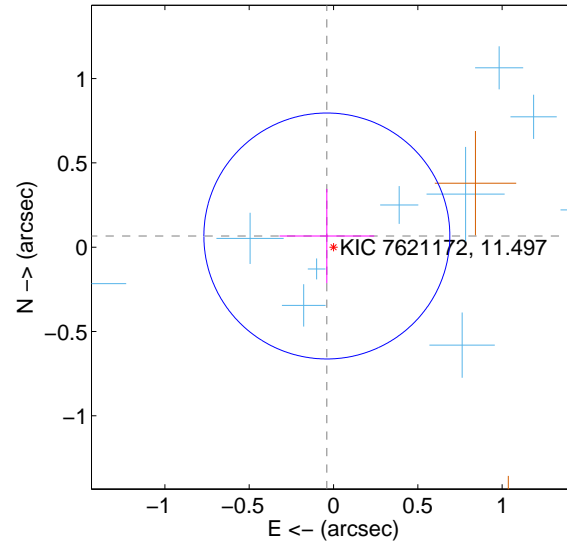
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.052 ± 0.333	0.16	0.033 ± 0.301	-0.040 ± 0.280
PRF-fit source offset from KIC position	0.077 ± 0.243	0.32	0.039 ± 0.281	0.066 ± 0.279
photometric centroid source offset	0.23 ± 0.32	0.73	-0.10 ± 0.30	0.21 ± 0.33

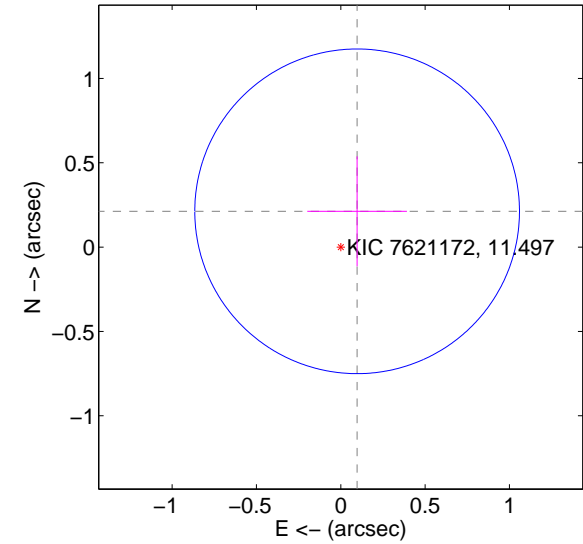
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

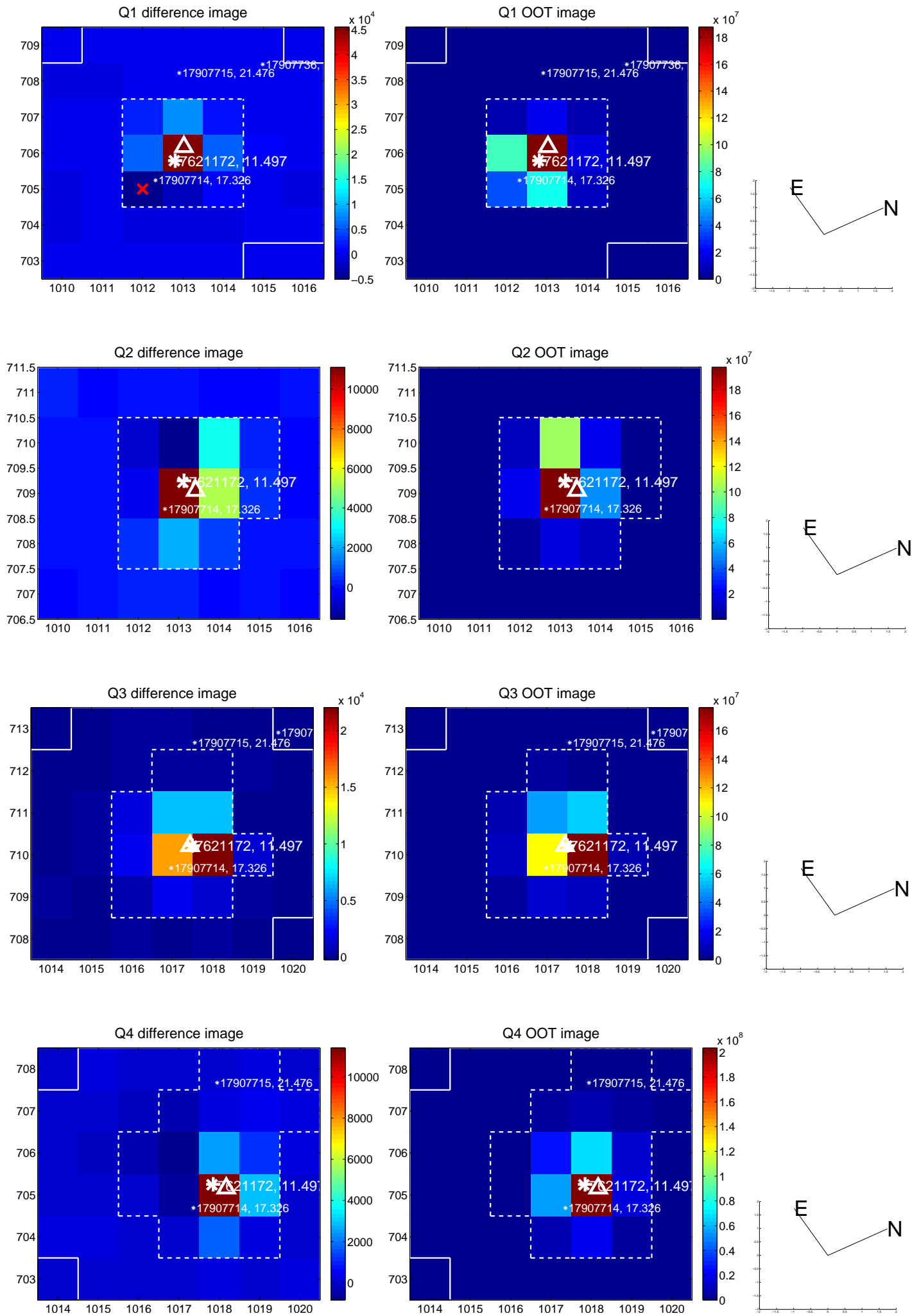


offset from photometric centroids

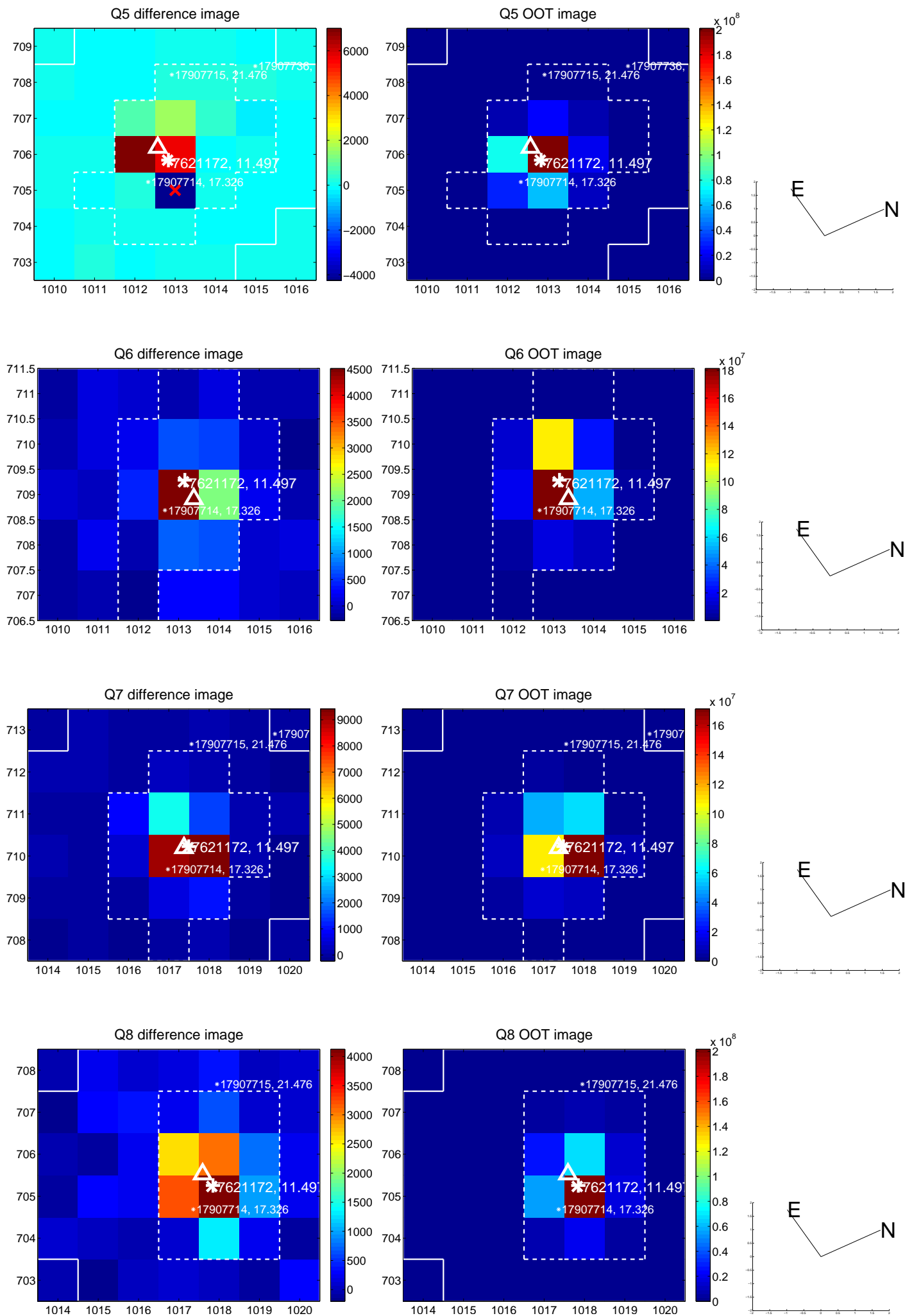


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

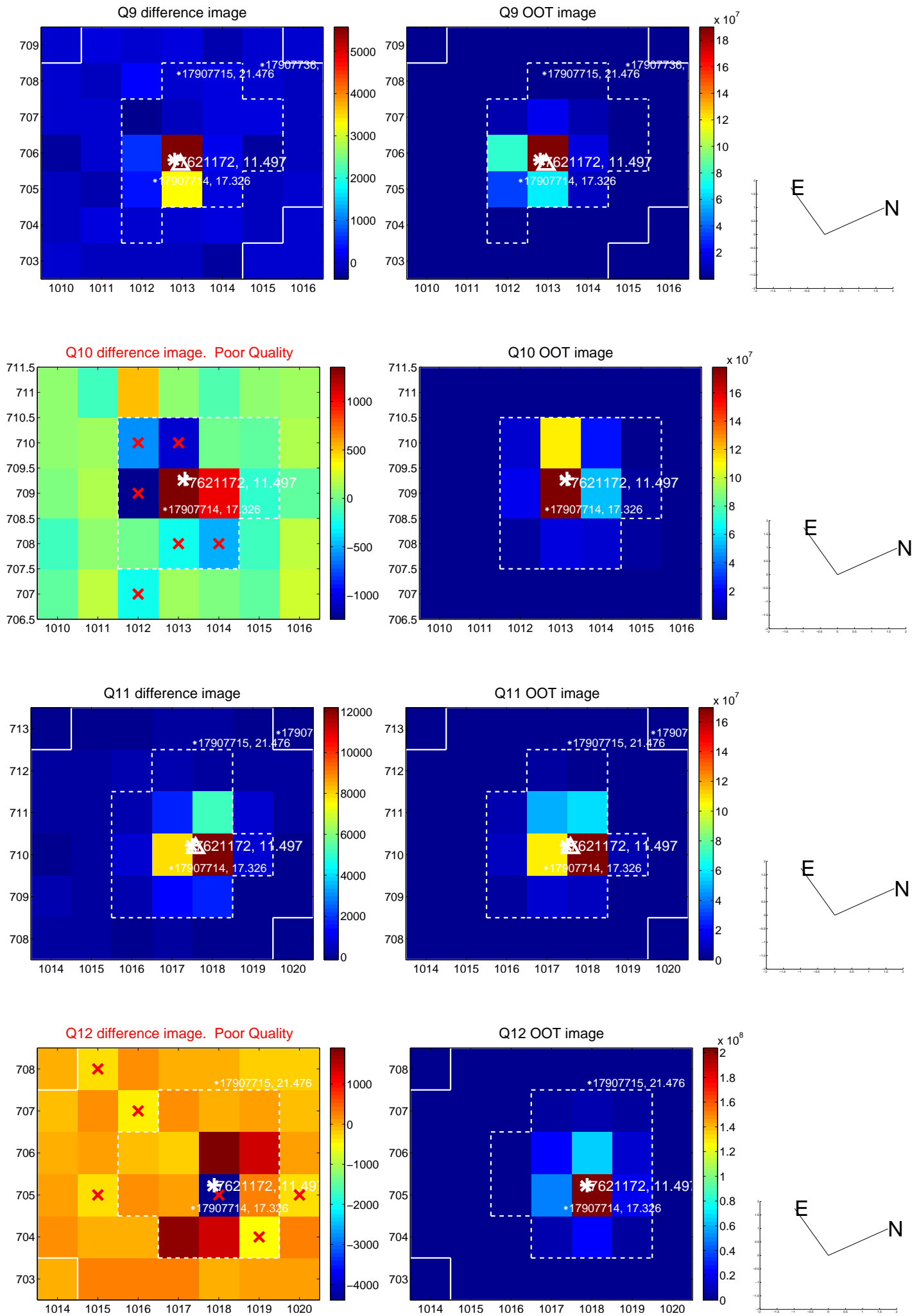
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



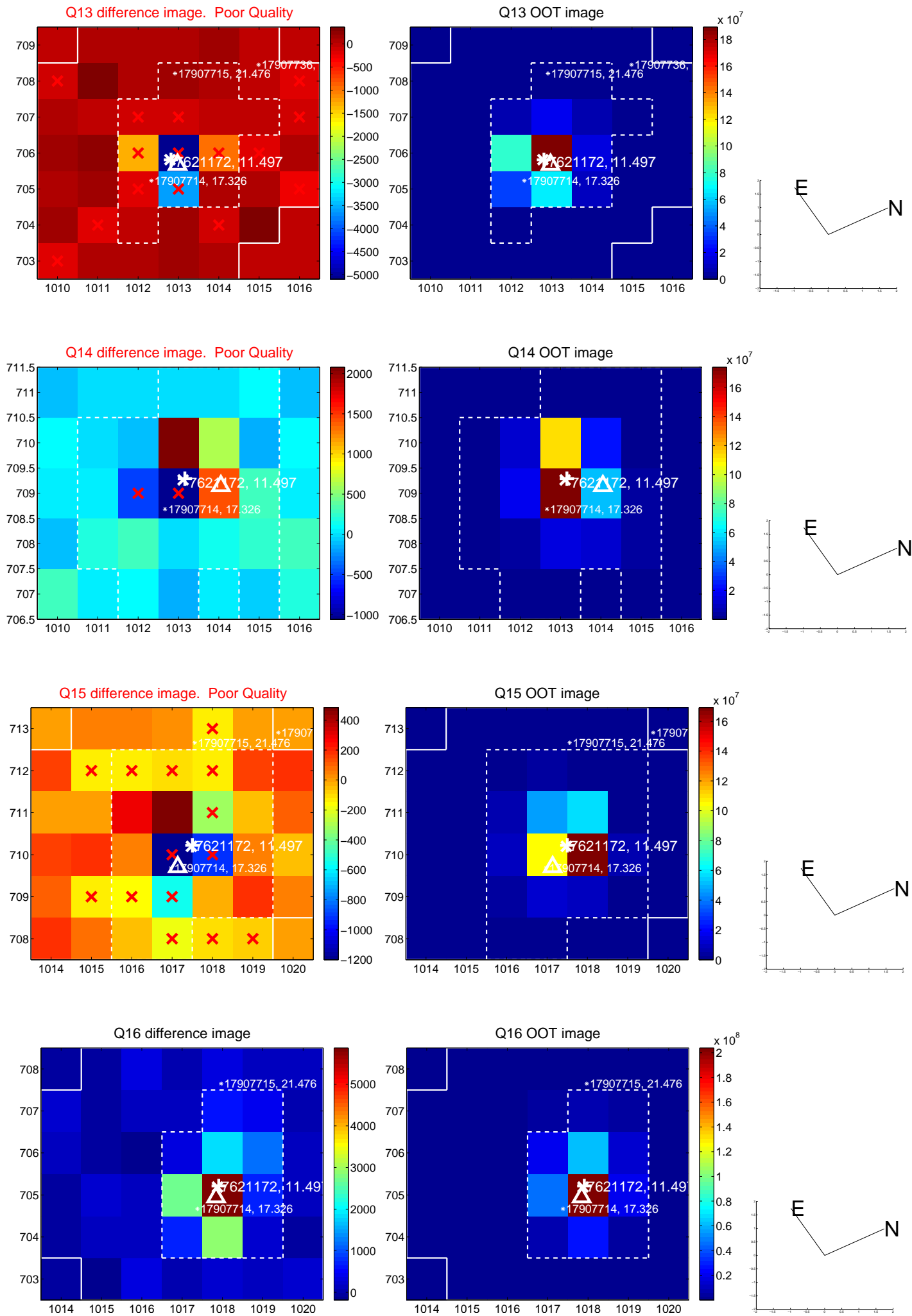
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



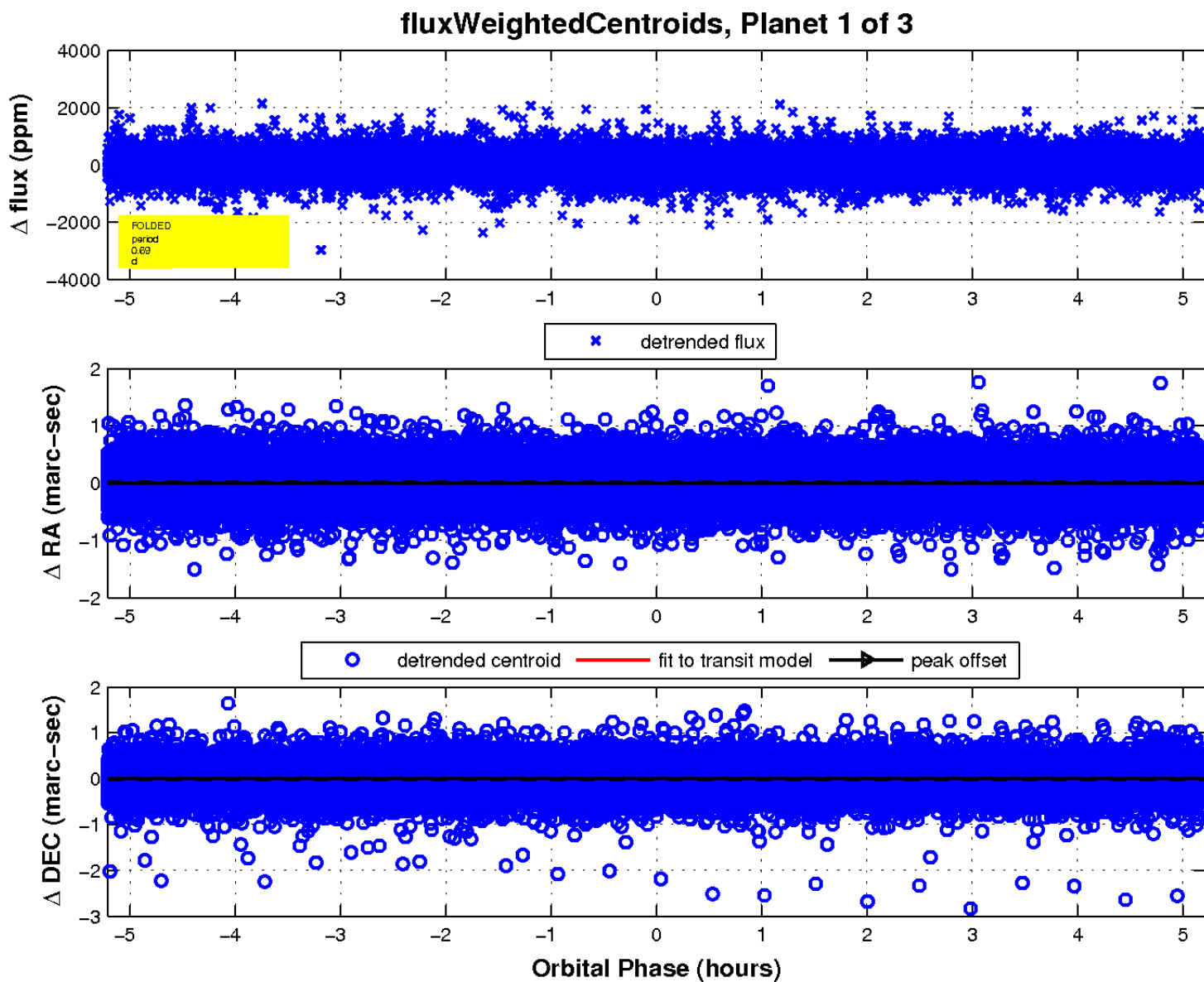
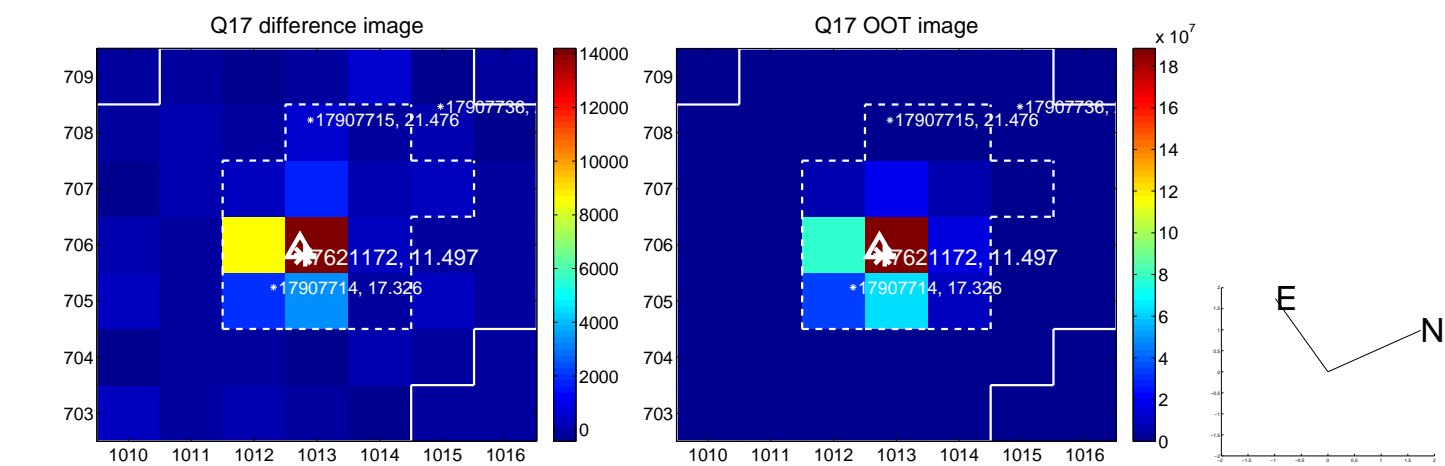
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

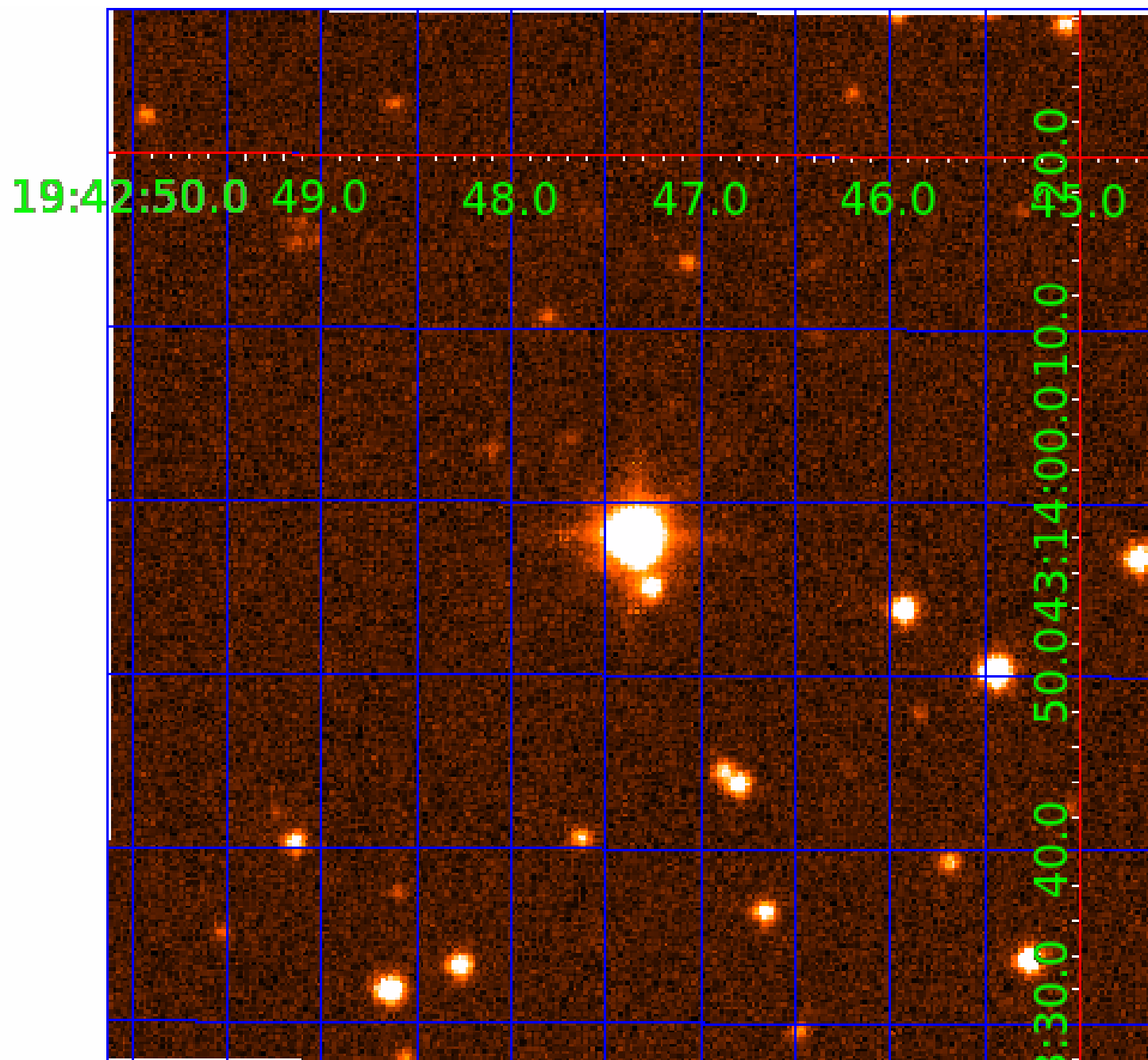


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007621172

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})
007621172-01	OBS	No	0.688117	132.090196	30.9	1.738	13.9	9.9	1.74	7052	1.11	21238.63
007621172-02	OBS	No	0.688143	131.851078	45.4	2.540	13.5	16.1	1.74	7052	1.36	21237.57
007621172-03	OBS	No	0.688158	131.616859	64.3	1.586	9.5	18.7	1.74	7052	1.42	21236.94

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007621172-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_SATURATED
007621172-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_SATURATED
007621172-03	OBS	FP	0.00	1	0	0	0	LPP_DV—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.

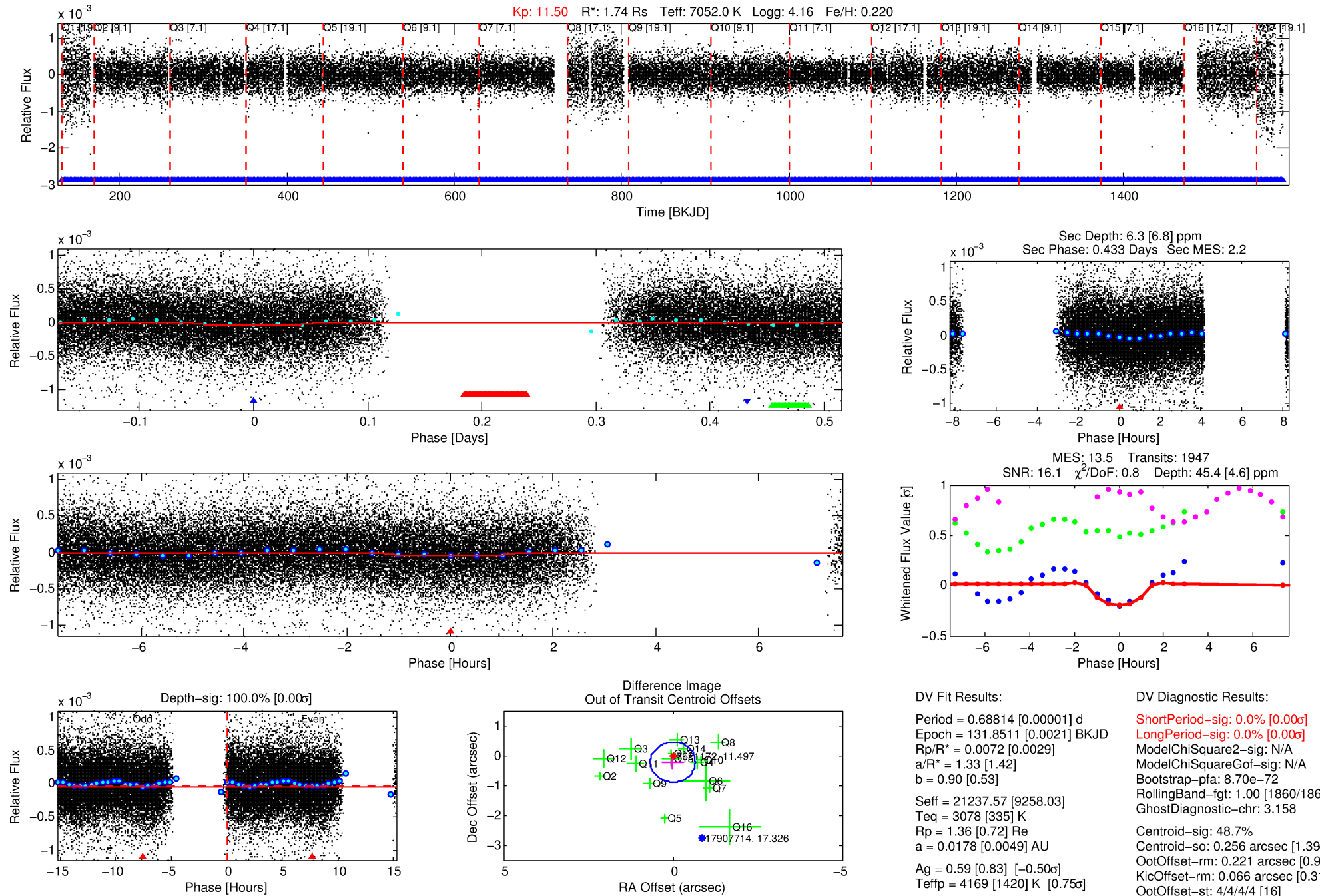
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007621172-02

No Significant Match Found

DV One-Page Summary

KIC: 7621172 Candidate: 2 of 3 Period: 0.688 d



DV Fit Results:

Period = 0.68814 [0.00001] d
Epoch = 131.8511 [0.0021] BKJD
Rp/R* = 0.0072 [0.0029]
a/R* = 1.33 [1.42]
b = 0.90 [0.53]
Seff = 21237.57 [9258.03]
Teq = 3078 [335] K
Rp = 1.36 [0.72] Re
a = 0.0178 [0.0049] AU
Ag = 0.59 [0.83] [-0.50 σ]
Teffp = 4169 [1420] K [0.75 σ]

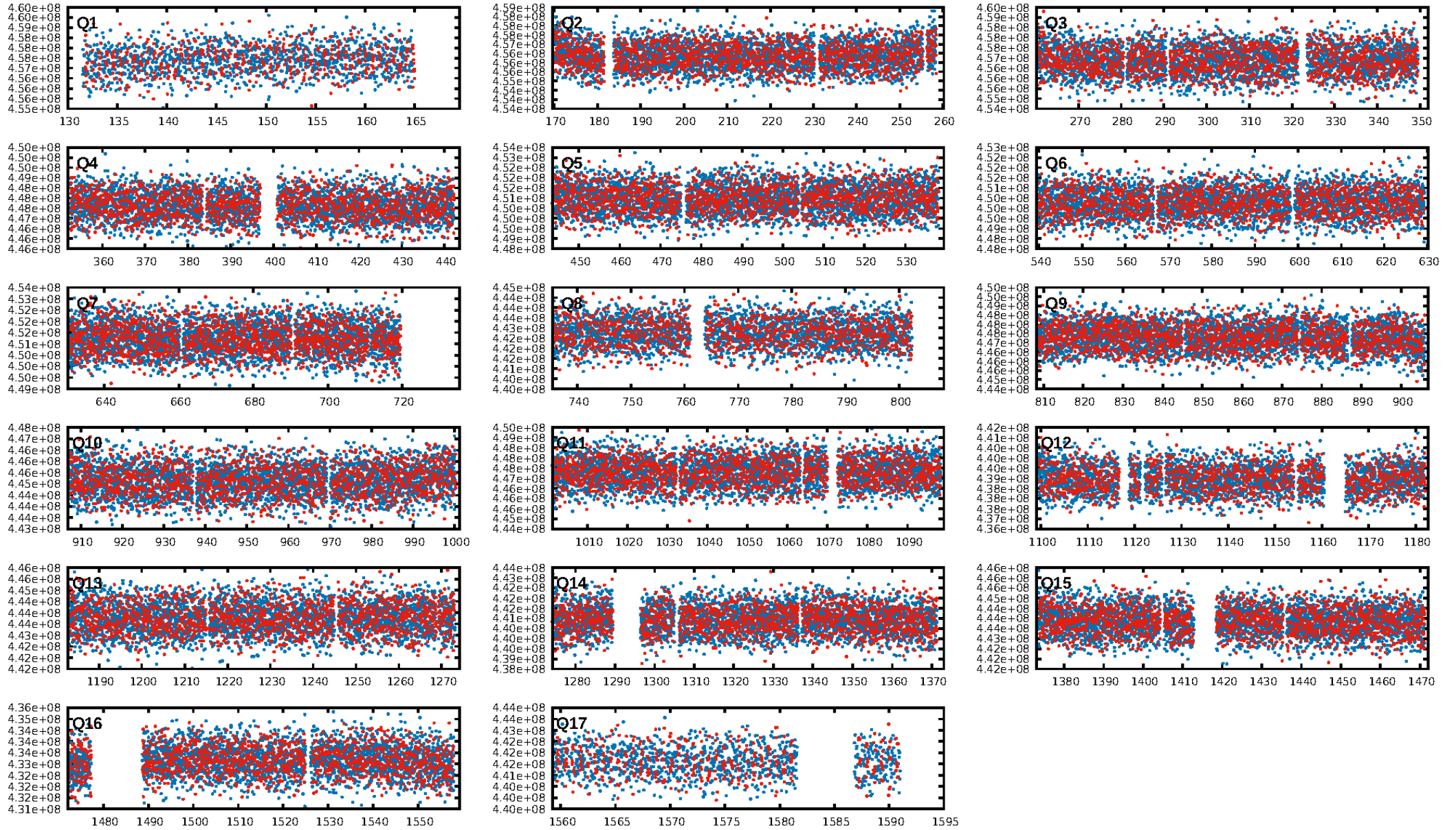
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 σ]
LongPeriod-sig: 0.0% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 8.70e-72
RollingBand-fgt: 1.00 [1860/1860]
GhostDiagnostic-chr: 3.158
Centroid-sig: 48.7%
Centroid-so: 0.256 arcsec [1.39 σ]
OotOffset-rm: 0.221 arcsec [0.99 σ]
KicOffset-rm: 0.066 arcsec [0.31 σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.81 [13/16]
DiffImageOverlap-fno: 0.00 [0/17]

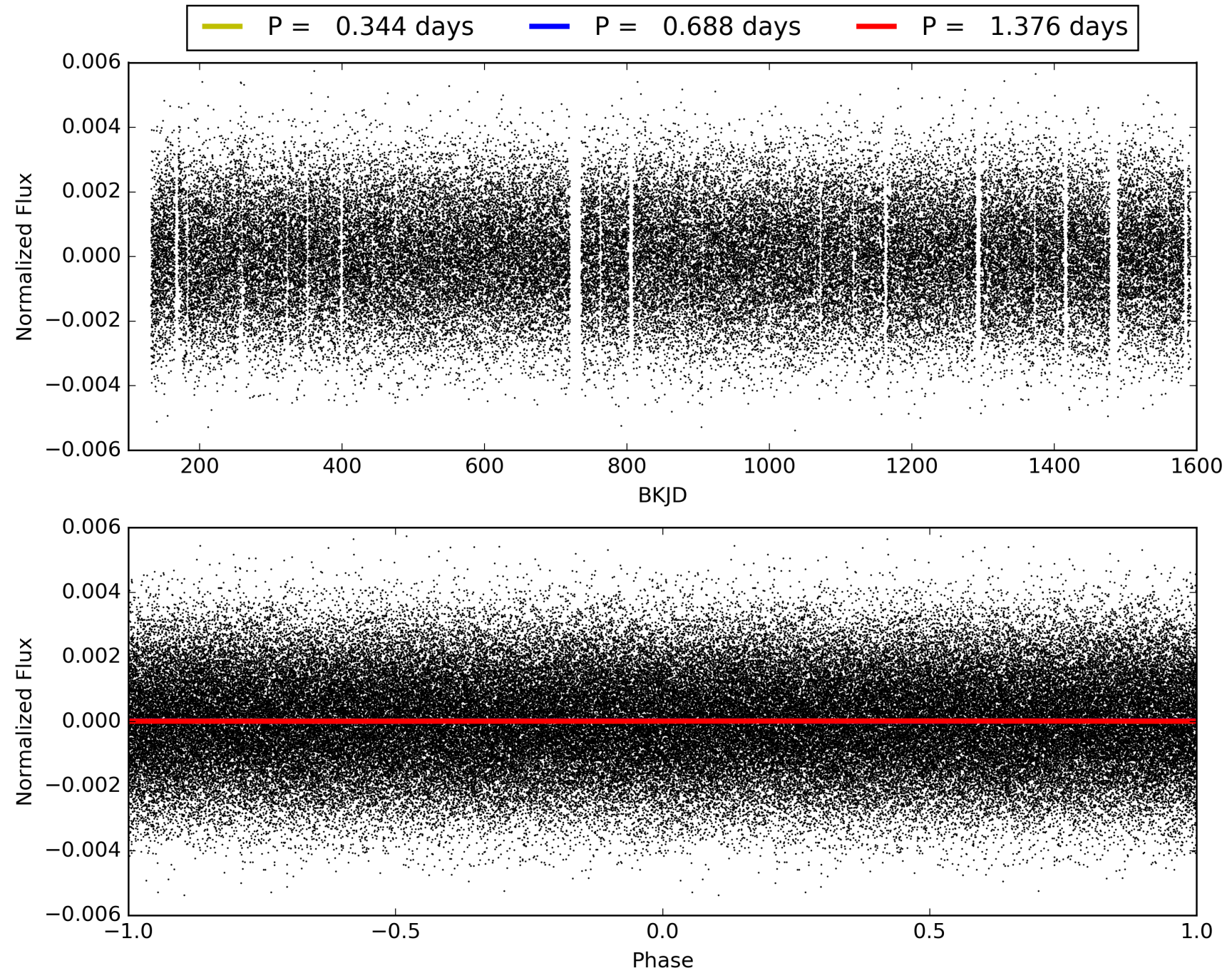
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 13:29:52 Z

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

TCE 007621172-02, PDC Light Curves

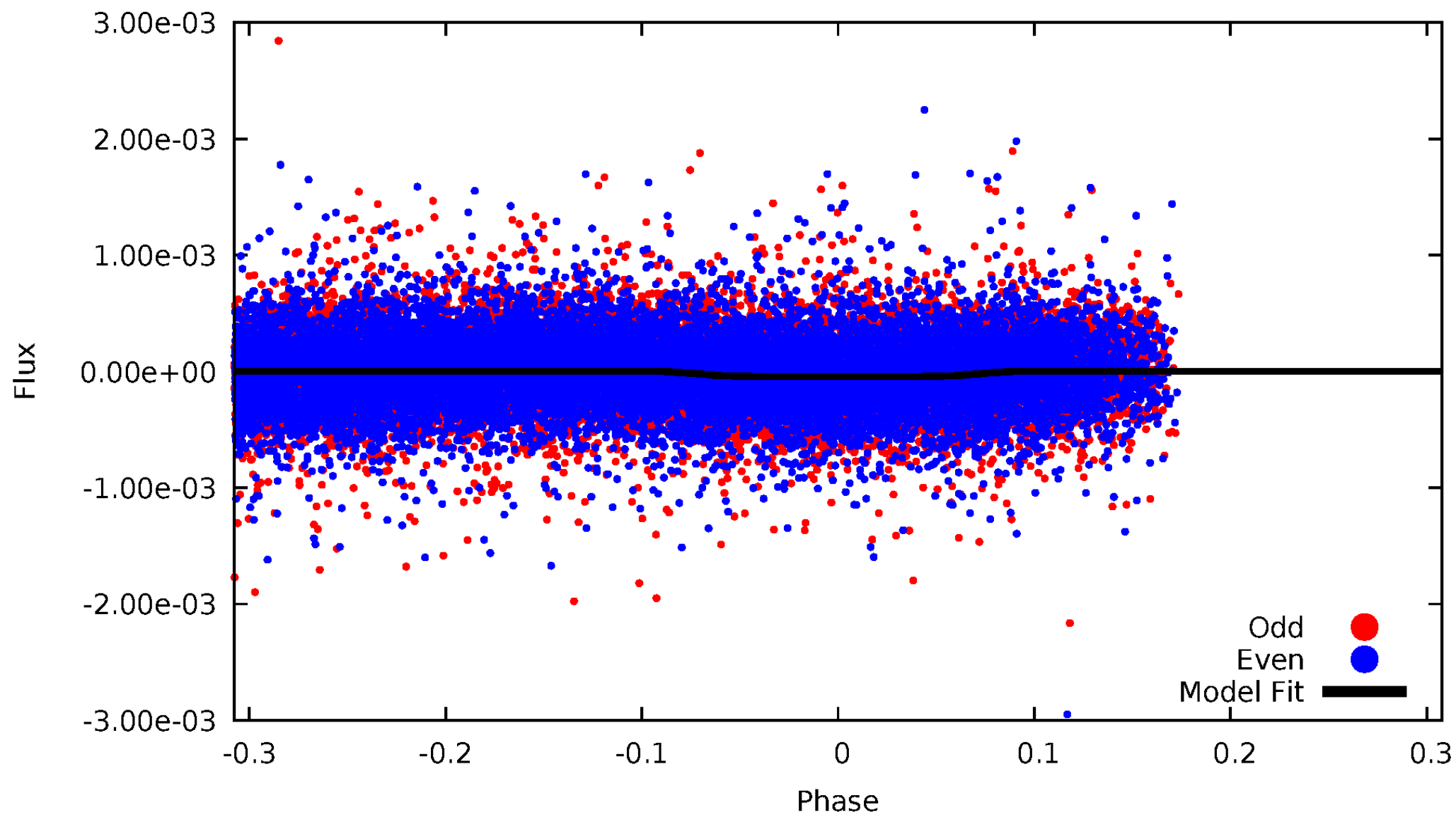


TCE 007621172-02



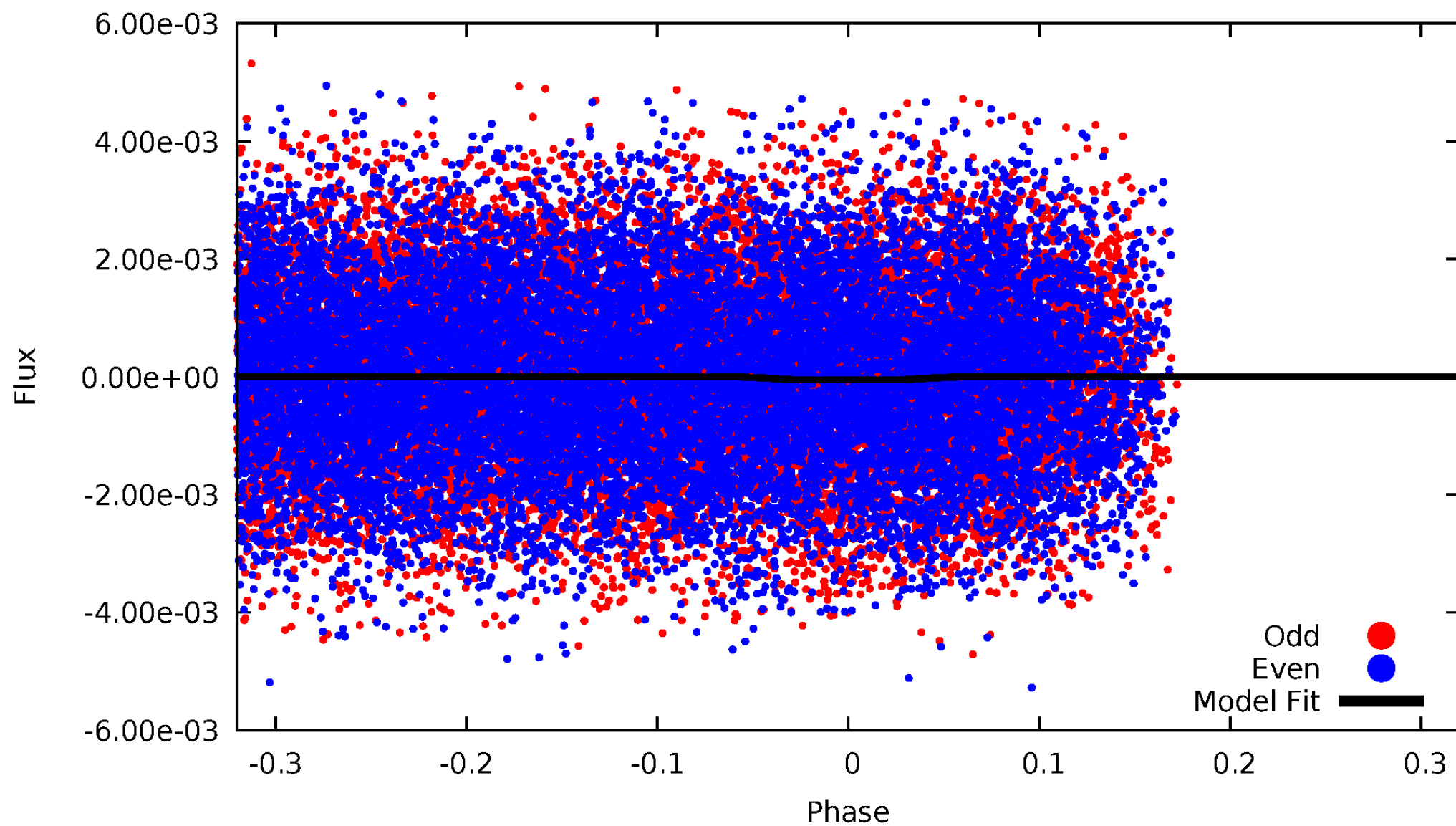
DV Odd/Even

TCE 007621172-02



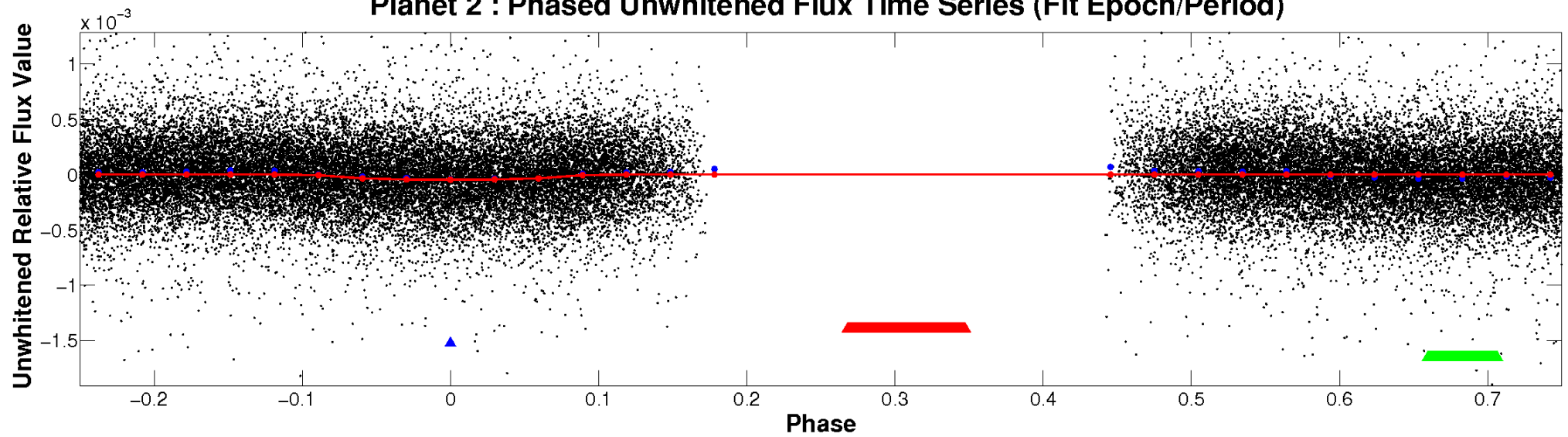
ALT Odd/Even

TCE 007621172-02

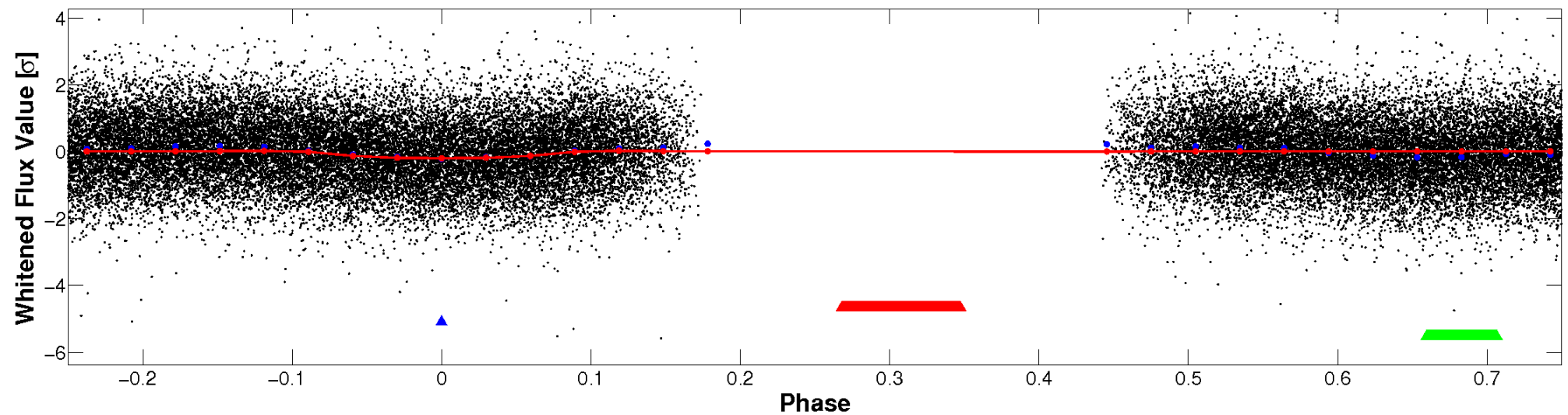


Non-Whitened Vs. Whitened Light Curve

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

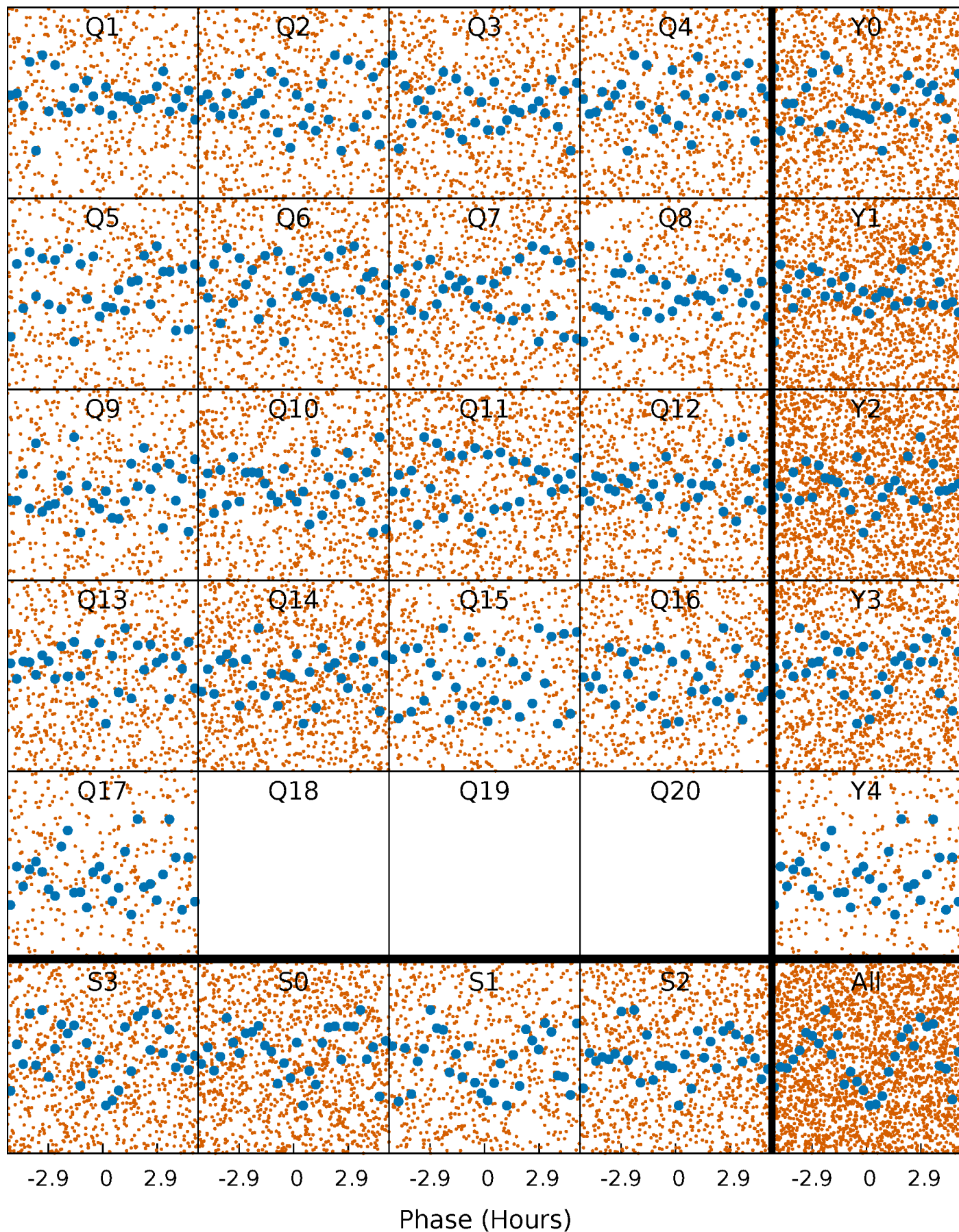


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



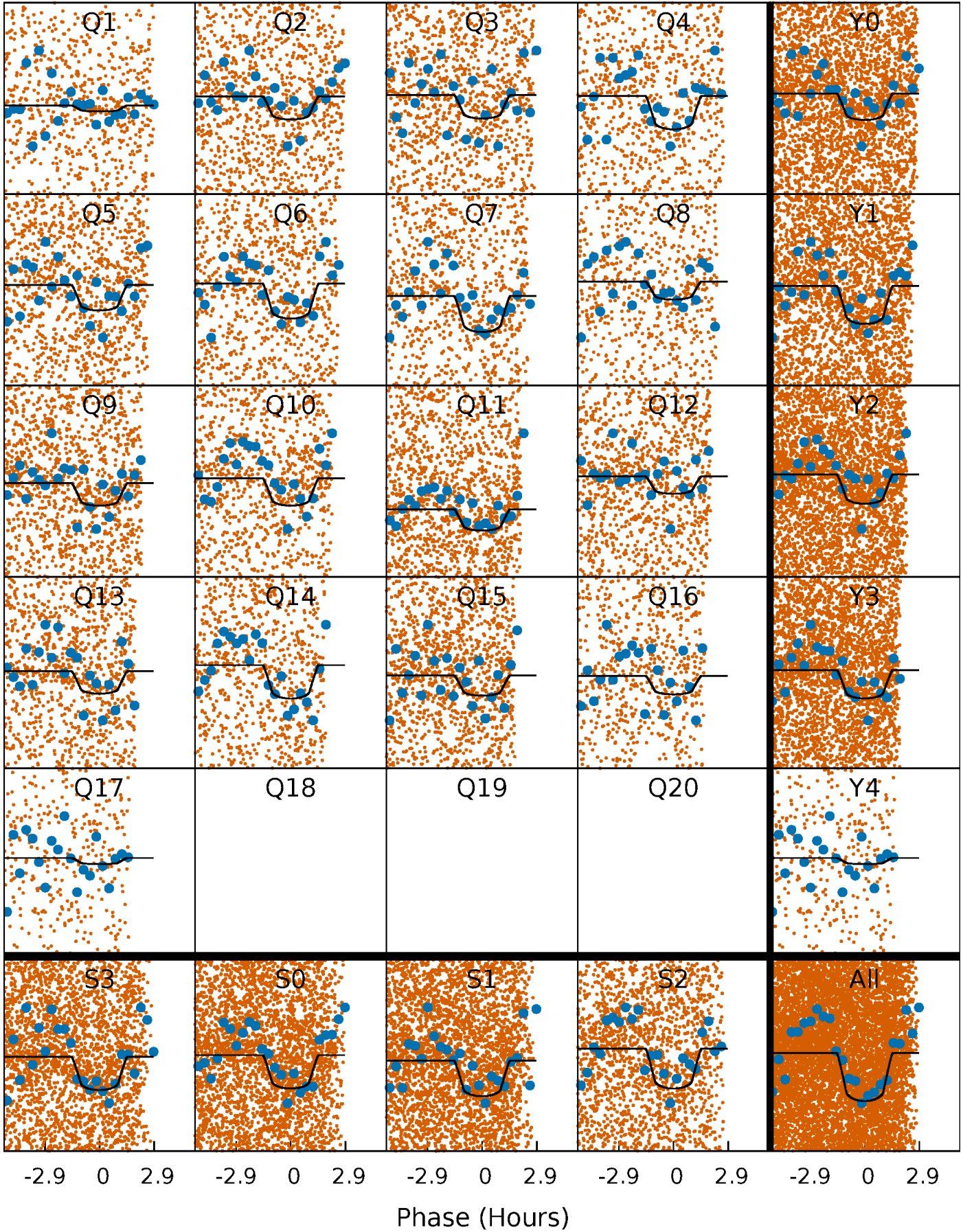
PDC Quarter-Phased Transit Curves

TCE 007621172-02 P= 0.688143 Days $T_0=131.851078$ (BKJD)



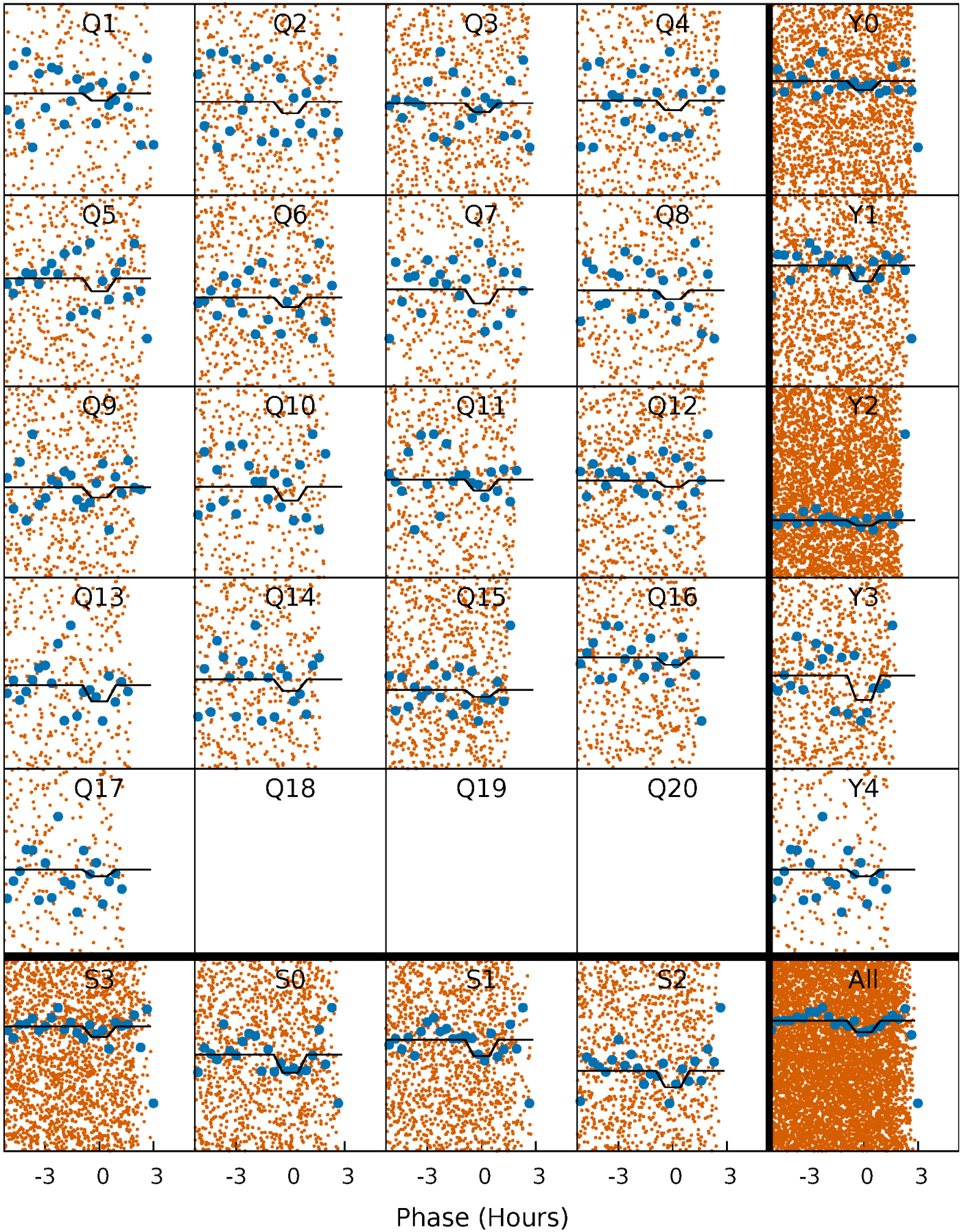
DV Quarter-Phased Transit Curves

TCE 007621172-02 P= 0.688143 Days $T_0=131.851078$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

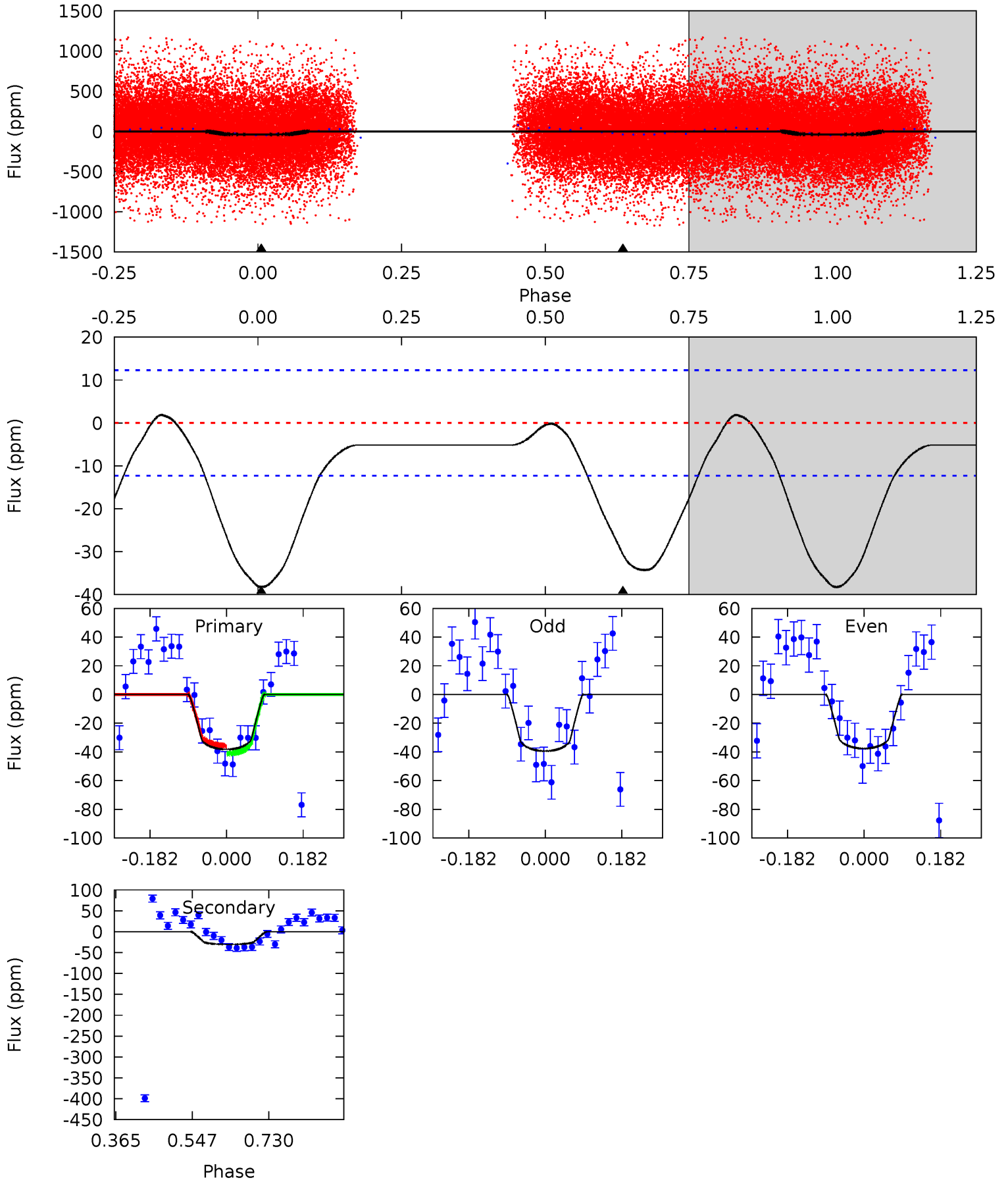
TCE 007621172-02 P= 0.688146 Days $T_0=131.851933$ (BKJD)



DV Model-Shift Uniqueness Test

007621172-02, P = 0.688143 Days, E = 131.162935 Days

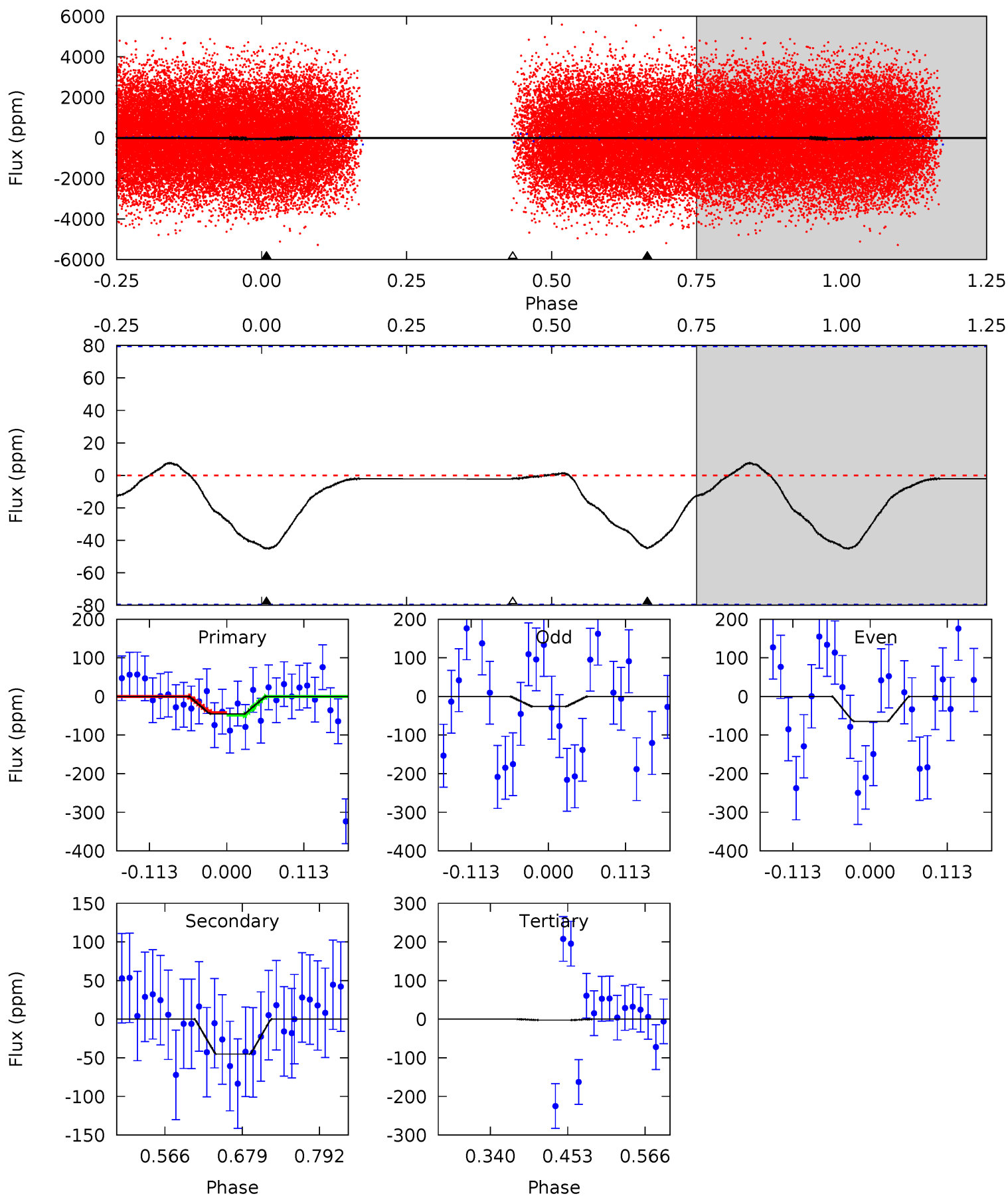
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.8	11.1	0	0	4.44	1.33	0.89	13.8	13.8	11.1	11.1	0.32	0.93	0.05	0.97



Alt Model-Shift Uniqueness Test

007621172-02, P = 0.688146 Days, E = 131.163787 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.58	2.57	0.13	0	4.54	1.58	0.24	2.45	2.58	2.44	2.57	1.10	0.89	0.15	0.21



Stellar Parameters For KIC 007621172

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7052^{+195}_{-335}	$4.156^{+0.105}_{-0.210}$	$0.220^{+0.150}_{-0.350}$	$1.741^{+0.584}_{-0.270}$	$1.583^{+0.214}_{-0.236}$	$0.423^{+0.215}_{-0.226}$
	+3%/-5%	+3%/-5%	+68%/-159%	+34%/-16%	+14%/-15%	+51%/-53%
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 007621172-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-31 ± 3	$1.41^{+0.64}_{-0.55}$	4308^{+343}_{-255}	5821^{+2140}_{-950}	$2.608^{+4.501}_{-1.356}$
Alt.	-45 ± 18	$1.45^{+0.58}_{-0.62}$	4302^{+337}_{-252}	6416^{+2456}_{-1287}	$3.671^{+7.261}_{-2.174}$

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 $A_{obs} \gg 1.0$

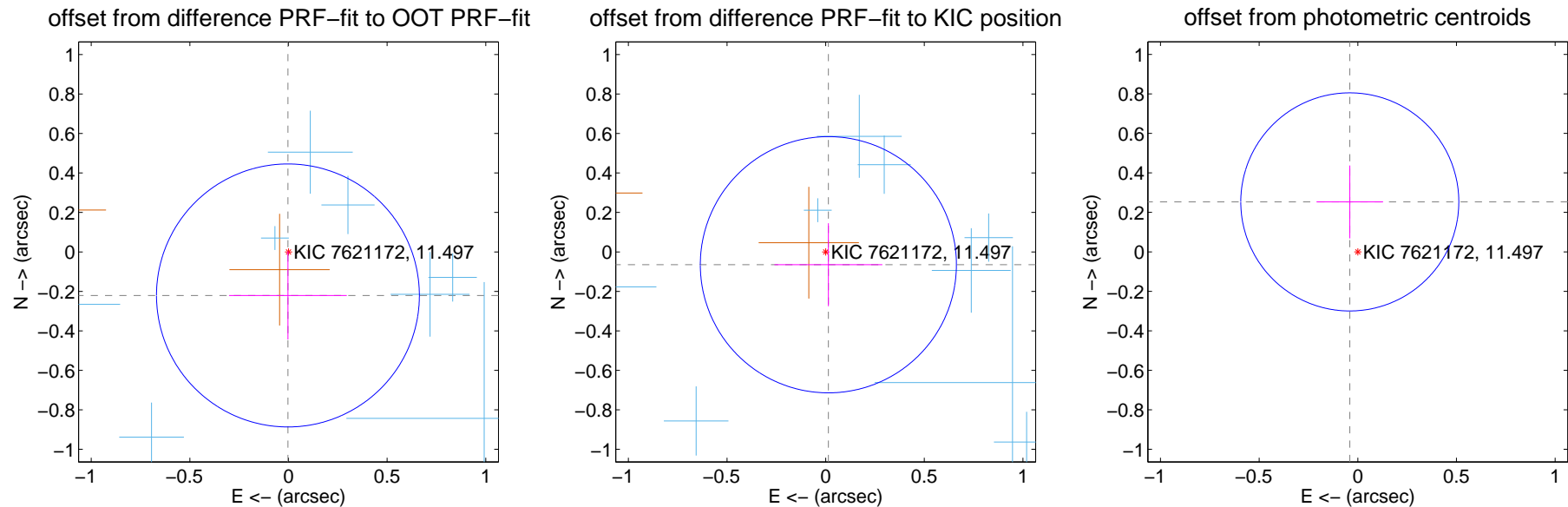
DV Centroid Data

Supplemental centroid analysis for 007621172-02. **Kepler magnitude: 11.50.** Transit SNR 16.07

There are 13 quarters with good PRF difference image offsets

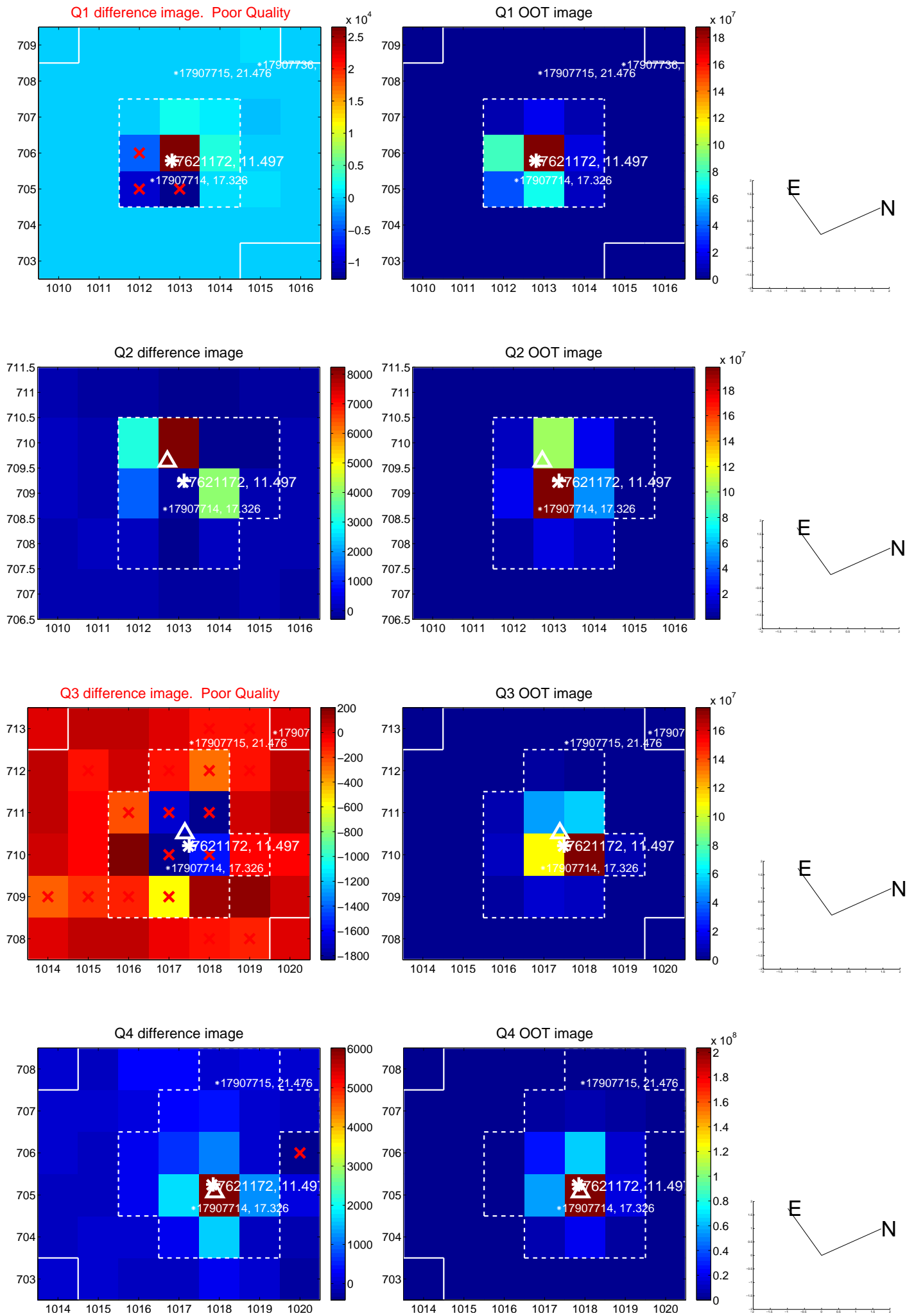
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.221 ± 0.222	0.99	0.003 ± 0.298	-0.221 ± 0.223
PRF-fit source offset from KIC position	0.066 ± 0.216	0.31	-0.014 ± 0.273	-0.065 ± 0.210
photometric centroid source offset	0.26 ± 0.18	1.39	0.04 ± 0.17	0.25 ± 0.18

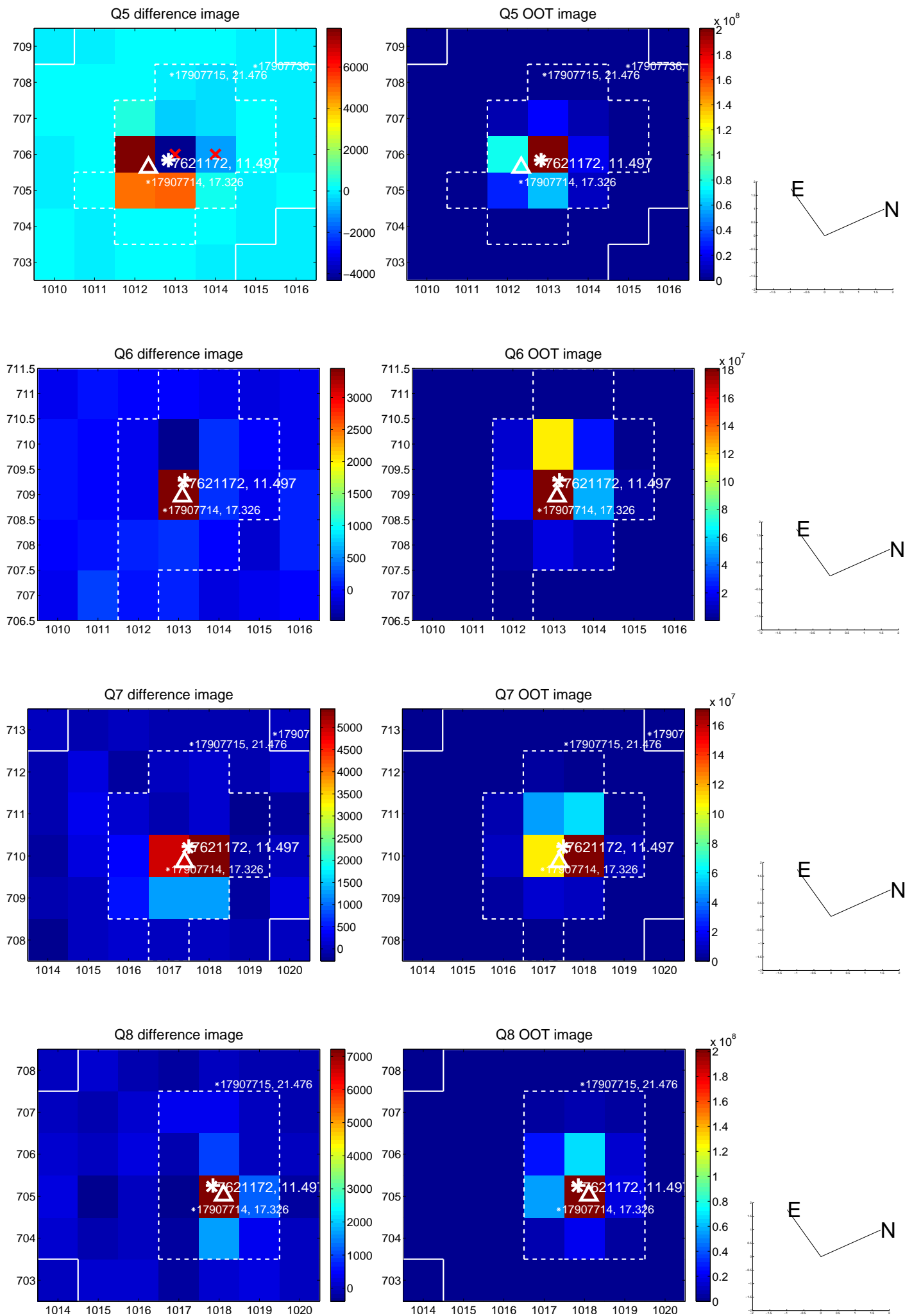


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

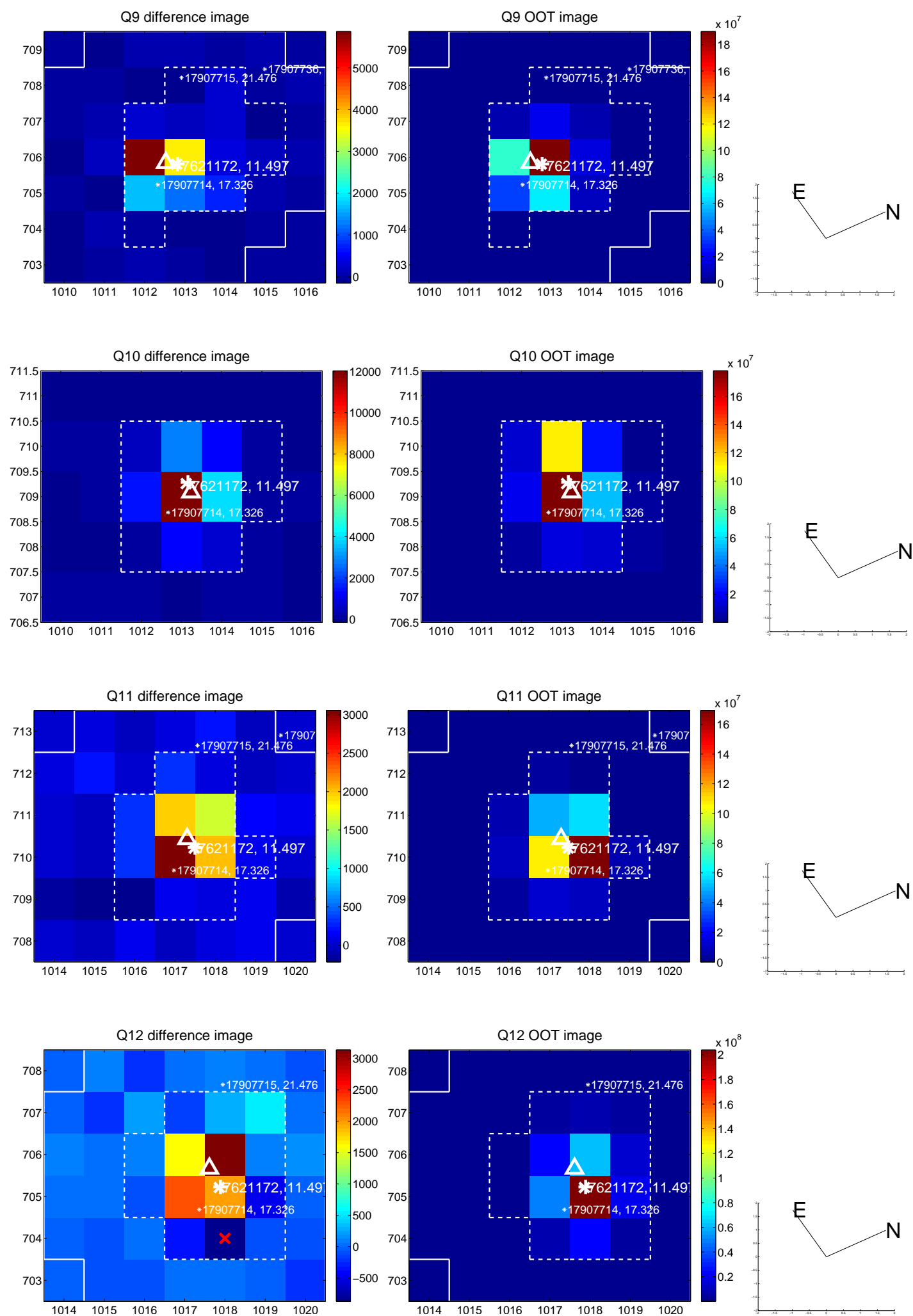
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



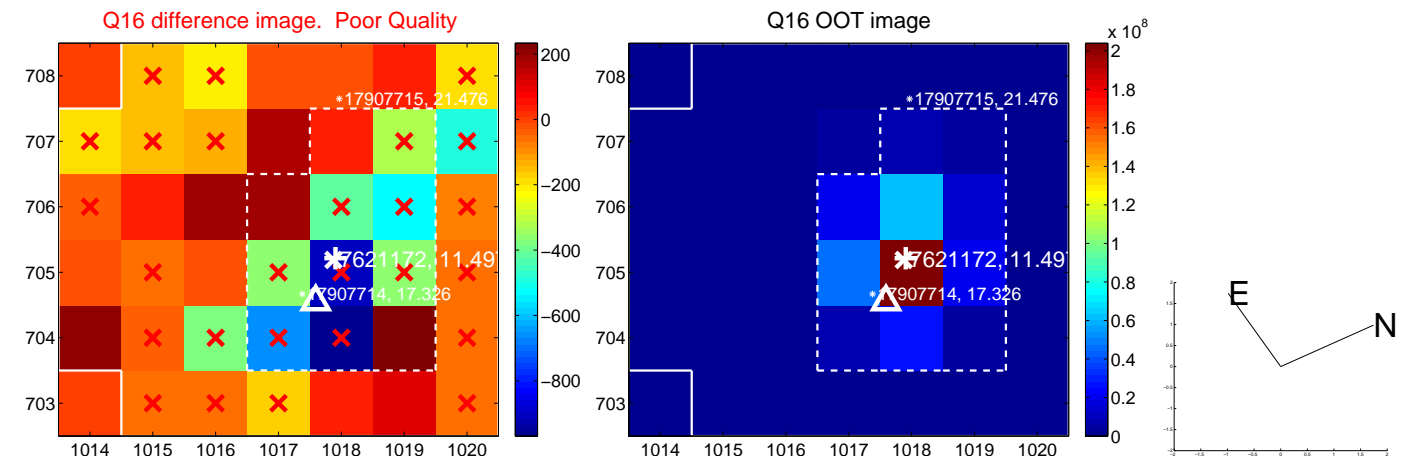
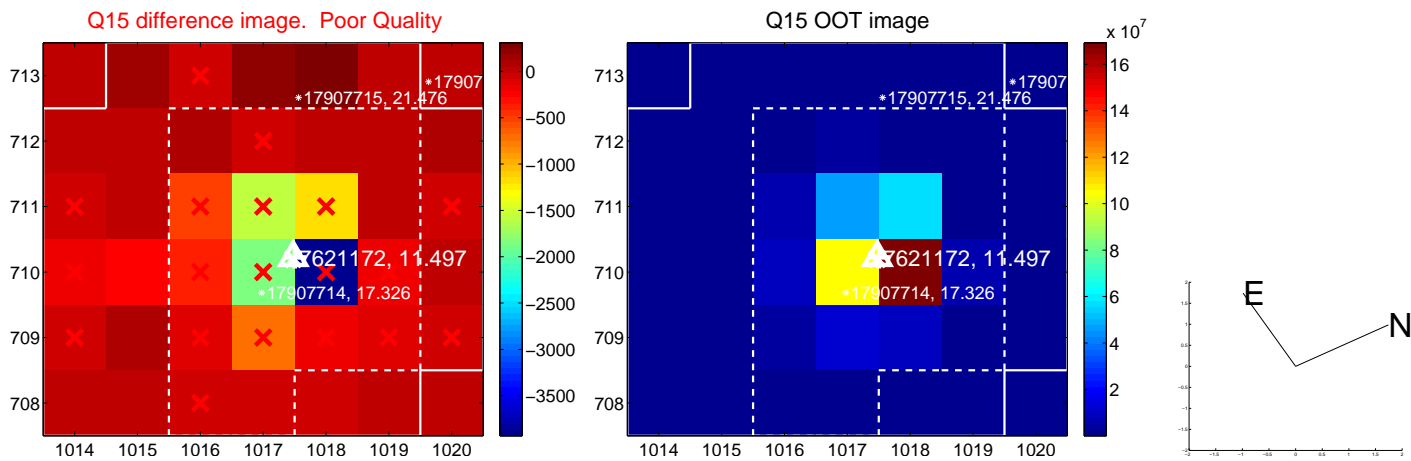
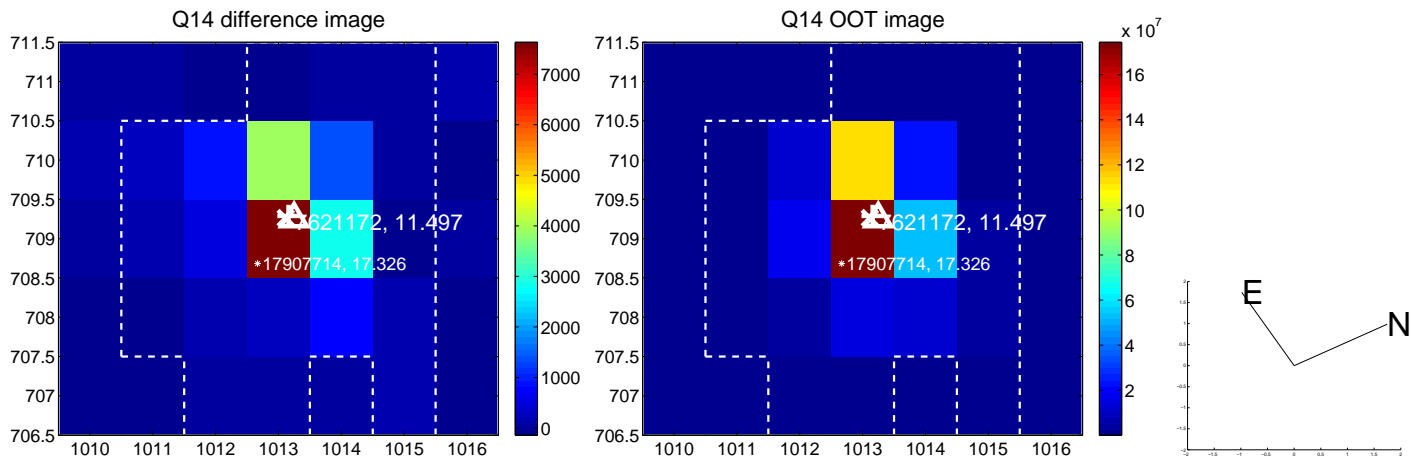
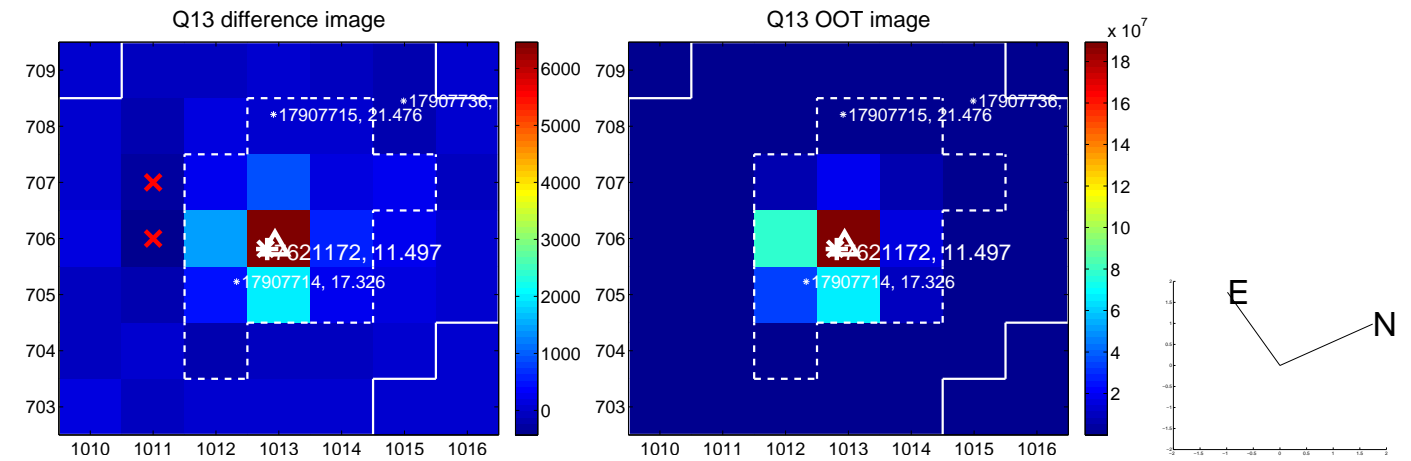
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



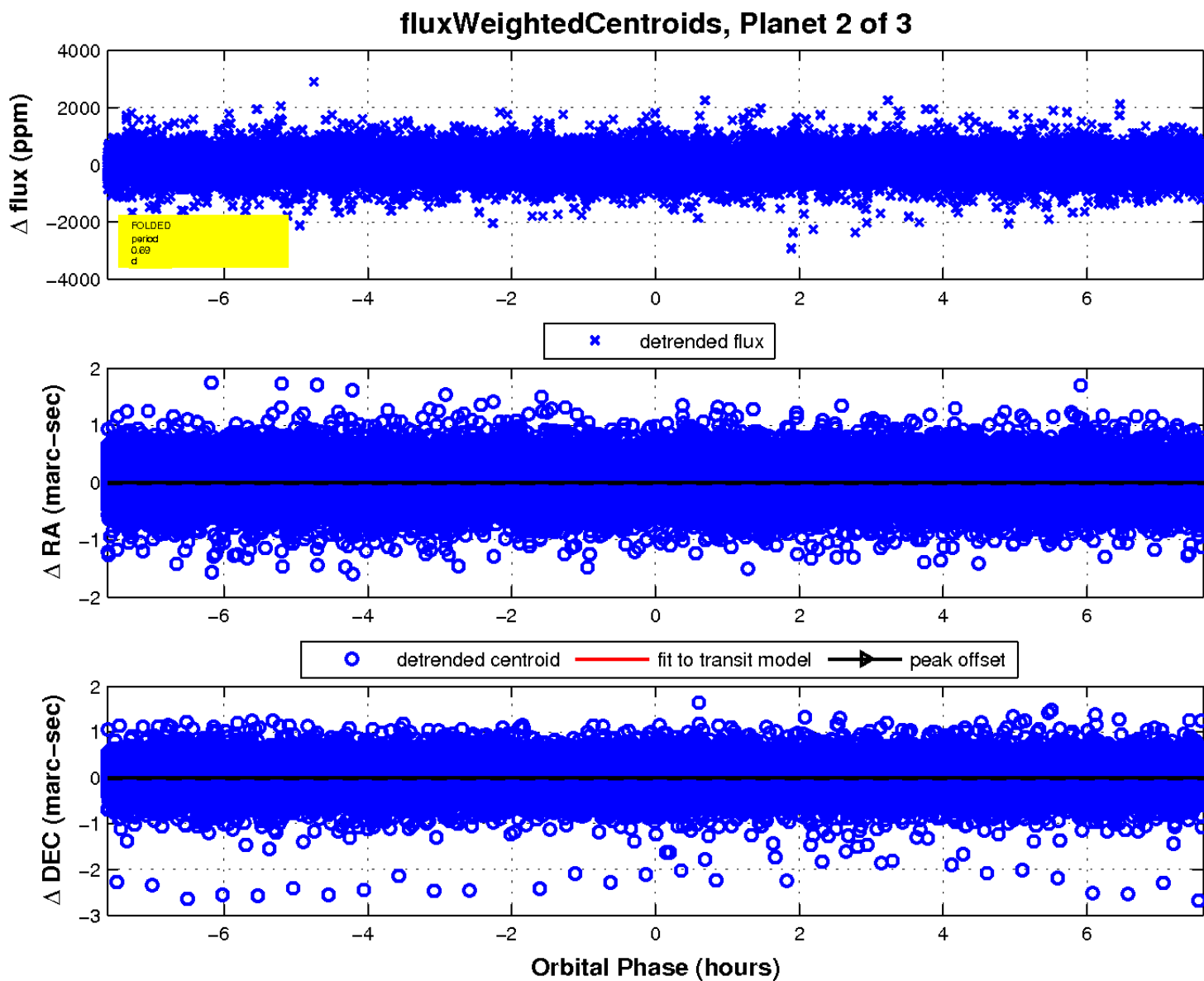
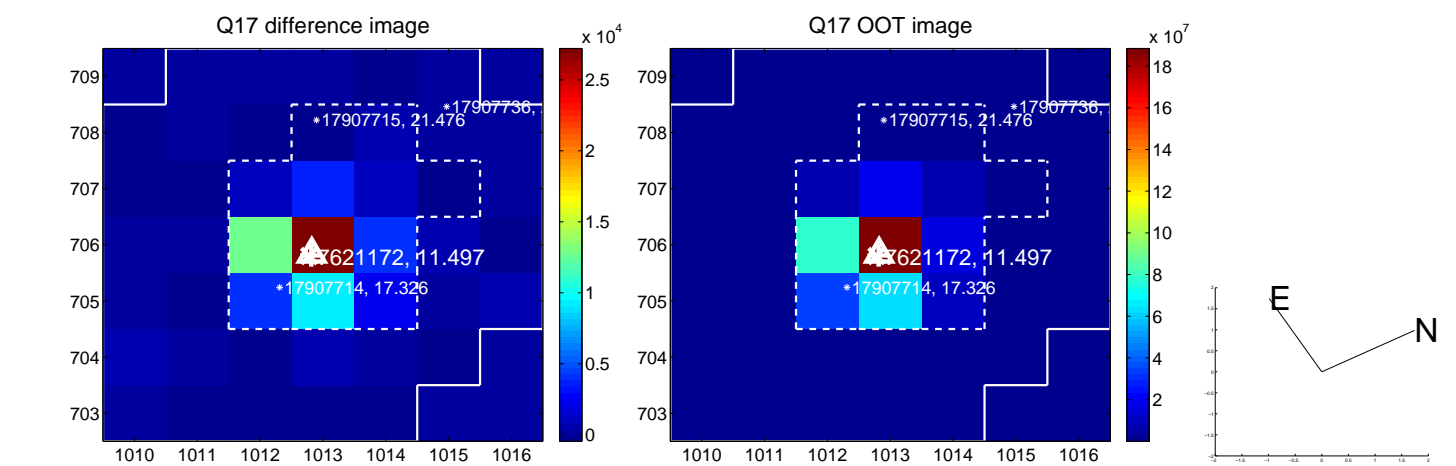
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

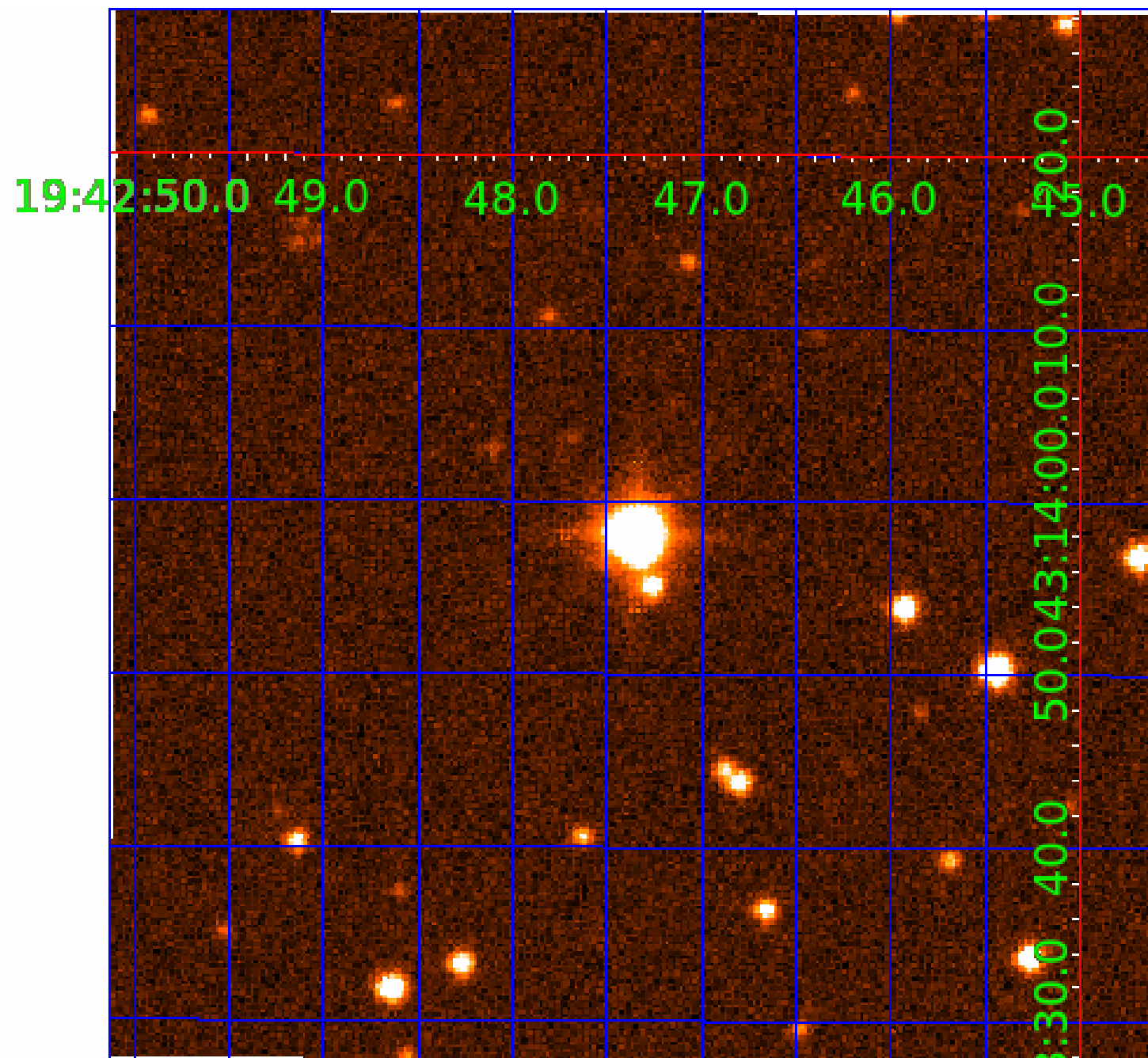


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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Declination



KIC 007621172

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})
007621172-01	OBS	No	0.688117	132.090196	30.9	1.738	13.9	9.9	1.74	7052	1.11	21238.63
007621172-02	OBS	No	0.688143	131.851078	45.4	2.540	13.5	16.1	1.74	7052	1.36	21237.57
007621172-03	OBS	No	0.688158	131.616859	64.3	1.586	9.5	18.7	1.74	7052	1.42	21236.94

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007621172-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—CENT_SATURATED
007621172-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_SATURATED
007621172-03	OBS	FP	0.00	1	0	0	0	LPP_DV—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.

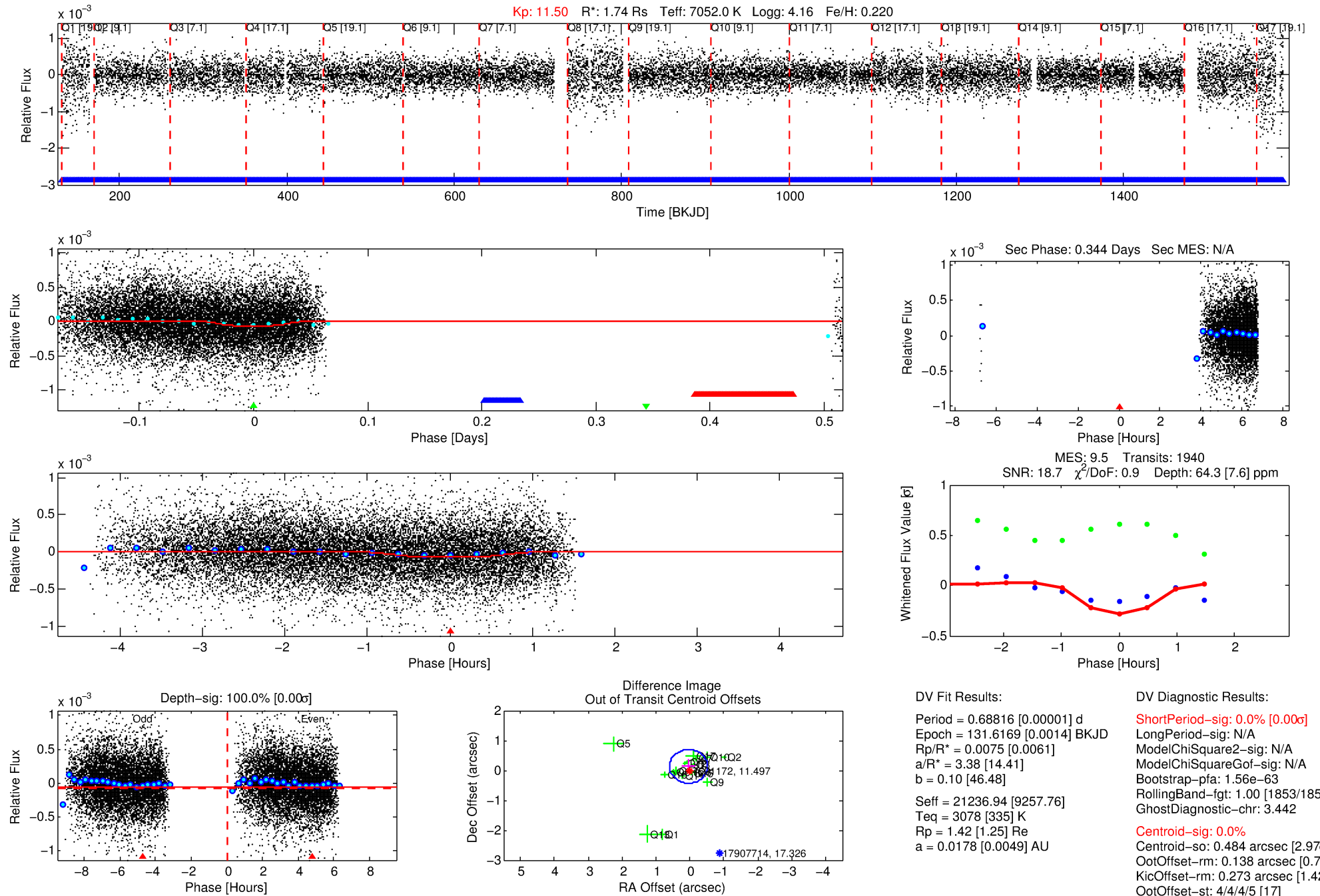
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007621172-03

No Significant Match Found

DV One-Page Summary

KIC: 7621172 Candidate: 3 of 3 Period: 0.688 d



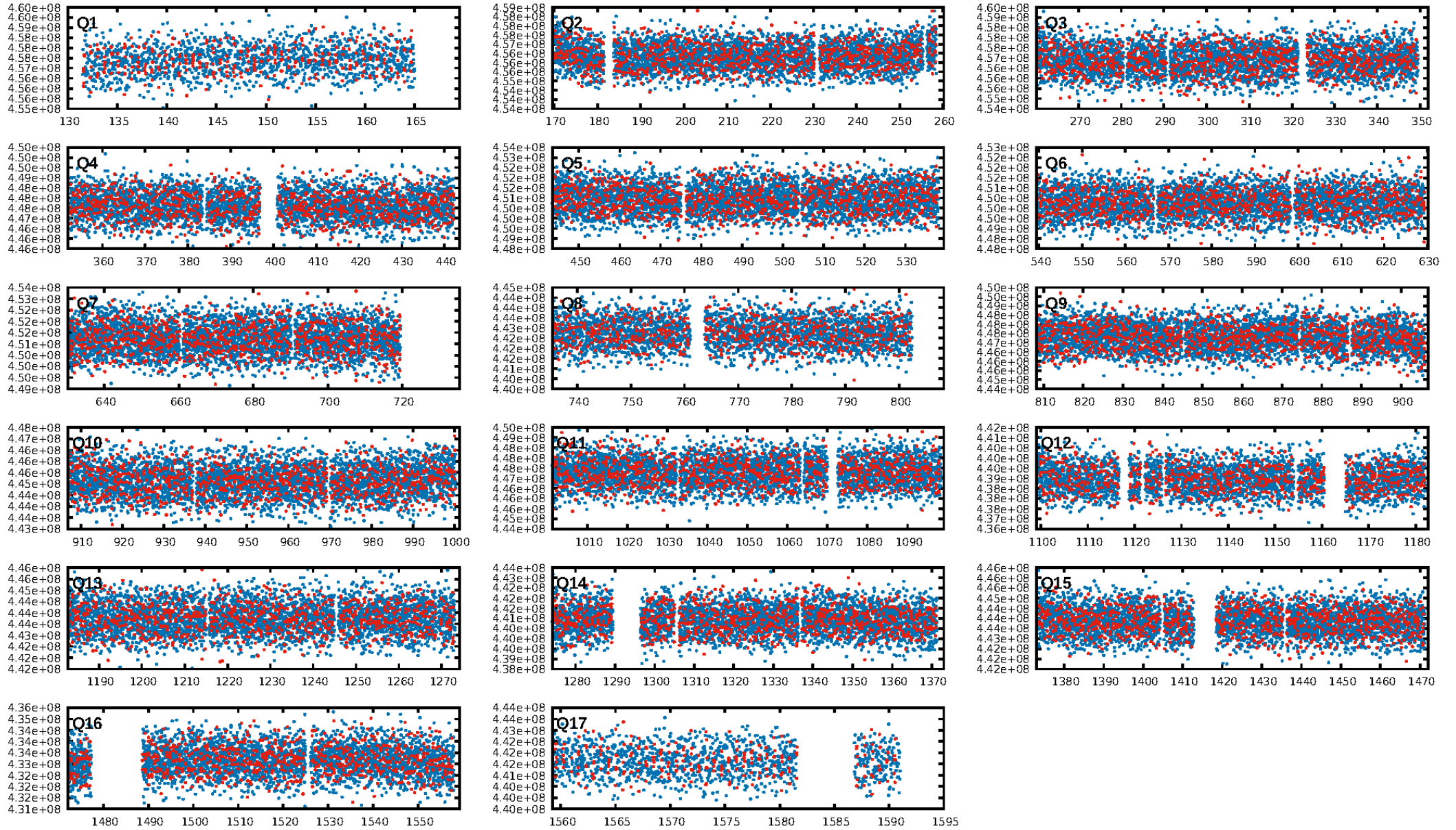
DV Fit Results:

Period = 0.68816 [0.00001] d
Epoch = 131.6169 [0.0014] BKJD
Rp/R* = 0.0075 [0.0061]
a/R* = 3.38 [14.41]
b = 0.10 [46.48]
Seff = 21236.94 [9257.76]
Teq = 3078 [335] K
Rp = 1.42 [1.25] Re
a = 0.0178 [0.0049] AU

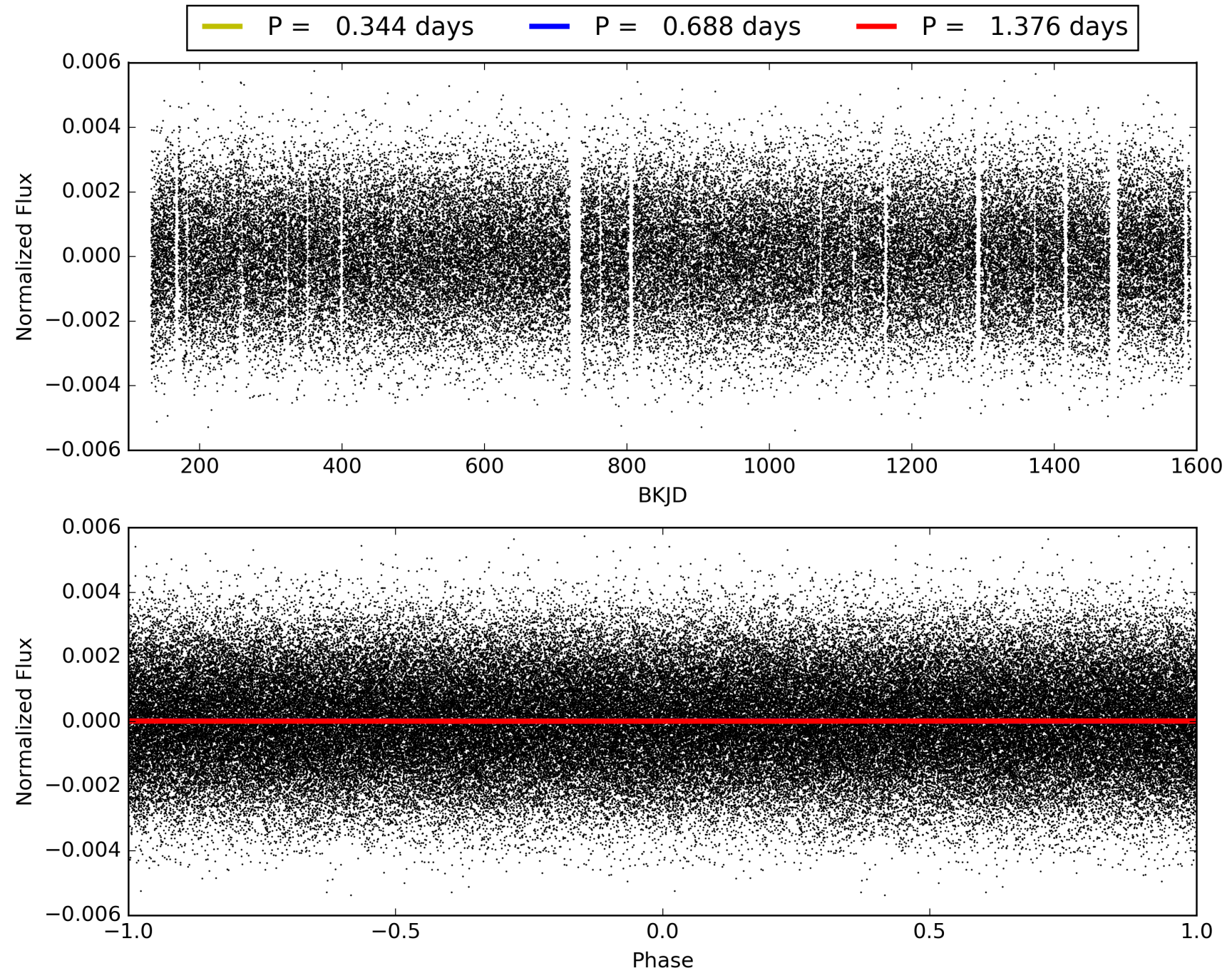
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.56e-63
RollingBand-fgt: 1.00 [1853/1853]
GhostDiagnostic-chr: 3.442
Centroid-sig: 0.0%
Centroid-so: 0.484 arcsec [2.97σ]
OotOffset-rm: 0.138 arcsec [0.74σ]
KicOffset-rm: 0.273 arcsec [1.42σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.94 [16/17]
DiffImageOverlap-fno: 0.00 [0/17]

TCE 007621172-03, PDC Light Curves

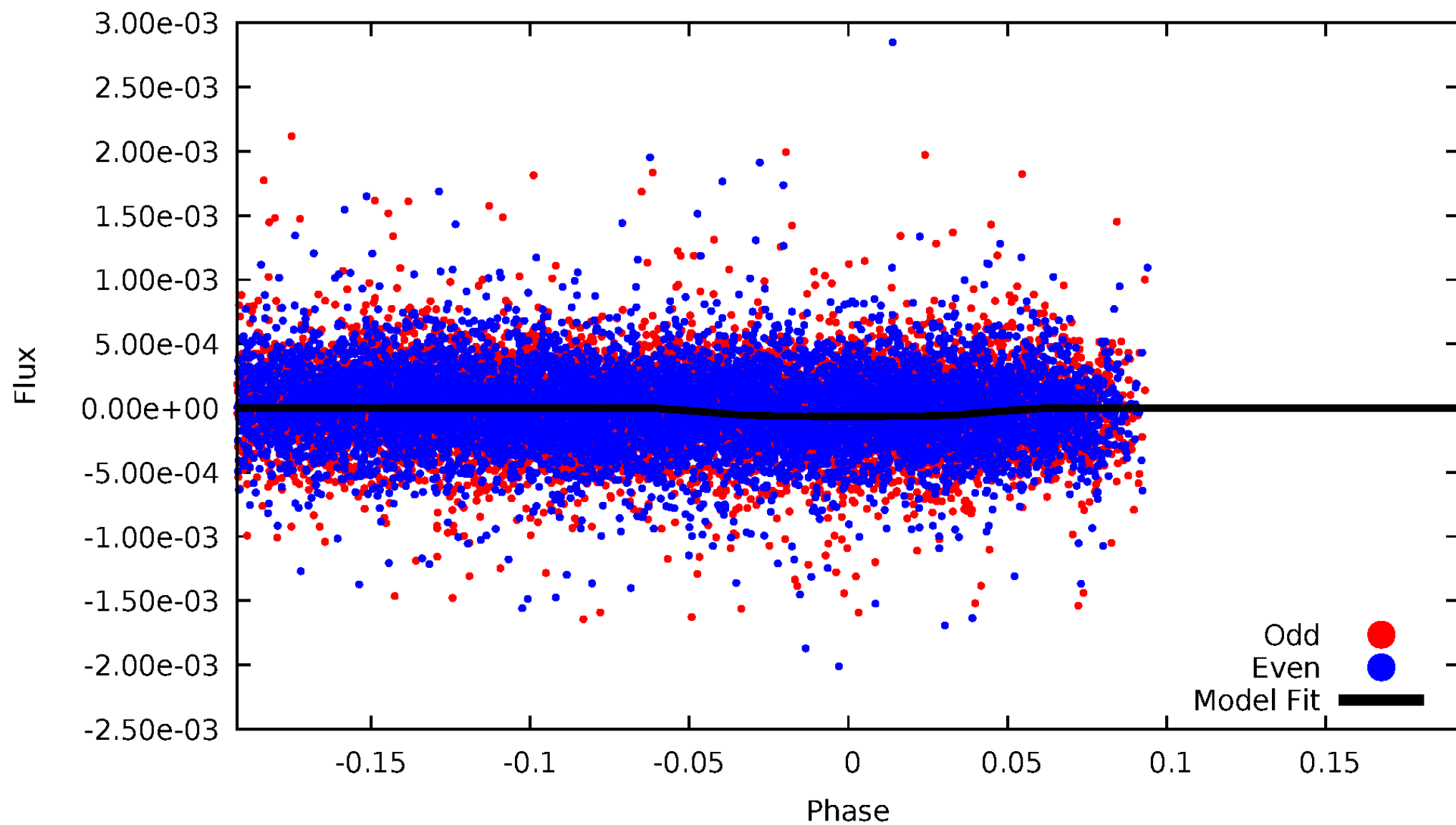


TCE 007621172-03



DV Odd/Even

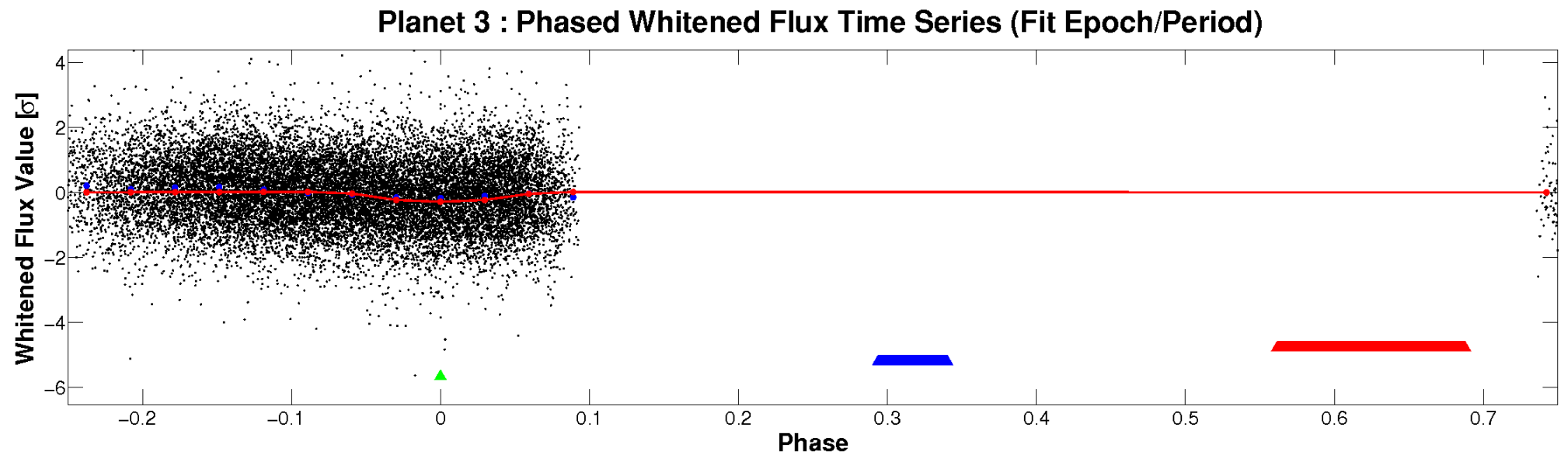
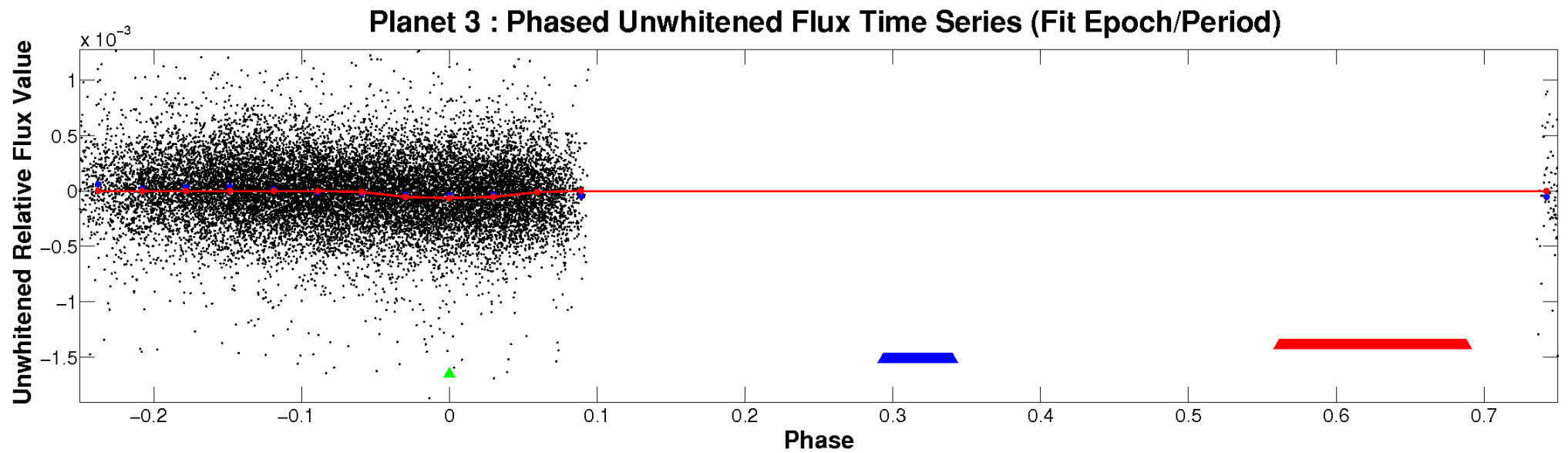
TCE 007621172-03



ALT Odd/Even

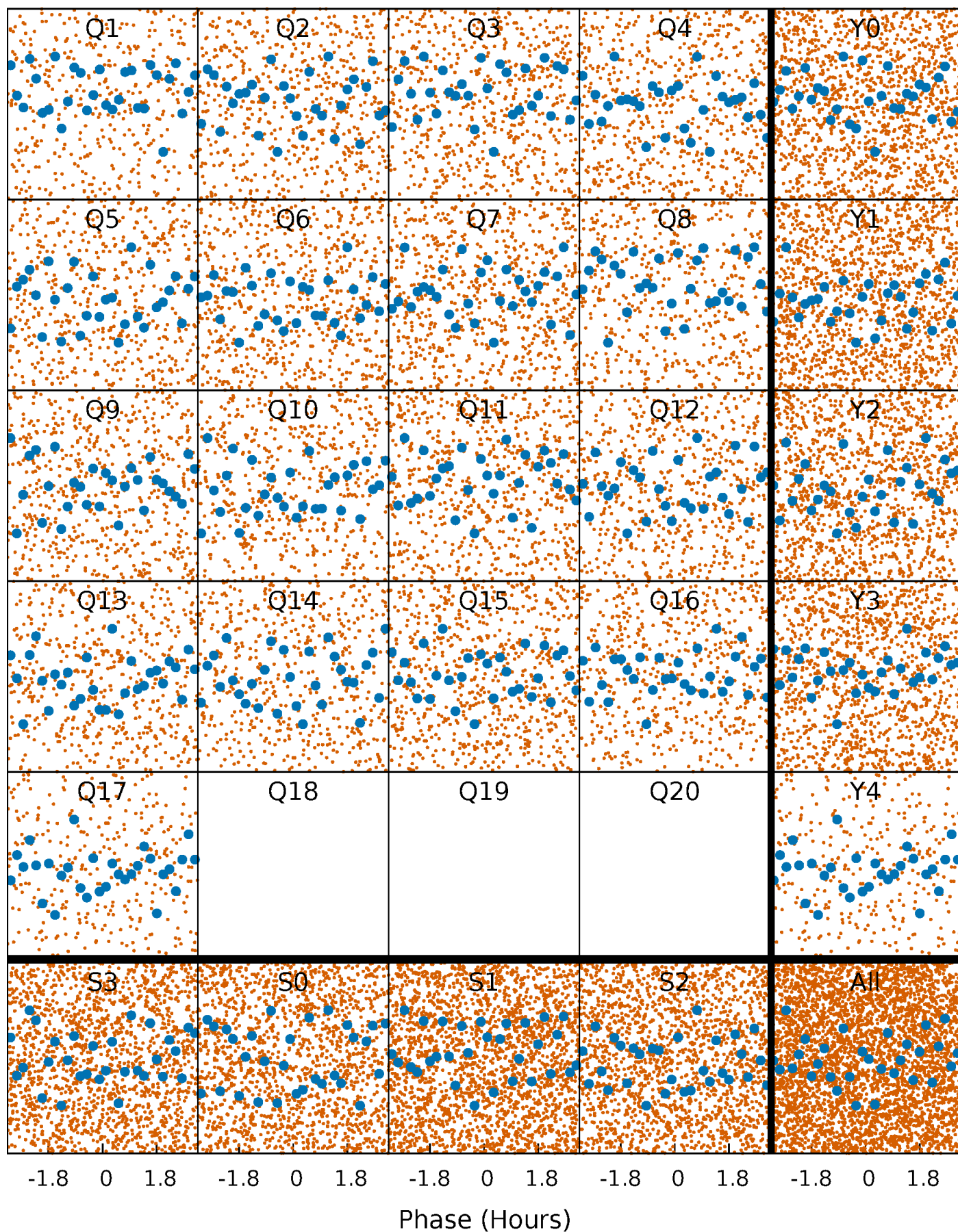
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve



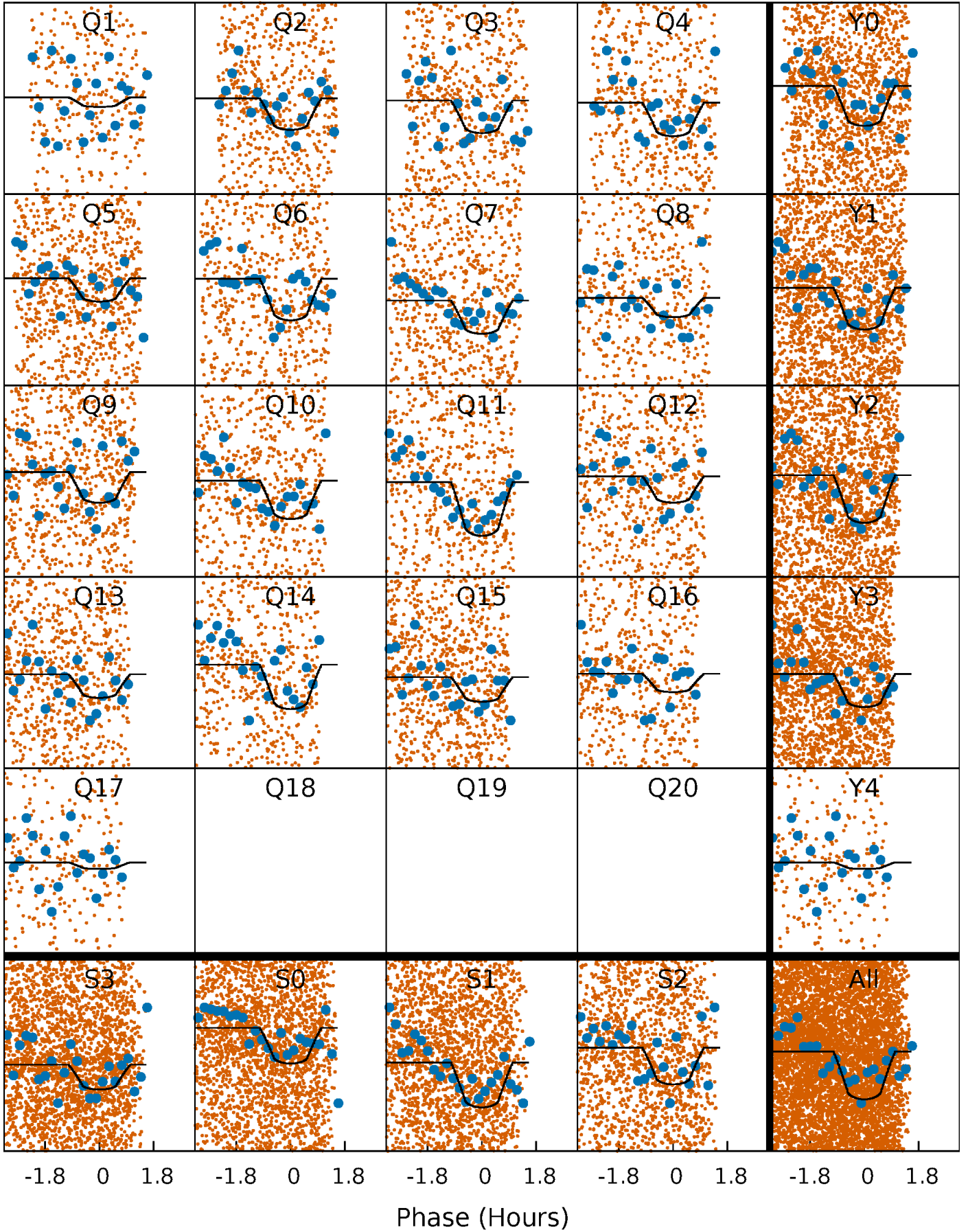
PDC Quarter-Phased Transit Curves

TCE 007621172-03 P= 0.688158 Days $T_0=131.616859$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007621172-03 P= 0.688158 Days $T_0=131.616859$ (BKJD)

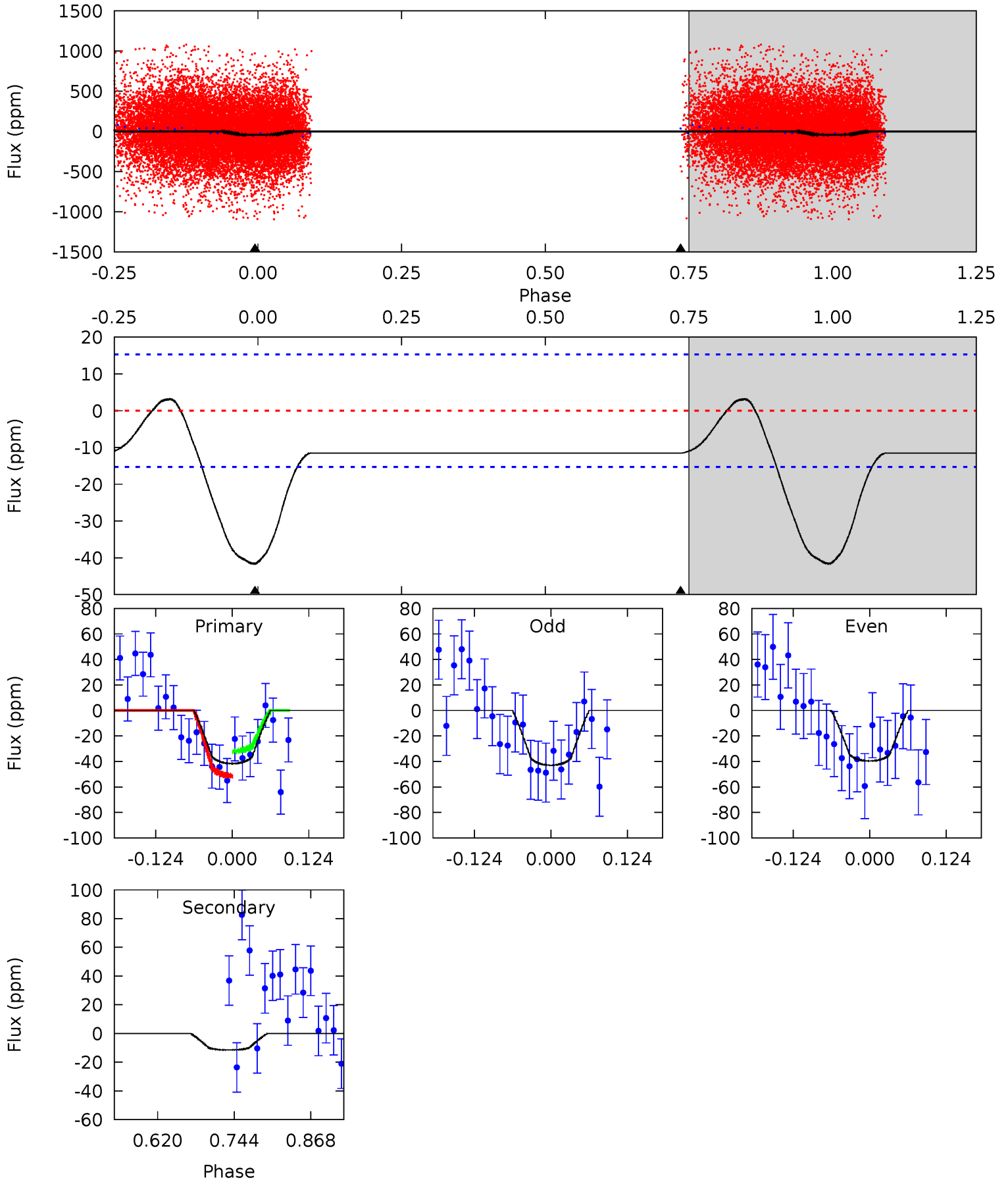


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

007621172-03, P = 0.688158 Days, E = 130.928701 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.3	3.40	0	0	4.52	1.54	0.73	12.3	12.3	3.40	3.40	0.50	0.95	0.07	2.90



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 007621172

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7052^{+195}_{-335}	$4.156^{+0.105}_{-0.210}$	$0.220^{+0.150}_{-0.350}$	$1.741^{+0.584}_{-0.270}$	$1.583^{+0.214}_{-0.236}$	$0.423^{+0.215}_{-0.226}$
	+3%/-5%	+3%/-5%	+68%/-159%	+34%/-16%	+14%/-15%	+51%/-53%
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 007621172-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-12 ± 3	$1.57^{+1.18}_{-0.88}$	4332^{+316}_{-268}	4200^{+2657}_{-7176}	$0.784^{+3.838}_{-0.539}$
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 $A_{obs} \gg 1.0$

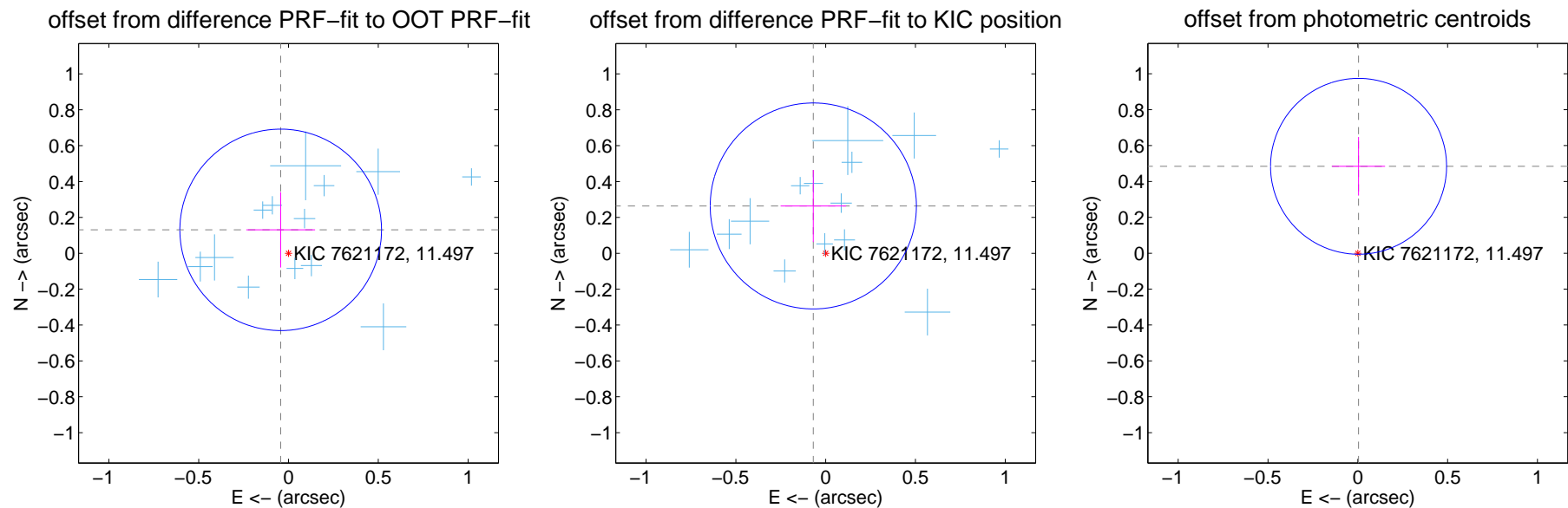
DV Centroid Data

Supplemental centroid analysis for 007621172-03. **Kepler magnitude: 11.50.** Transit SNR 18.74

There are 16 quarters with good PRF difference image offsets

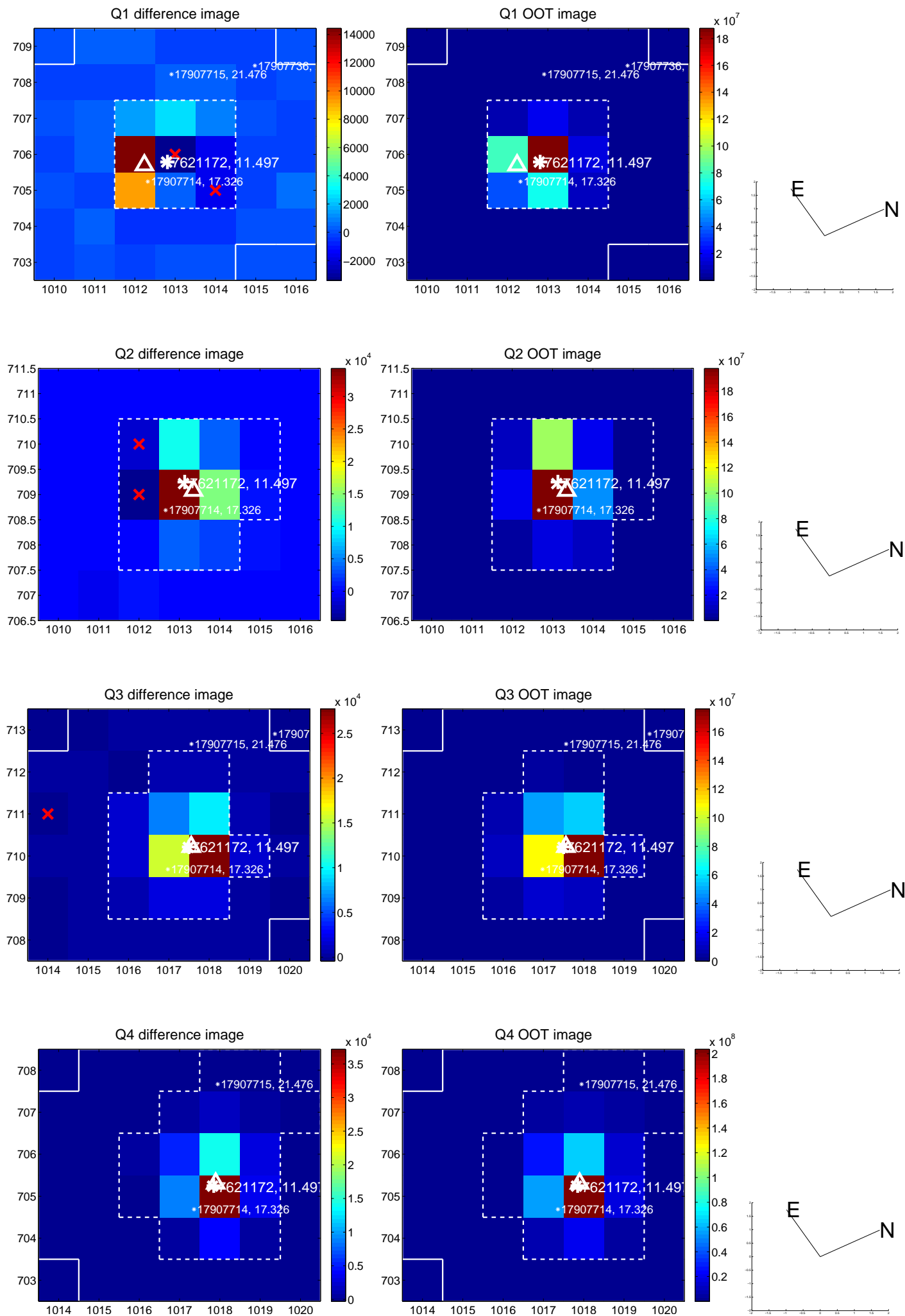
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.138 ± 0.187	0.74	0.043 ± 0.191	0.131 ± 0.210
PRF-fit source offset from KIC position	0.273 ± 0.191	1.42	0.069 ± 0.182	0.264 ± 0.201
photometric centroid source offset	0.48 ± 0.16	2.97	-0.00 ± 0.15	0.48 ± 0.16

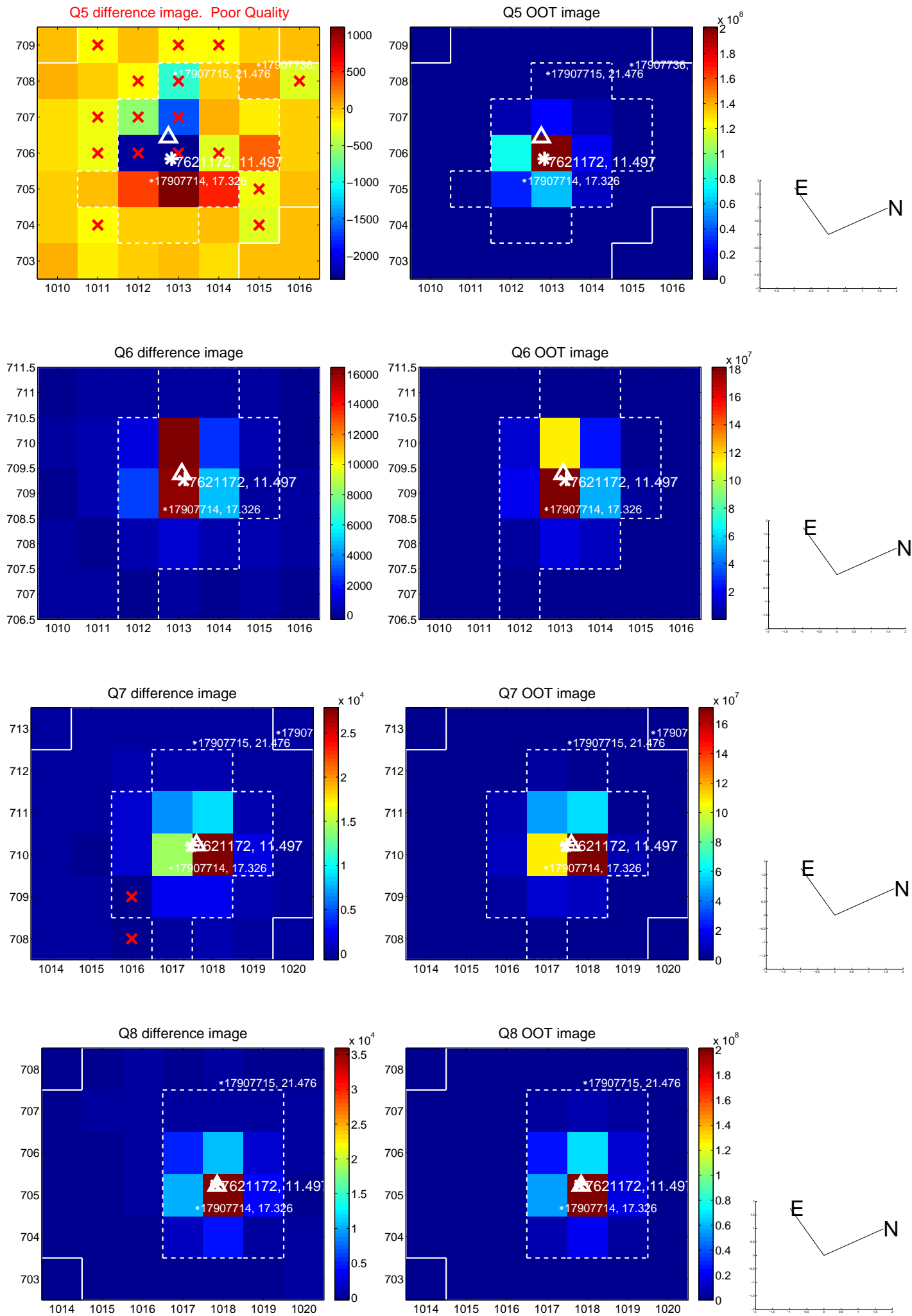


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

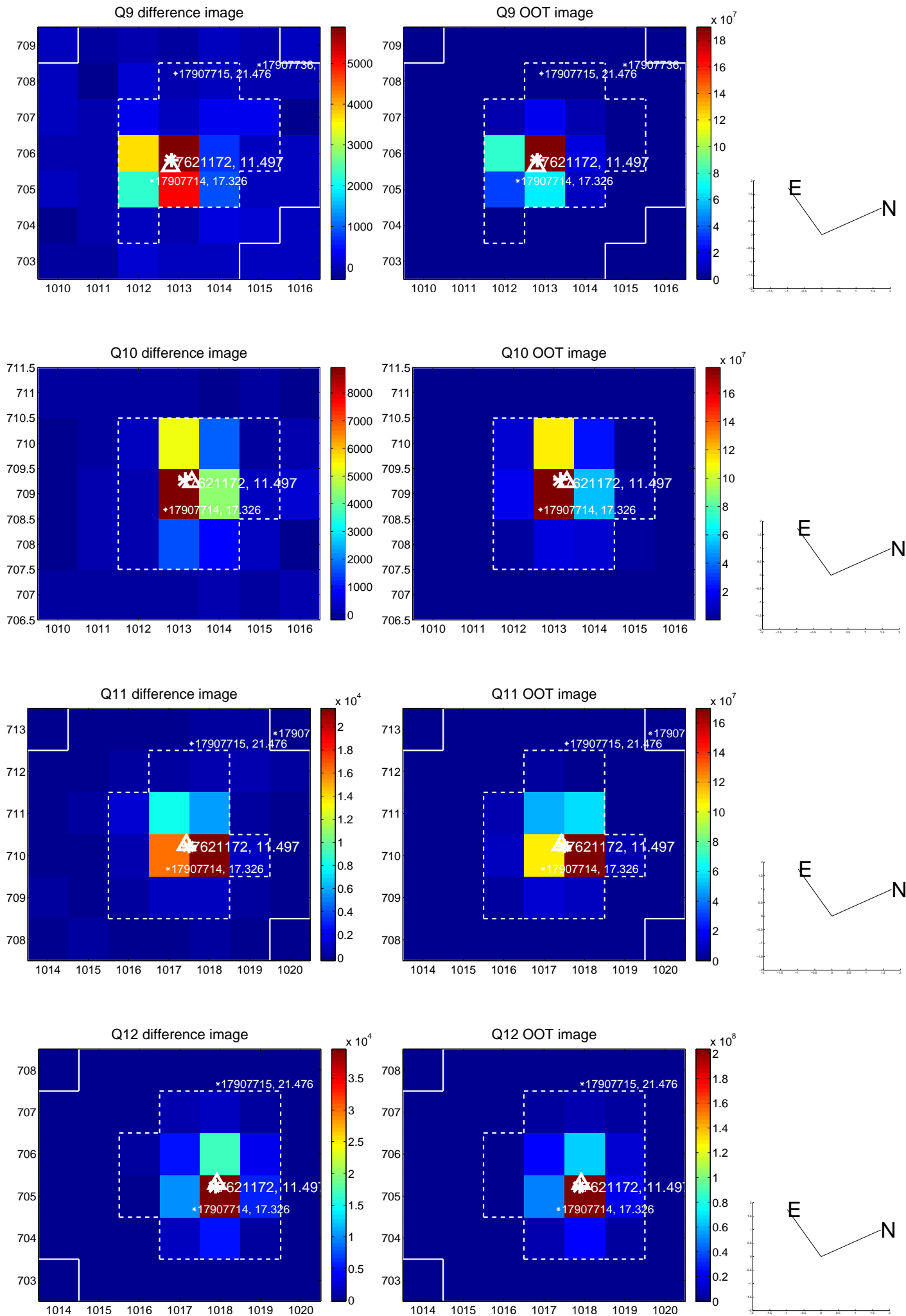
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



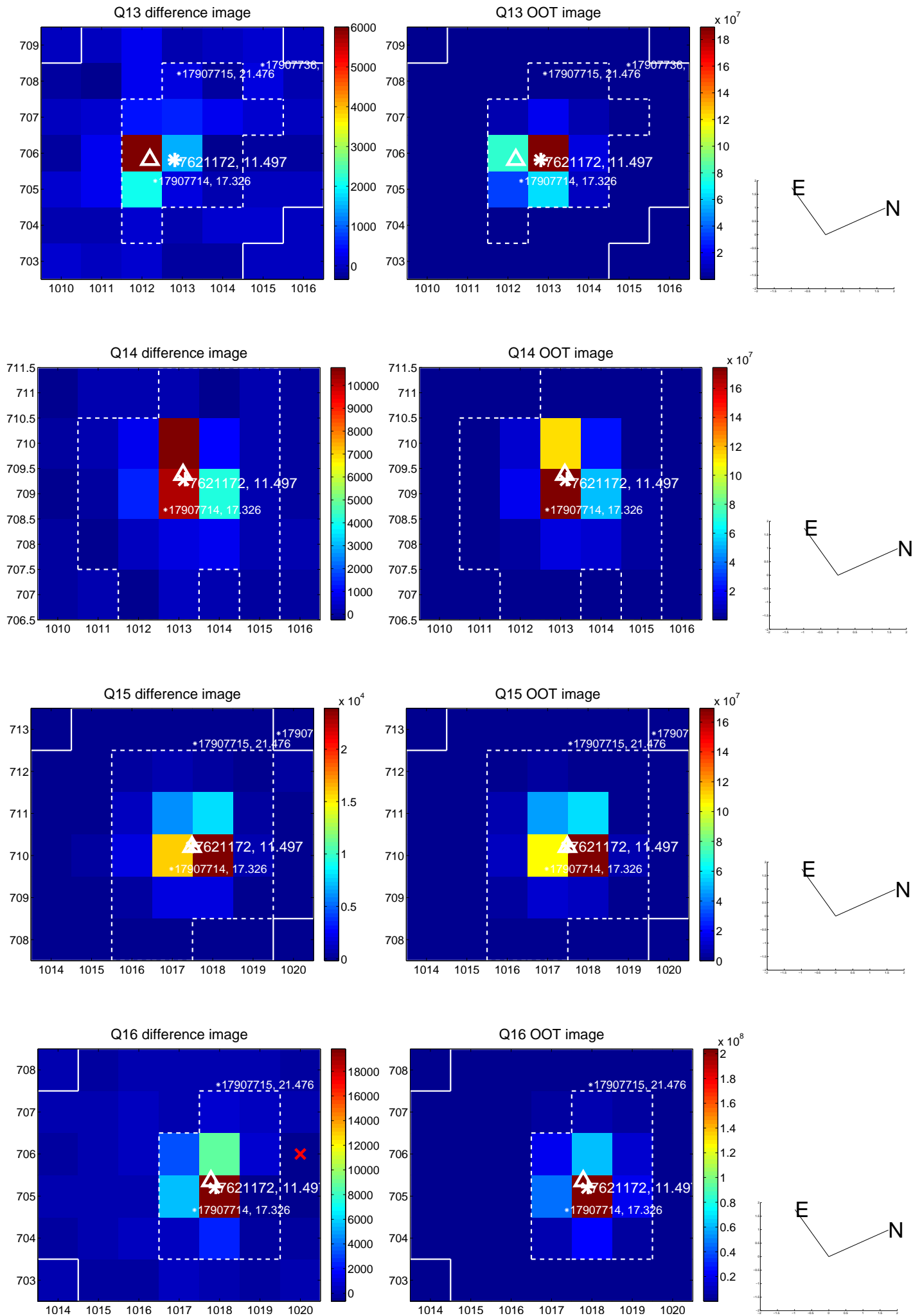
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



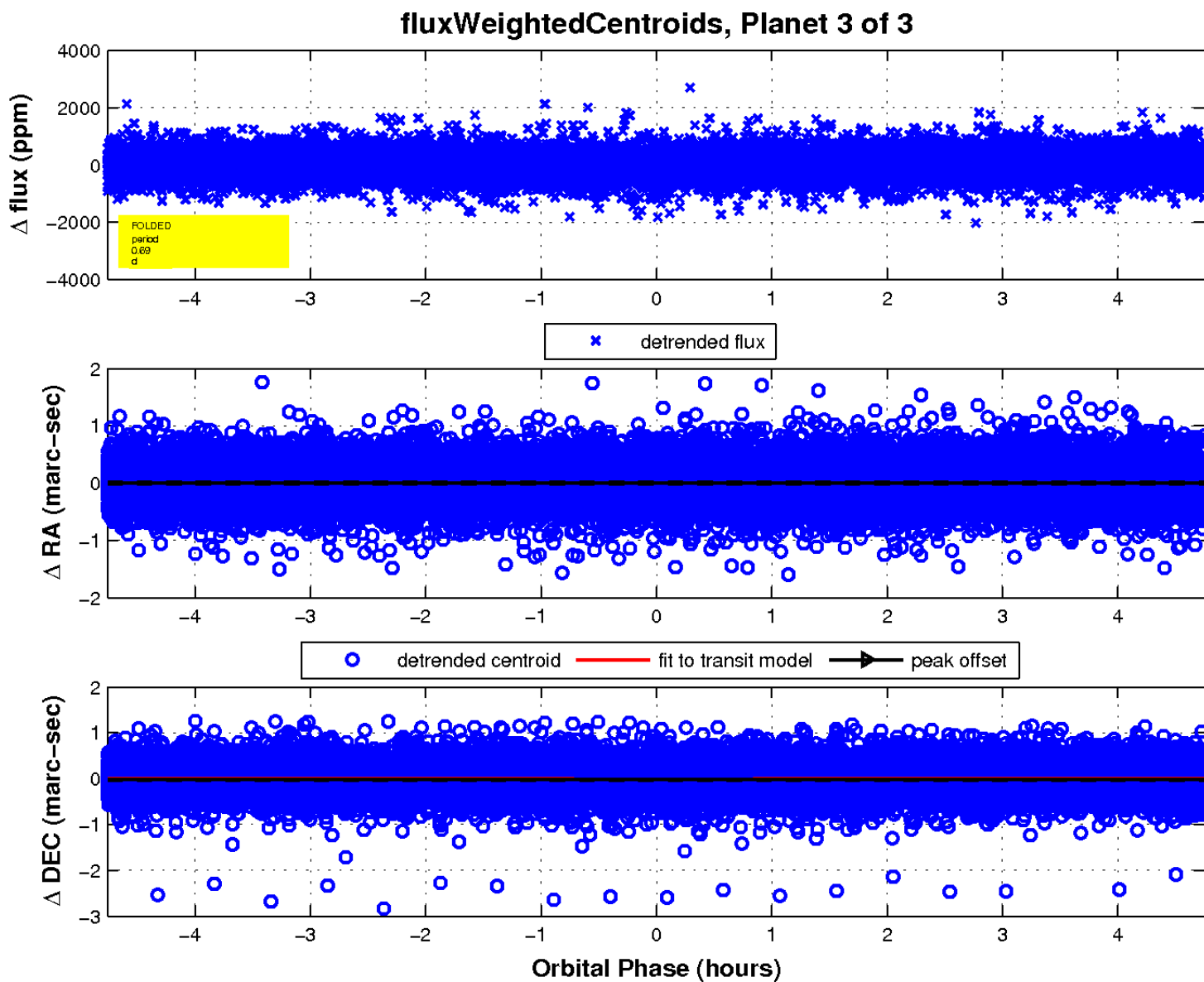
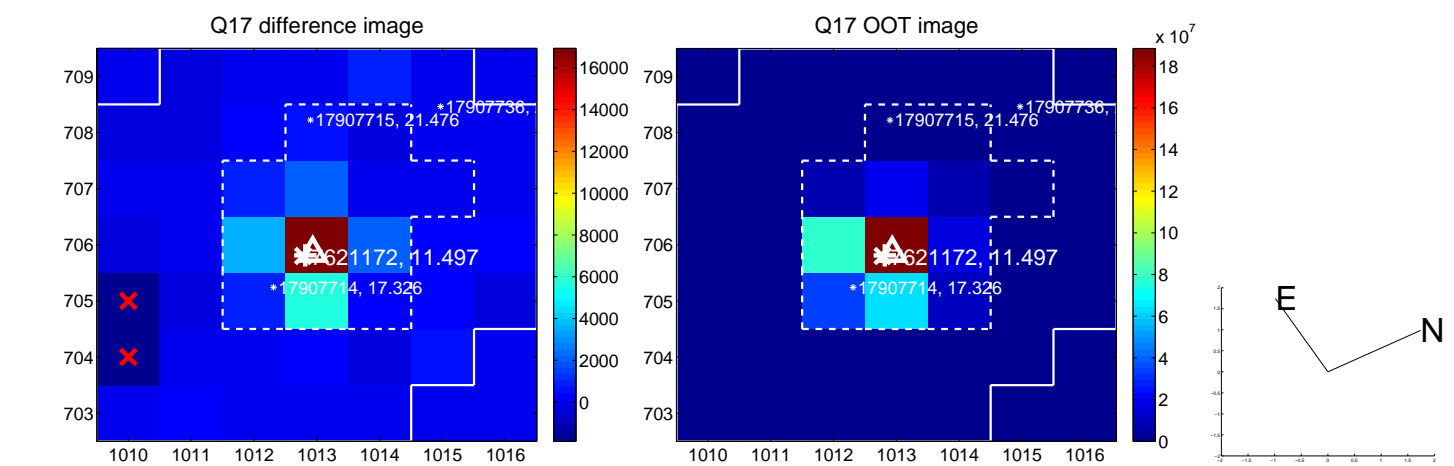
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