

KIC 006784155

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})
006784155-01	OBS	No	0.599899	132.043629	75.1	1.709	10.2	9.8	2.83	7530	2.84	75524.01
006784155-02	OBS	No	0.824401	131.738805	76.8	4.743	10.6	6.5	2.83	7530	2.89	49431.57
006784155-03	OBS	No	0.824408	132.138277	129.7	3.000	15.3	11.8	2.83	7530	3.34	49431.02

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006784155-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
006784155-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
006784155-03	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—SAME_NTL_PERIOD

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

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

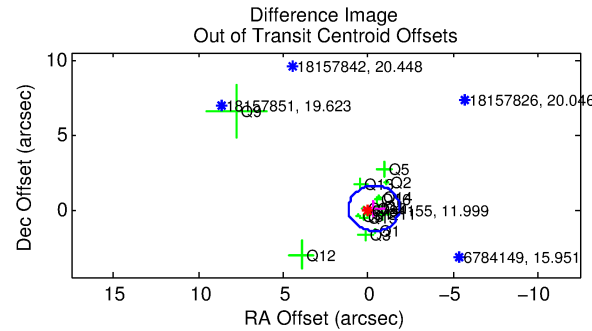
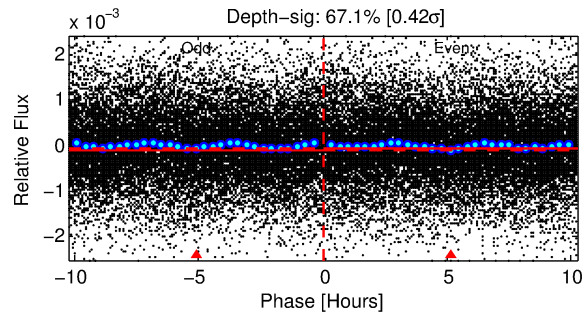
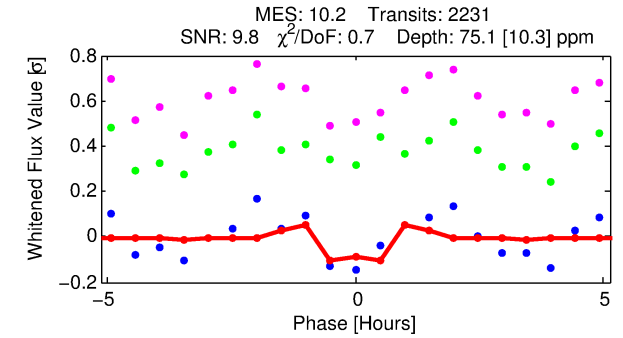
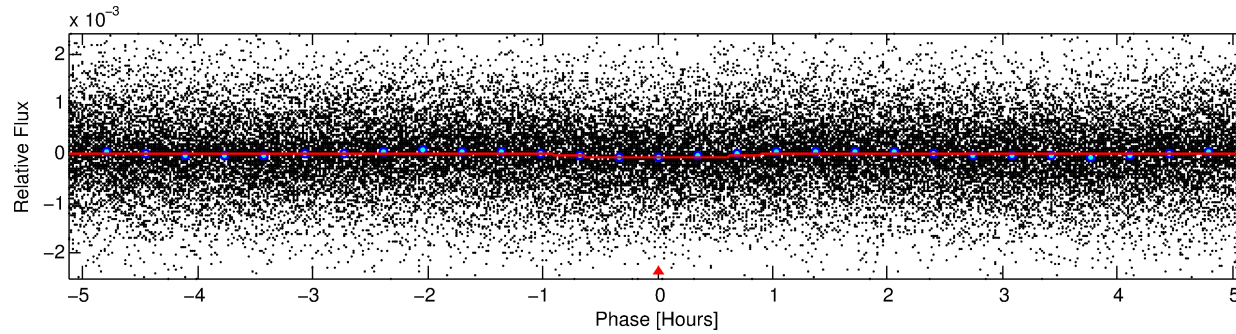
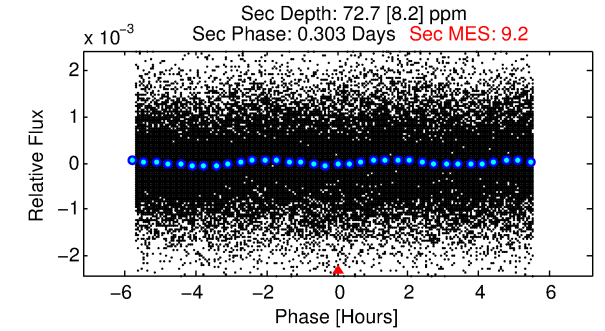
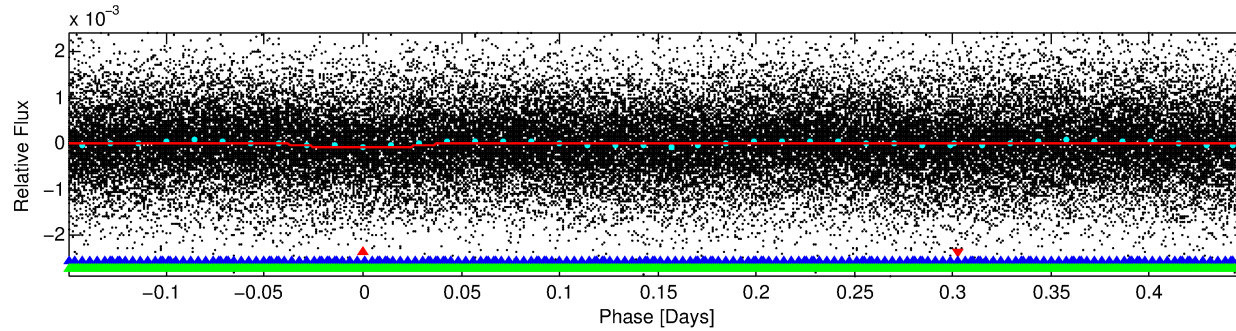
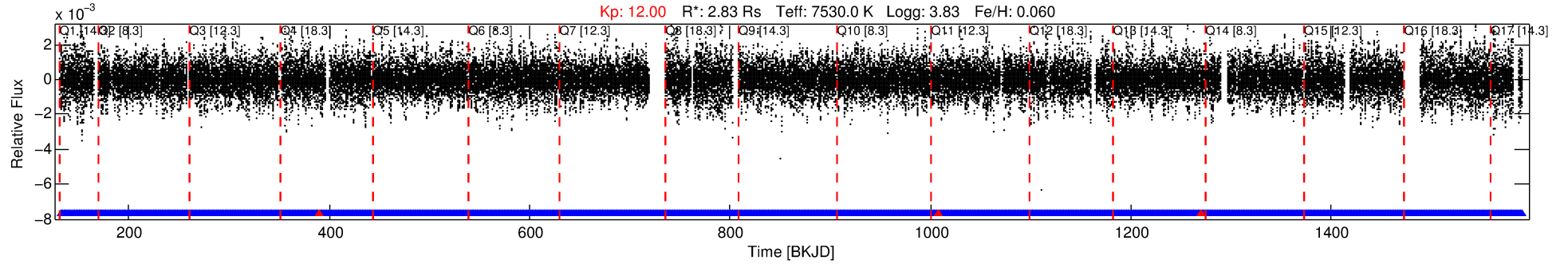
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006784155-01

No Significant Match Found

DV One-Page Summary

KIC: 6784155 Candidate: 1 of 3 Period: 0.600 d



DV Fit Results:

Period = 0.59990 [0.00001] d
Epoch = 132.0436 [0.0012] BKJD
 R_p/R^* = 0.0092 [0.0019]
 a/R^* = 1.55 [1.12]
 b = 0.90 [0.27]
 Seff = 75524.01 [44920.88]
 T_{eq} = 4227 [629] K
 R_p = 2.84 [1.32] R_e
 a = 0.0175 [0.0065] AU
 A_g = 1.51 [1.07] [0.48σ]
 T_{effp} = 7244 [837] K [2.88σ]

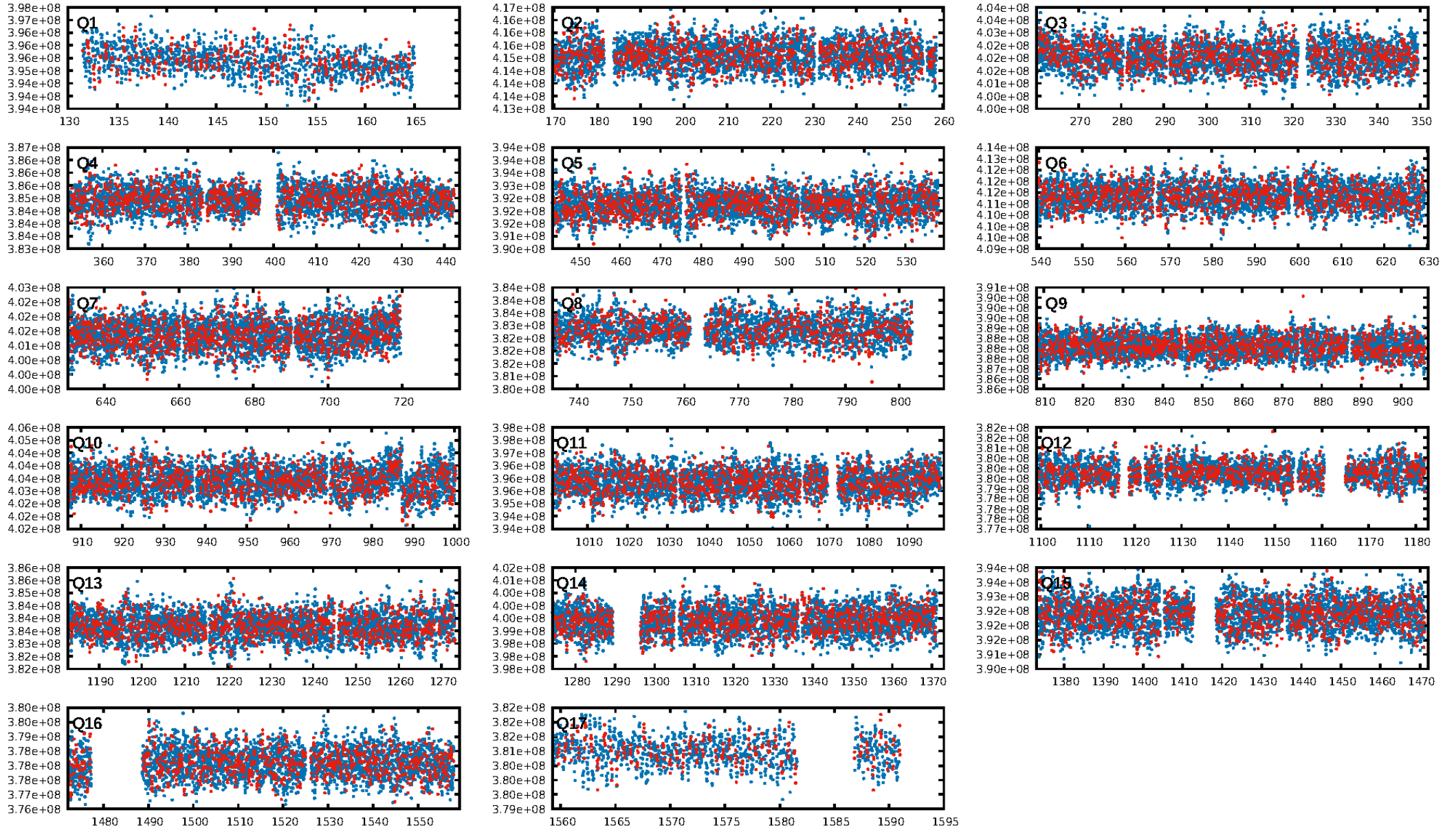
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 71.5% [1.07σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2127/2130]
GhostDiagnostic-chr: 2.969
Centroid-sig: 5.2%
Centroid-so: 0.120 arcsec [0.74σ]
OotOffset-rm: 0.366 arcsec [0.73σ]
KicOffset-rm: 0.464 arcsec [0.96σ]
OotOffset-st: 4/3/4/5 [16]
KicOffset-st: 4/3/4/5 [16]
DiffImageQuality-fgm: 0.62 [10/16]
DiffImageOverlap-fno: 0.00 [0/17]

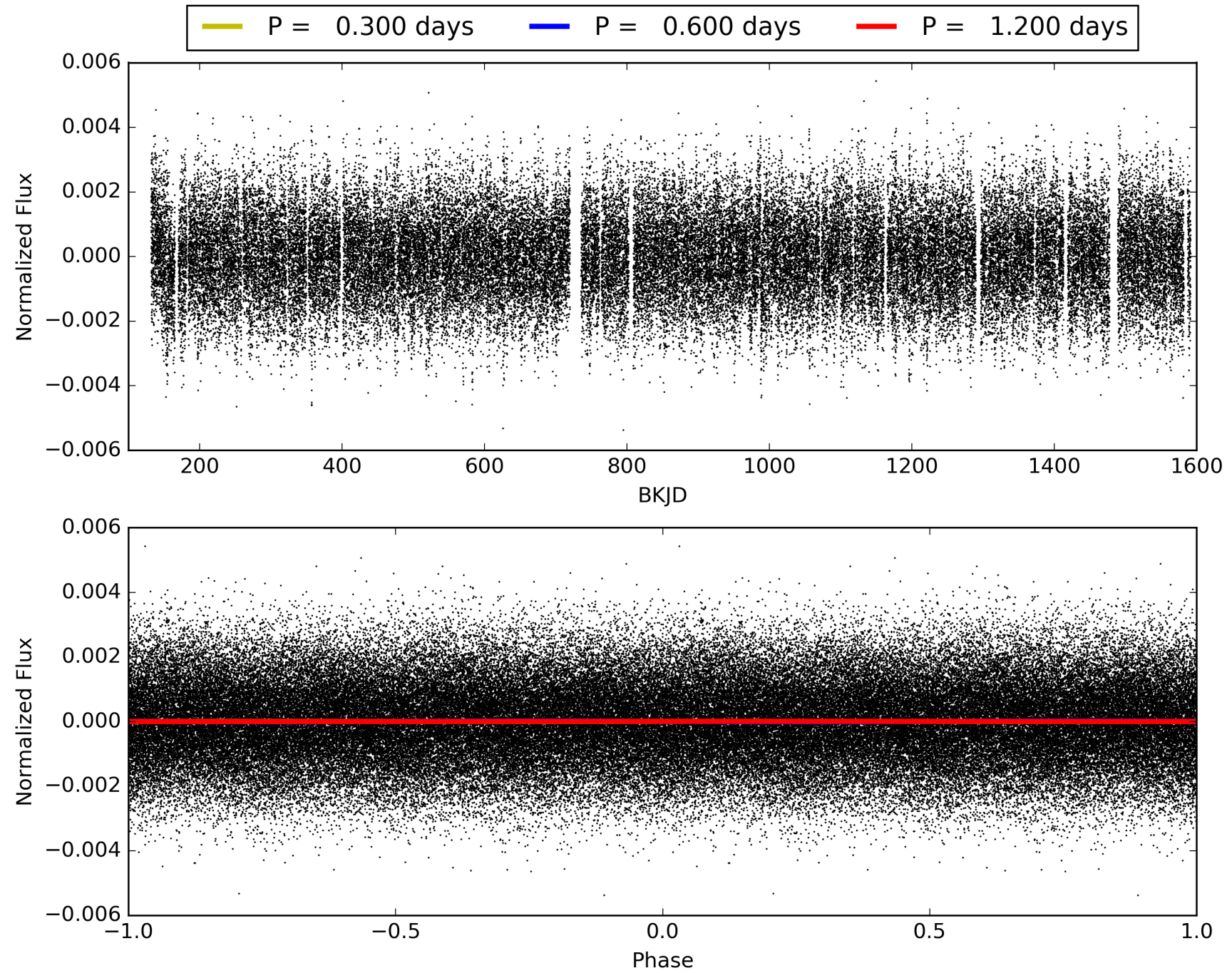
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:18:38 Z

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

TCE 006784155-01, PDC Light Curves

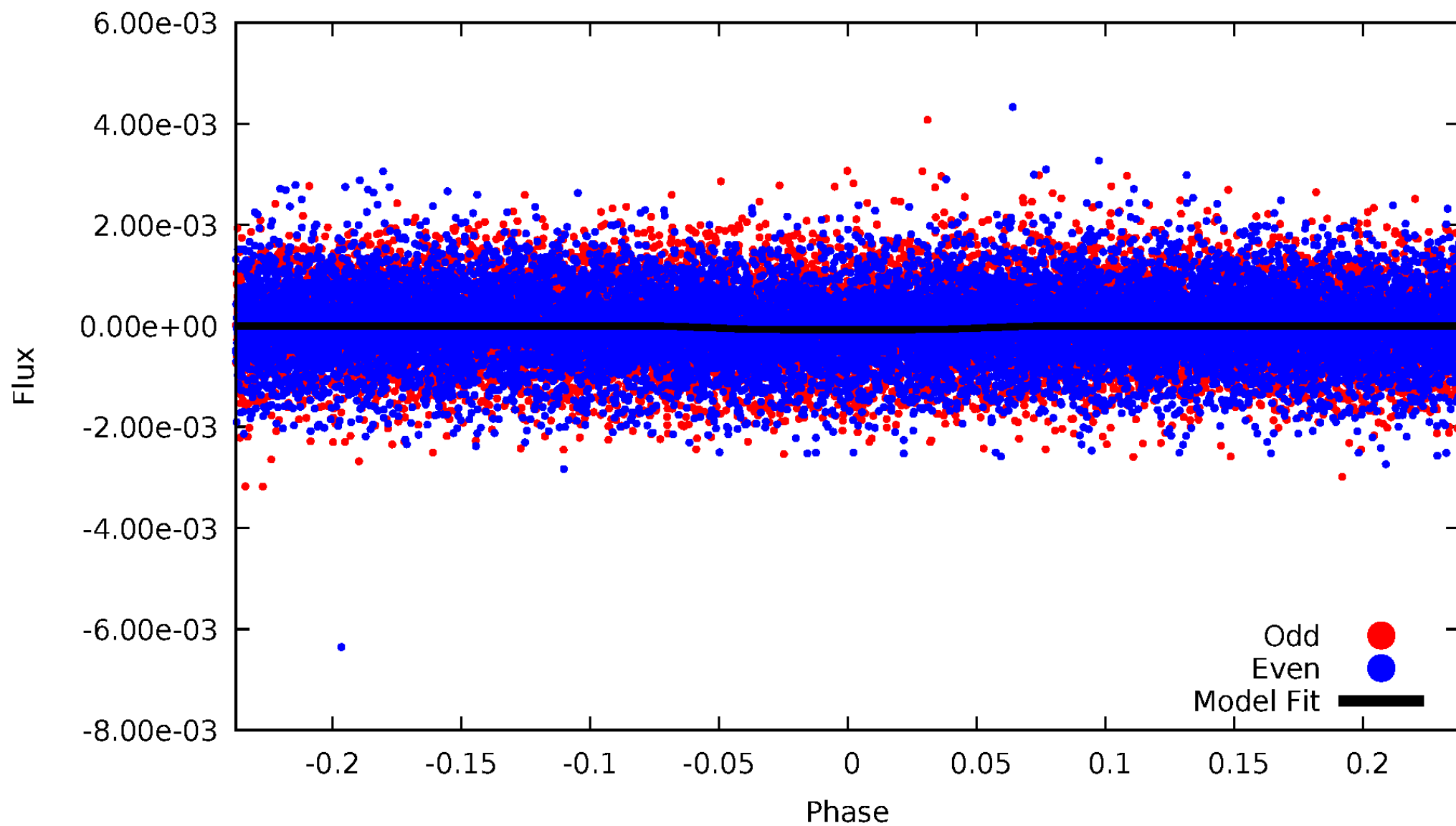


TCE 006784155-01



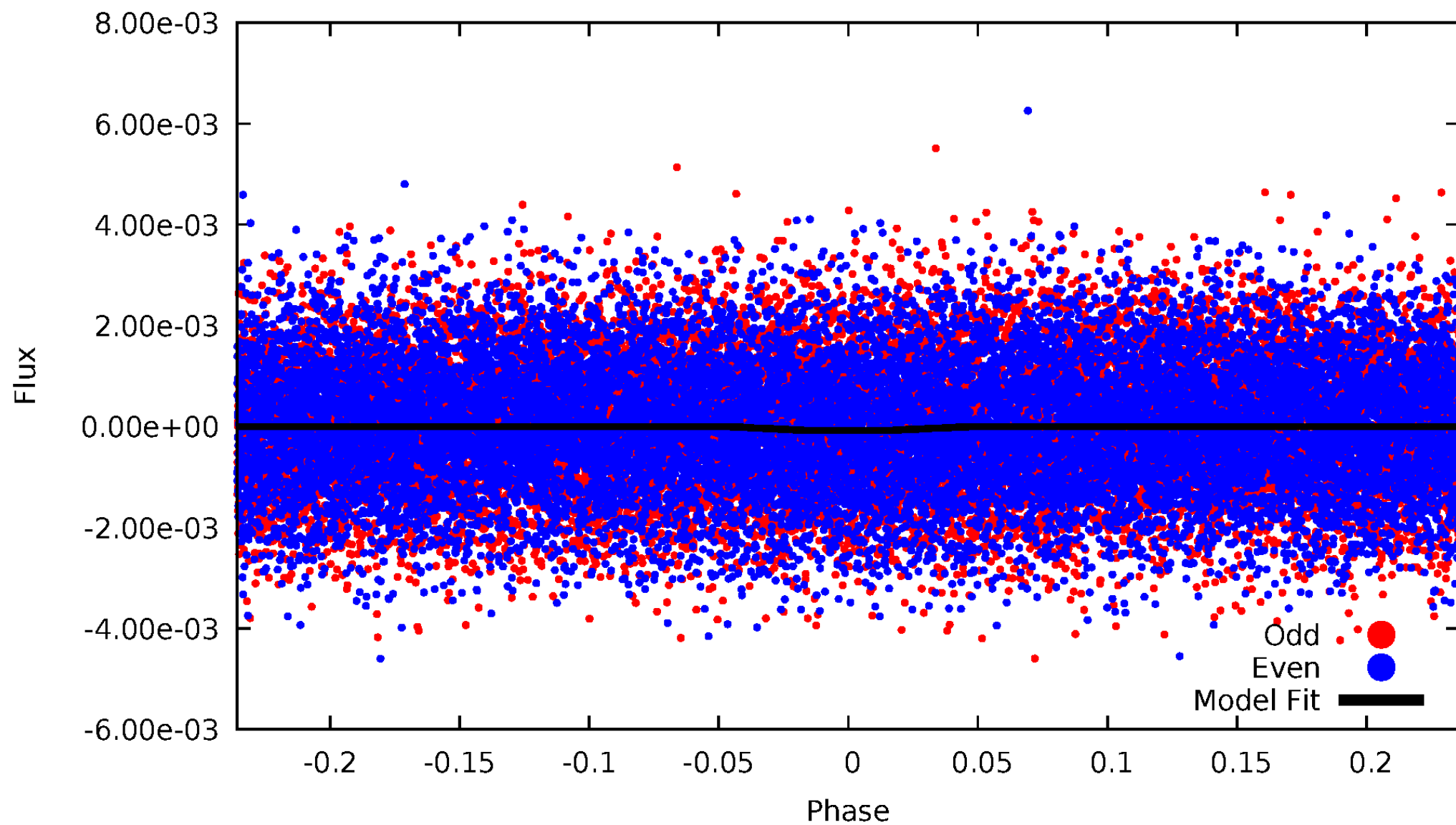
DV Odd/Even

TCE 006784155-01



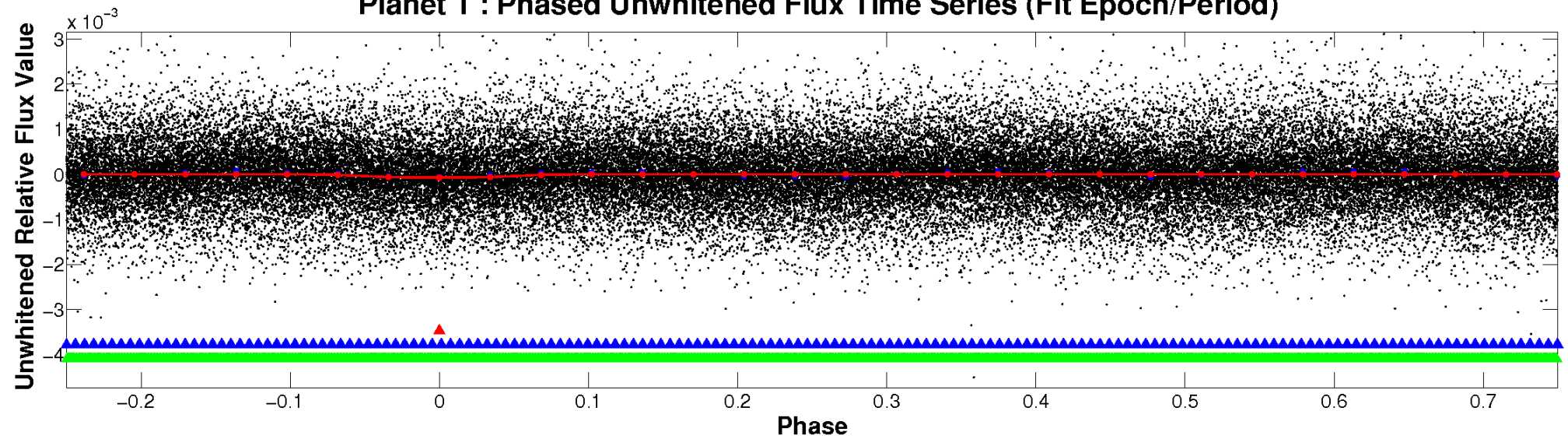
ALT Odd/Even

TCE 006784155-01

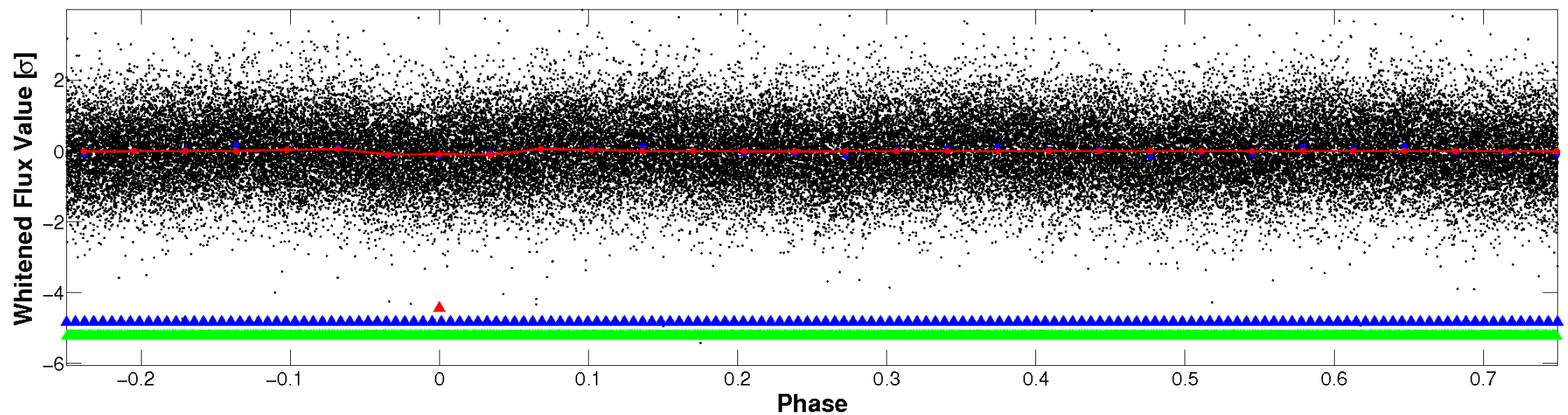


Non-Whitened Vs. Whitened Light Curve

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

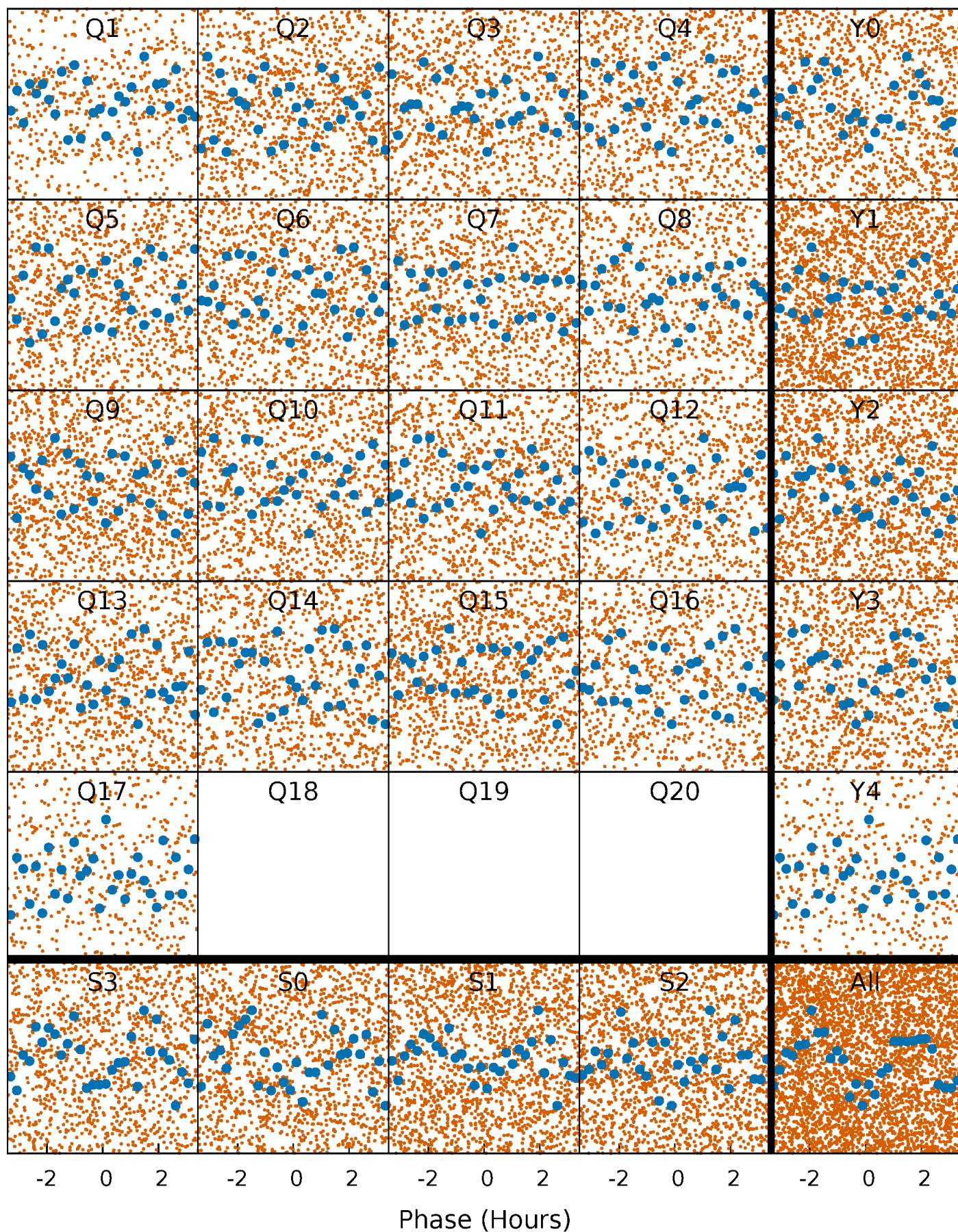


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



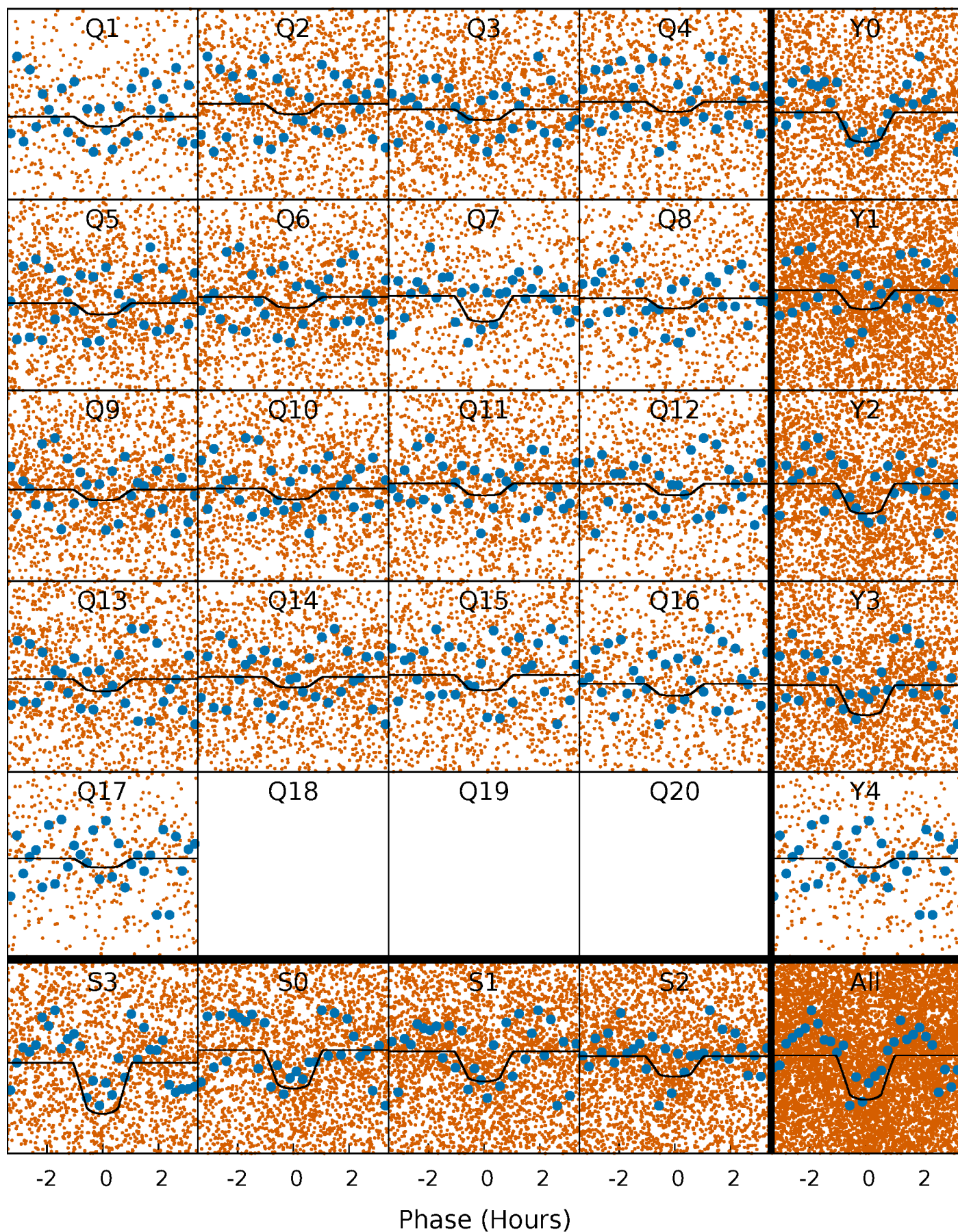
PDC Quarter-Phased Transit Curves

TCE 006784155-01 P= 0.599899 Days $T_0=132.043629$ (BKJD)



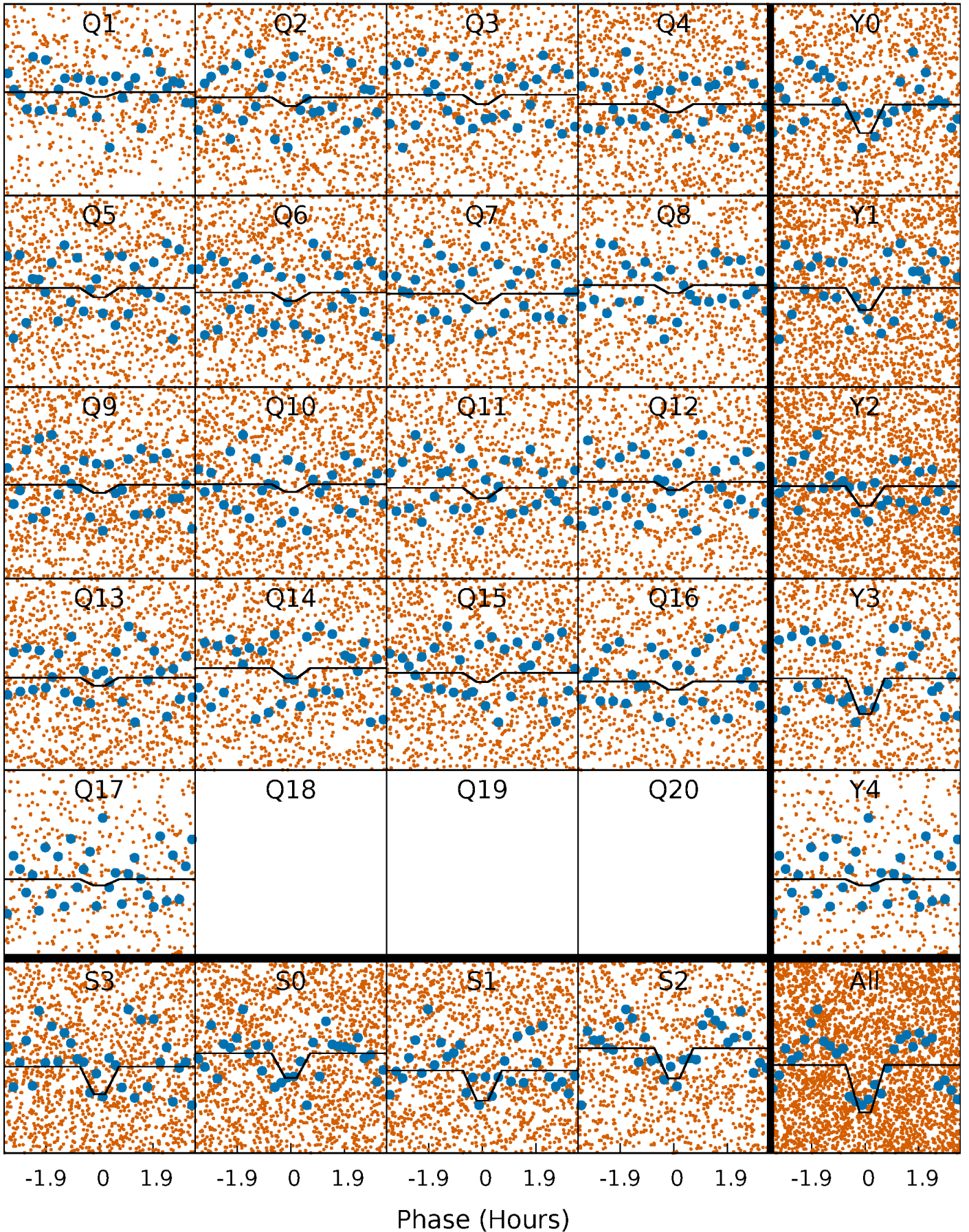
DV Quarter-Phased Transit Curves

TCE 006784155-01 P= 0.599899 Days $T_0=132.043629$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

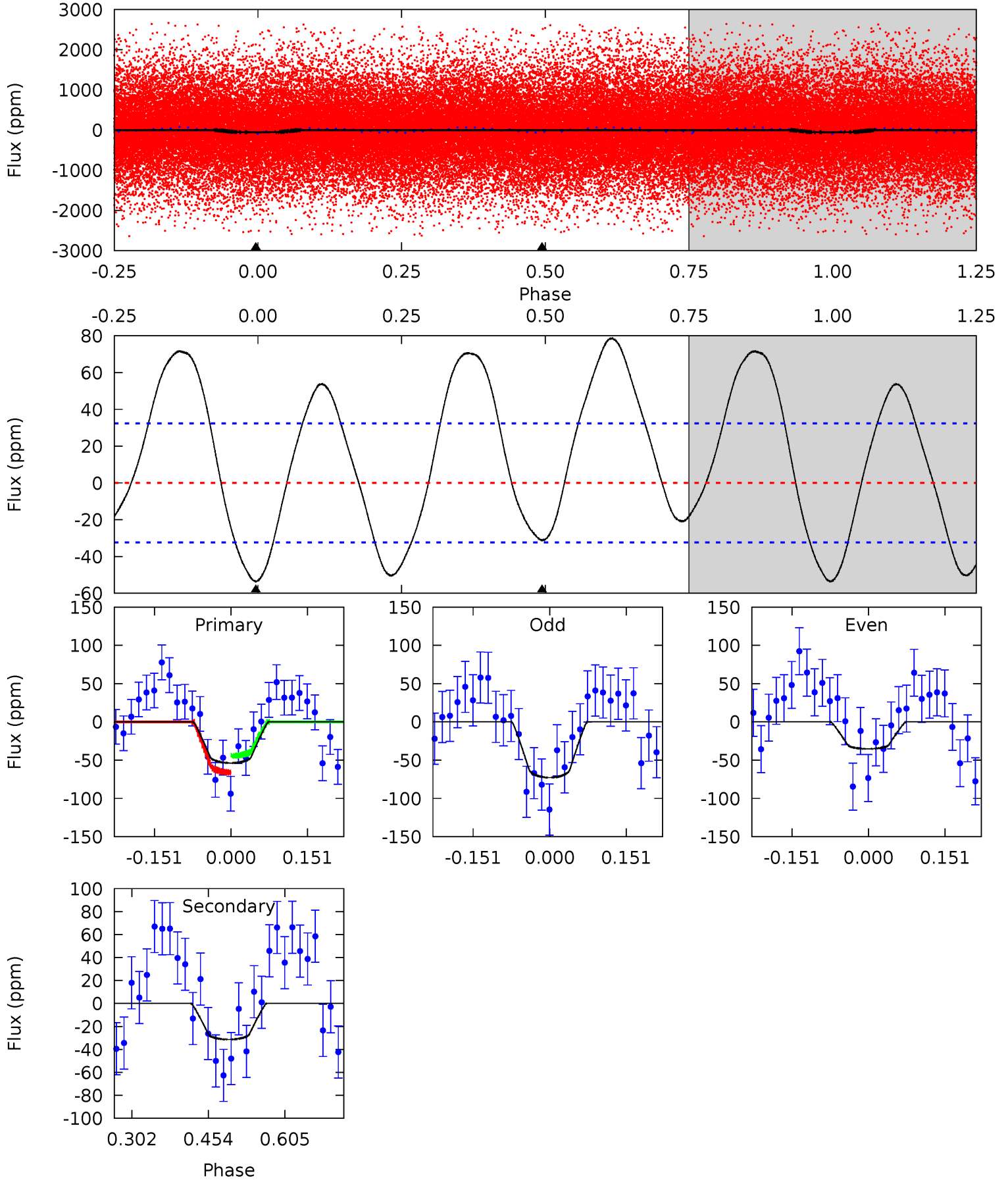
TCE 006784155-01 P= 0.599902 Days $T_0=132.036419$ (BKJD)



DV Model-Shift Uniqueness Test

006784155-01, P = 0.599899 Days, E = 131.443730 Days

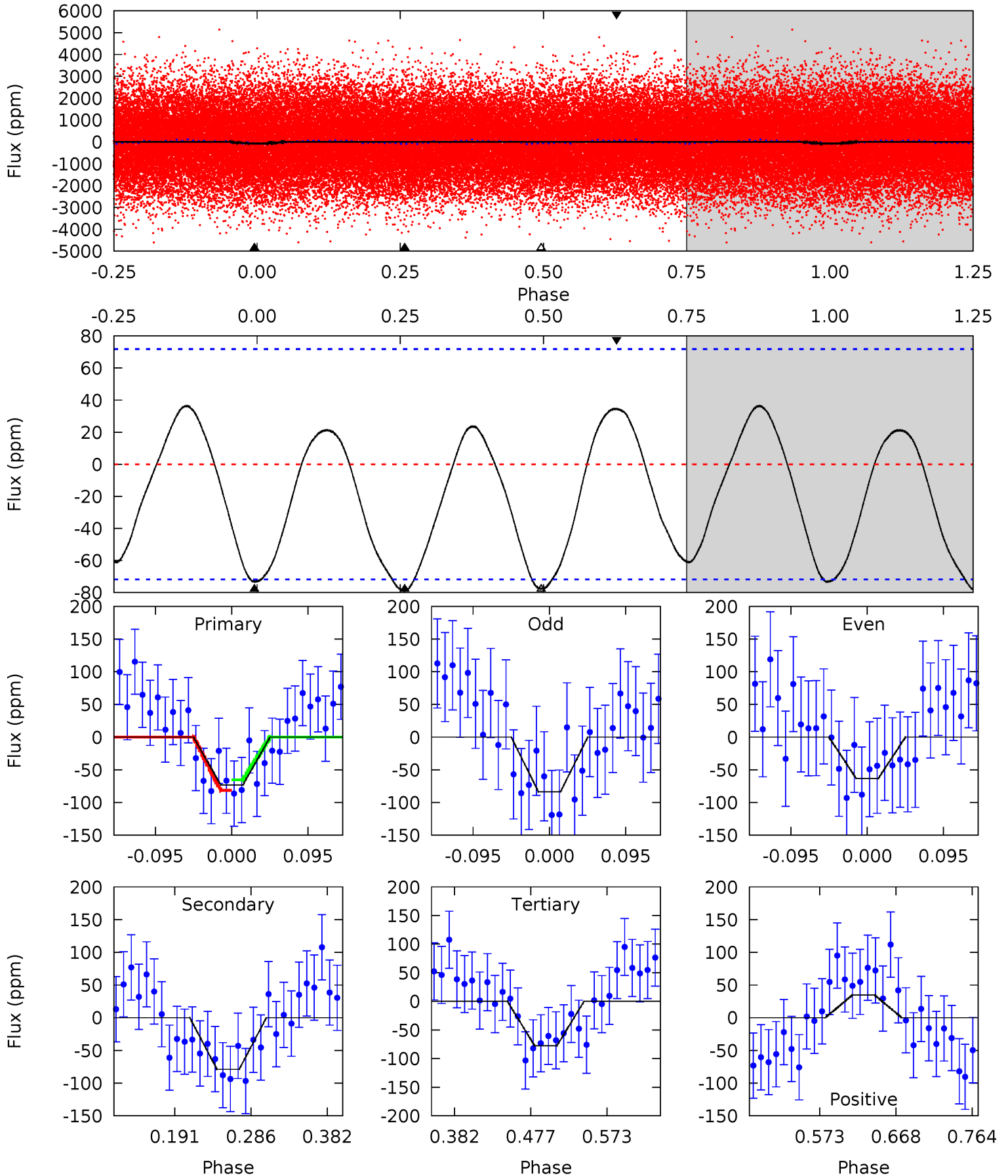
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.43	4.34	0	0	4.48	1.44	4.52	7.43	7.43	4.34	4.34	2.58	0.77	0.59	1.51



Alt Model-Shift Uniqueness Test

006784155-01, P = 0.599902 Days, E = 131.436517 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.67	5.03	4.95	2.21	4.57	1.67	2.28	-0.28	2.46	0.08	2.82	0.65	0.72	0.32	0.51



Stellar Parameters For KIC 006784155

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7530^{+209}_{-340}	$3.830^{+0.322}_{-0.107}$	$0.060^{+0.200}_{-0.350}$	$2.826^{+0.470}_{-1.175}$	$1.968^{+0.084}_{-0.475}$	$0.123^{+0.303}_{-0.042}$
	+3%/-5%	+8%/-3%	+333%/-583%	+17%/-42%	+4%/-24%	+247%/-34%
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 006784155-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-31 ± 7	$2.66^{+0.73}_{-0.68}$	5777^{+412}_{-559}	5065^{+994}_{-1072}	$0.720^{+0.616}_{-0.311}$
Alt.	-79 ± 16	$2.64^{+0.72}_{-0.67}$	5745^{+429}_{-567}	6888^{+1302}_{-949}	$1.774^{+1.469}_{-0.700}$

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 $A_{obs} \gg 1.0$

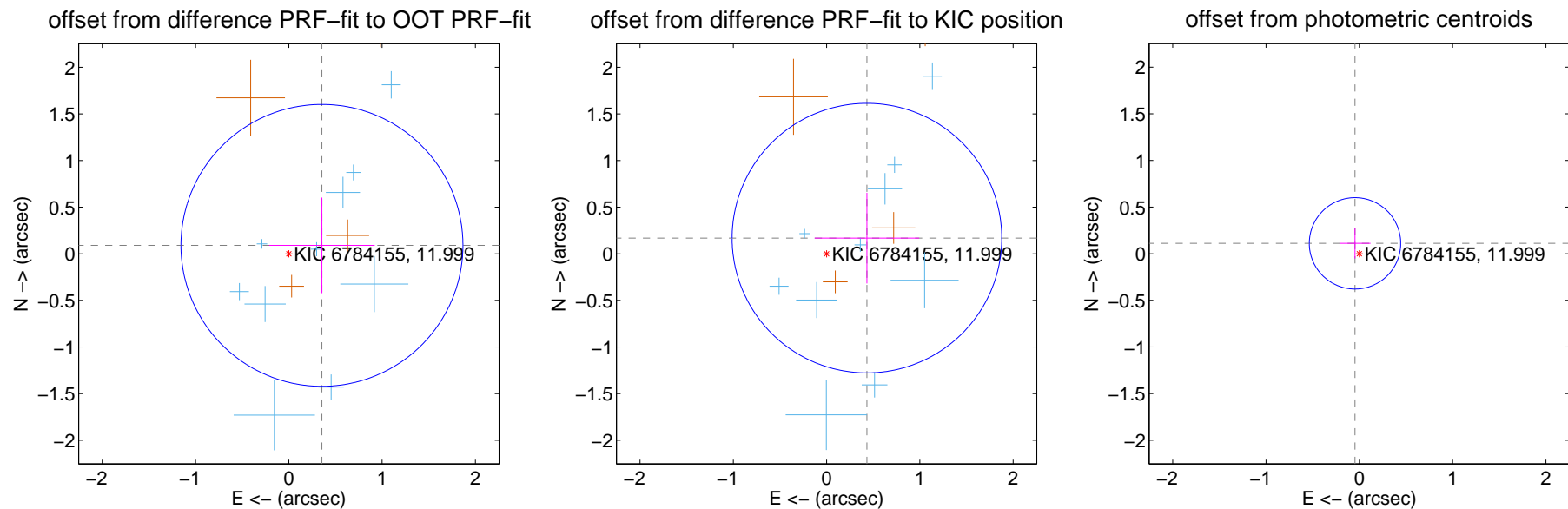
DV Centroid Data

Supplemental centroid analysis for 006784155-01. **Kepler magnitude: 12.00.** Transit SNR 9.82

There are 10 quarters with good PRF difference image offsets

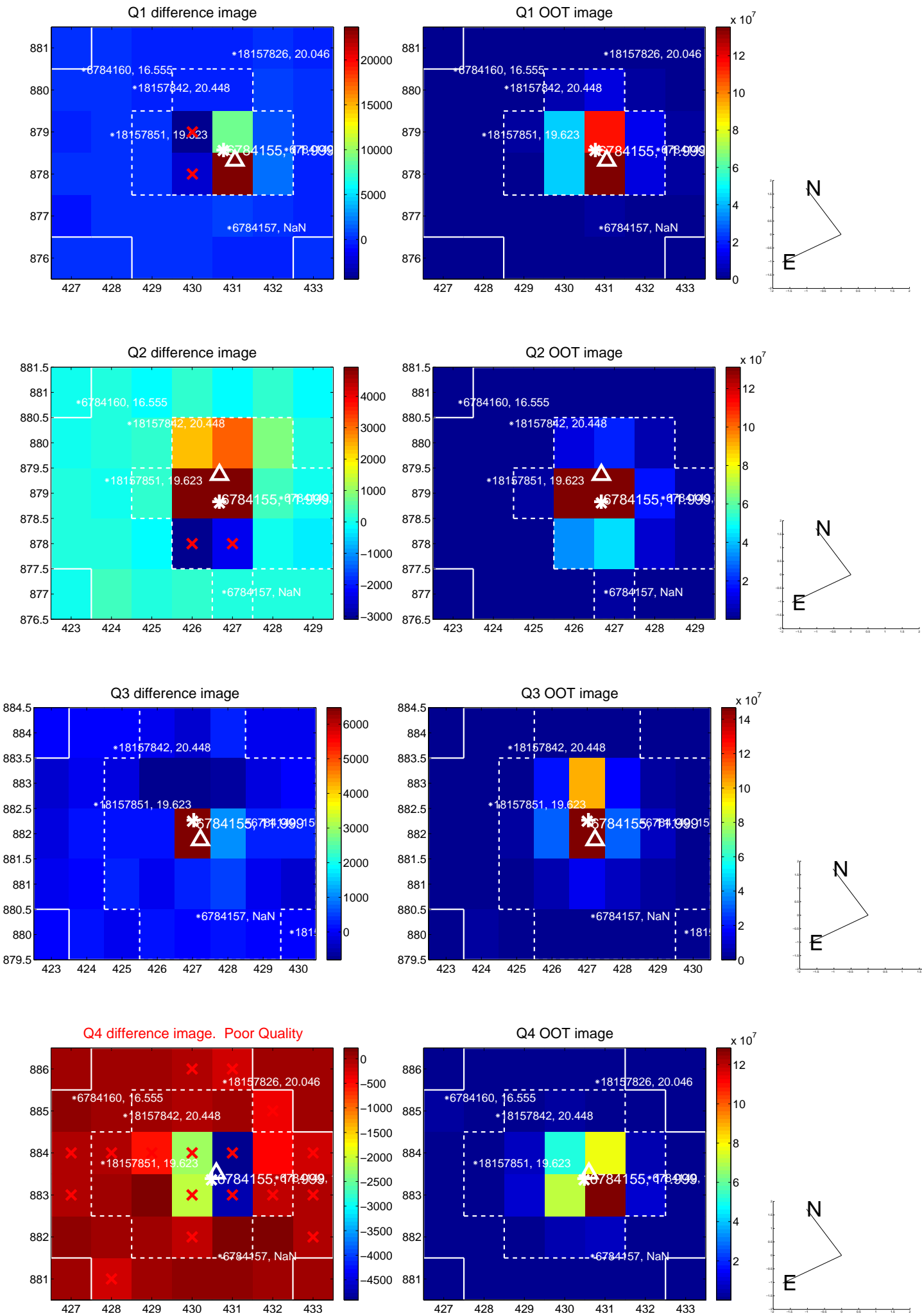
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.366 ± 0.504	0.73	-0.355 ± 0.566	0.090 ± 0.513
PRF-fit source offset from KIC position	0.464 ± 0.482	0.96	-0.433 ± 0.561	0.168 ± 0.486
photometric centroid source offset	0.12 ± 0.16	0.74	0.05 ± 0.17	0.11 ± 0.16

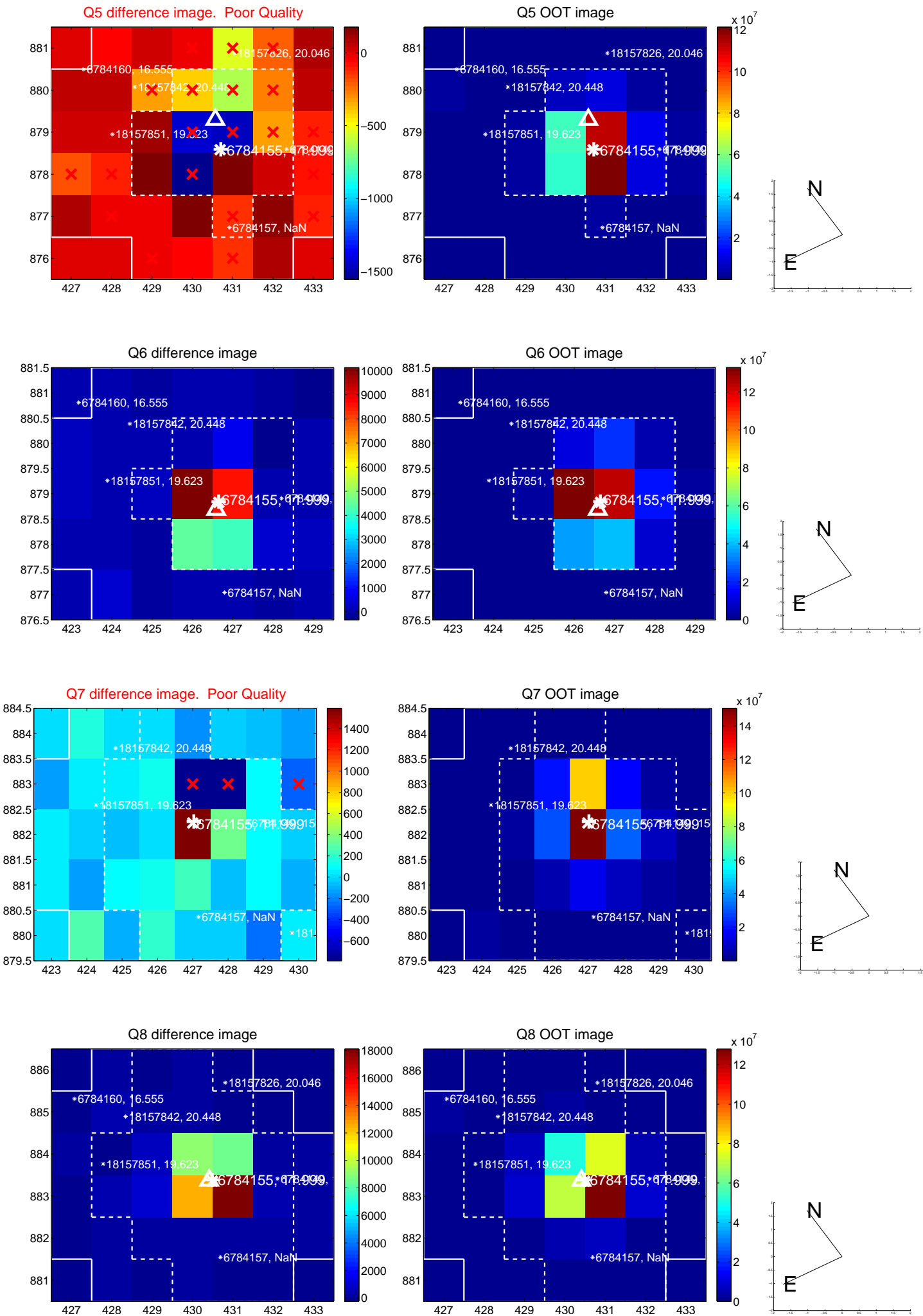


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

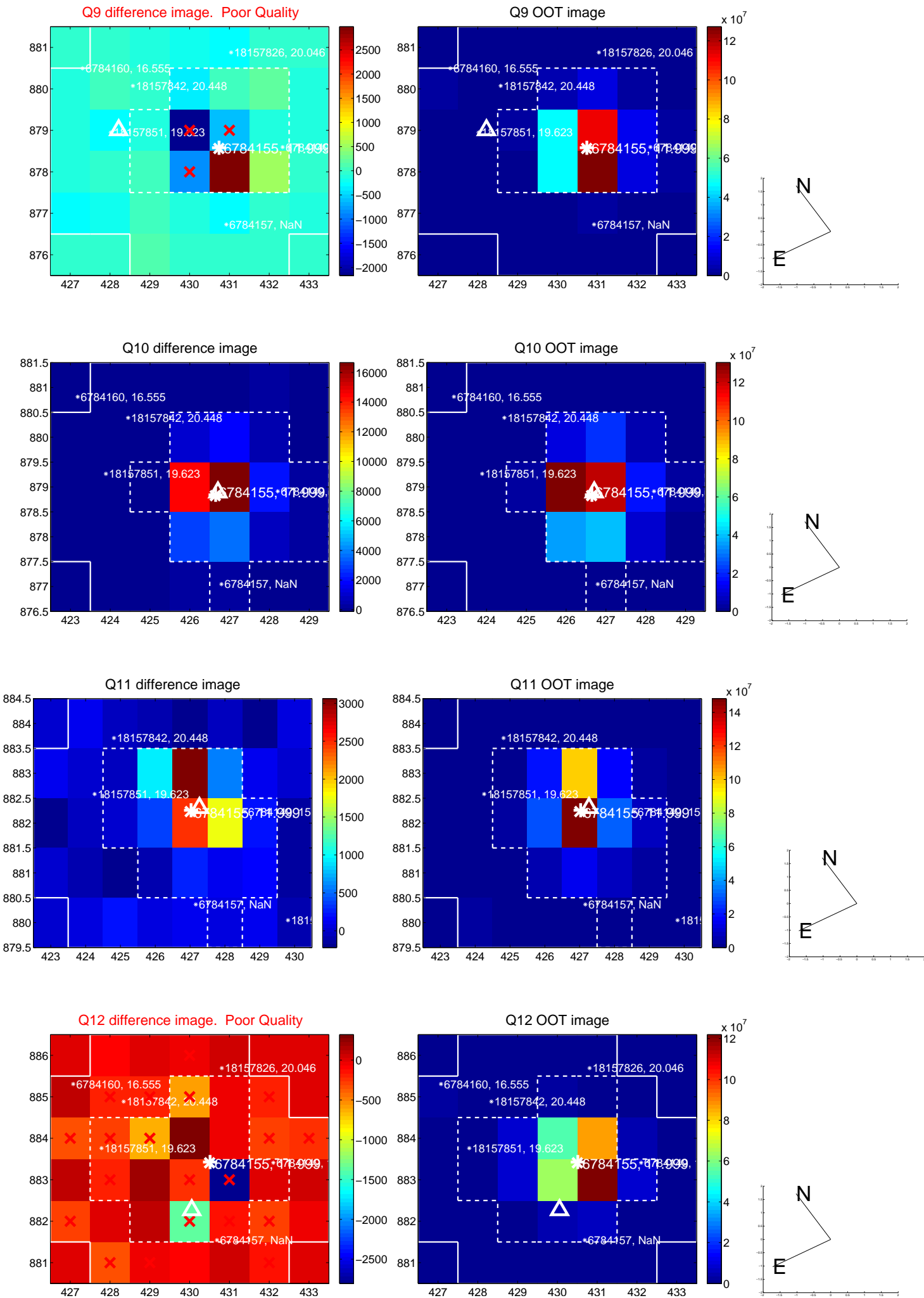
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



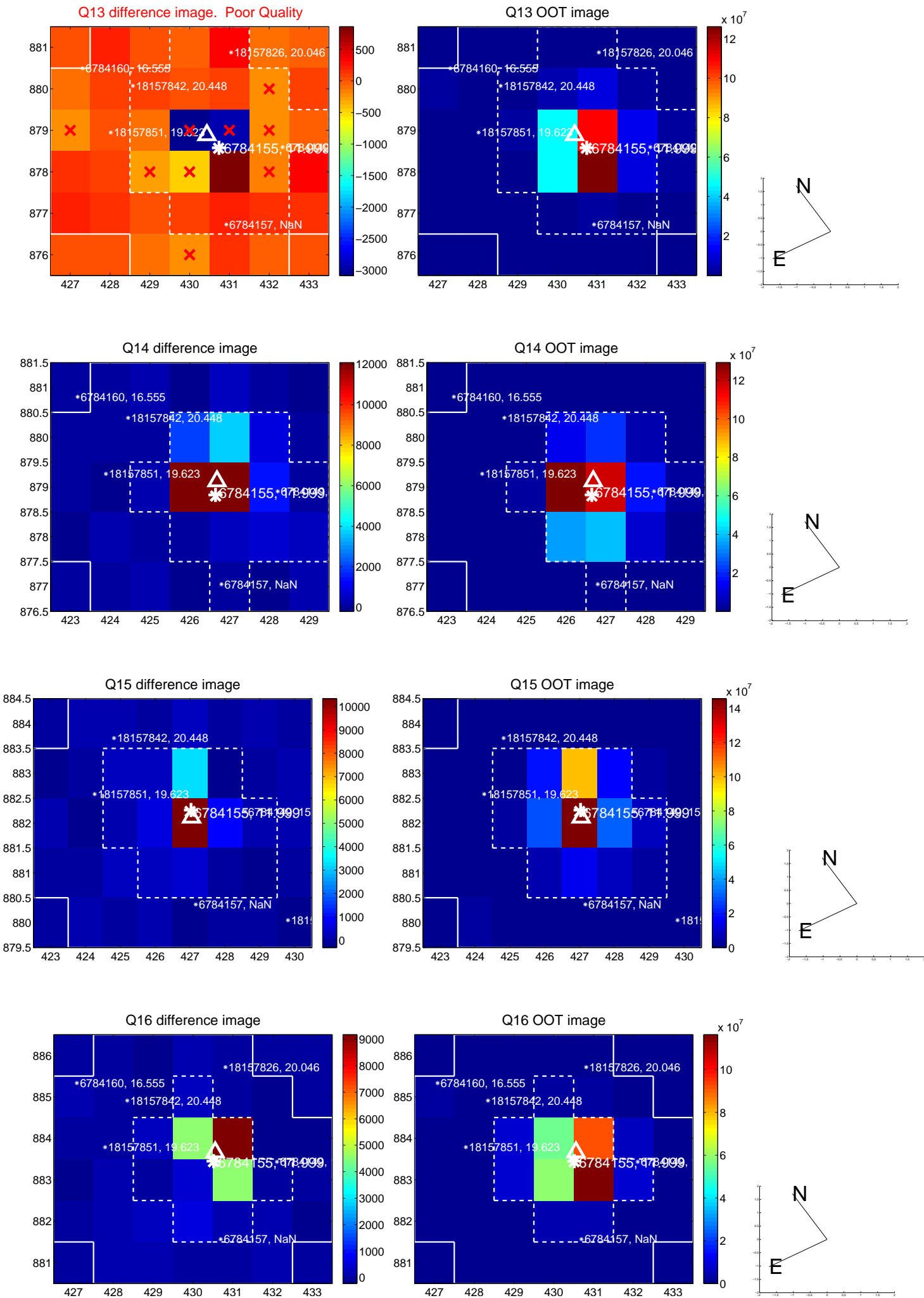
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



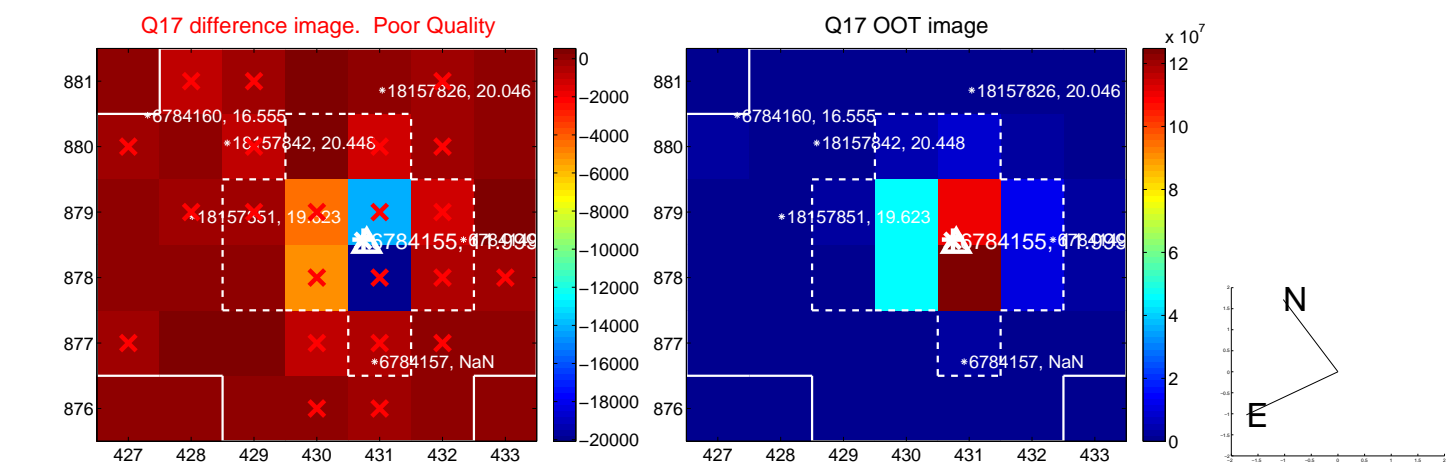
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



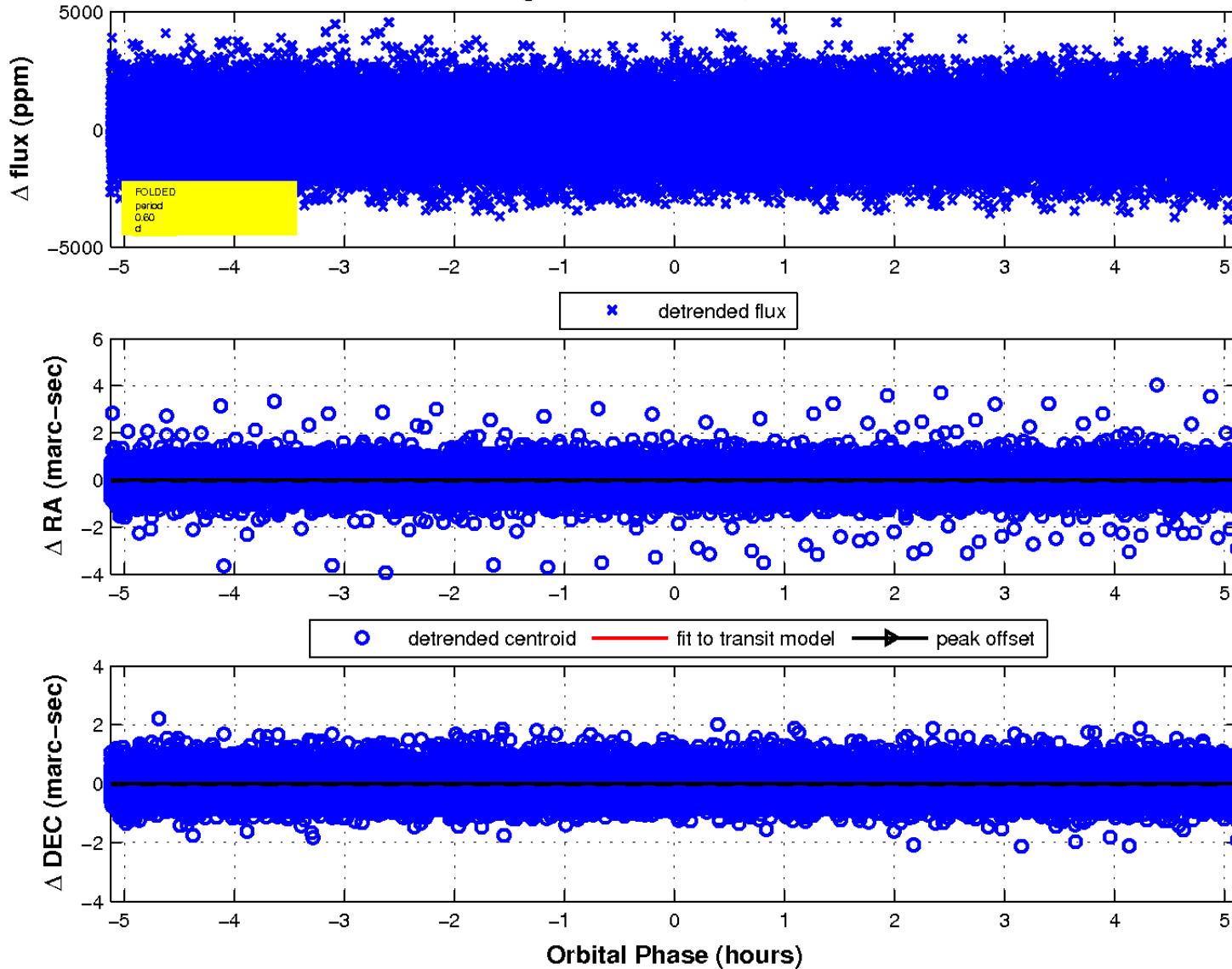
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



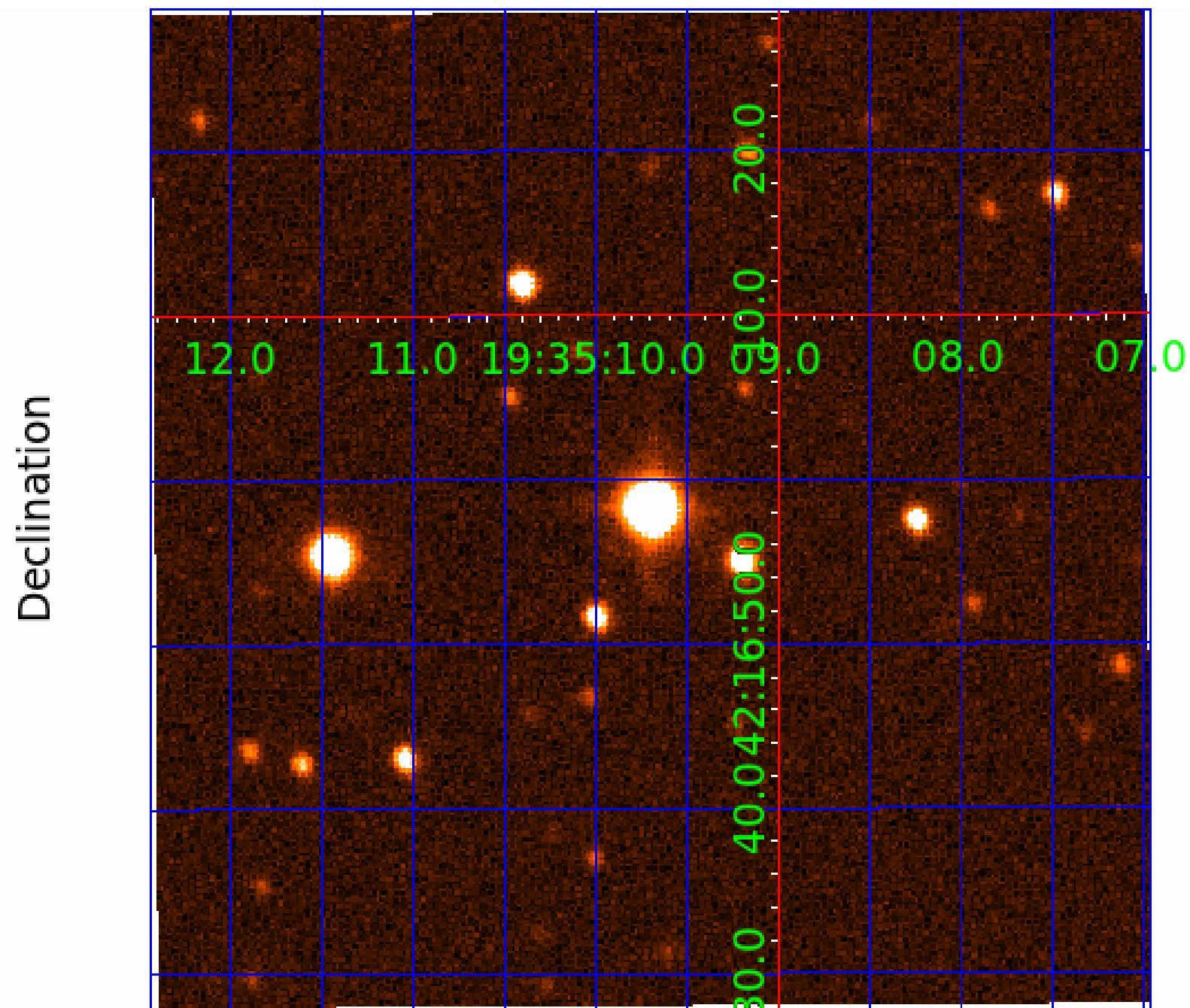
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 3



UKIRT Image



KIC 006784155

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})
006784155-01	OBS	No	0.599899	132.043629	75.1	1.709	10.2	9.8	2.83	7530	2.84	75524.01
006784155-02	OBS	No	0.824401	131.738805	76.8	4.743	10.6	6.5	2.83	7530	2.89	49431.57
006784155-03	OBS	No	0.824408	132.138277	129.7	3.000	15.3	11.8	2.83	7530	3.34	49431.02

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006784155-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
006784155-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
006784155-03	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—SAME_NTL_PERIOD

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

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

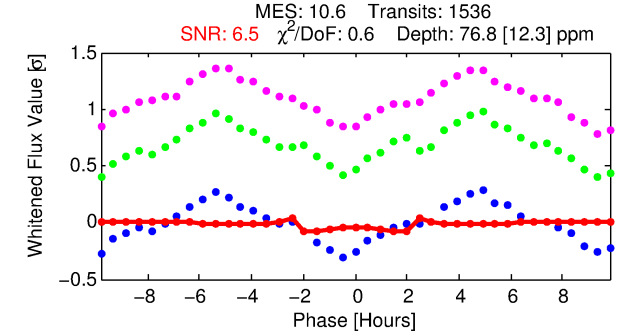
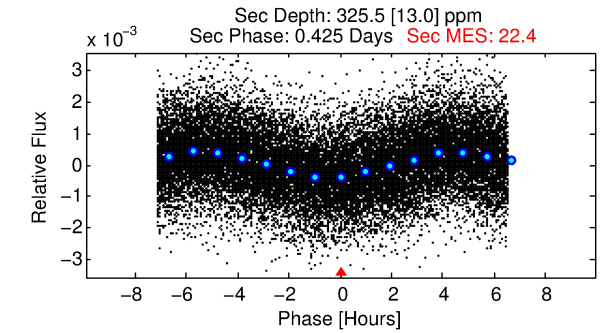
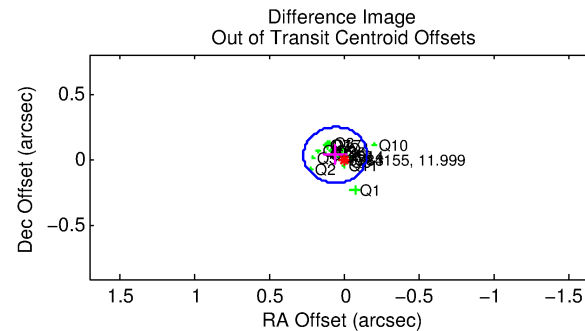
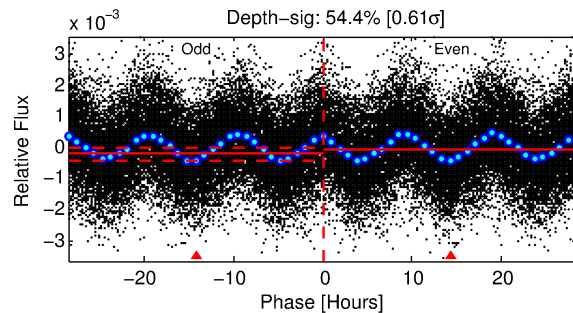
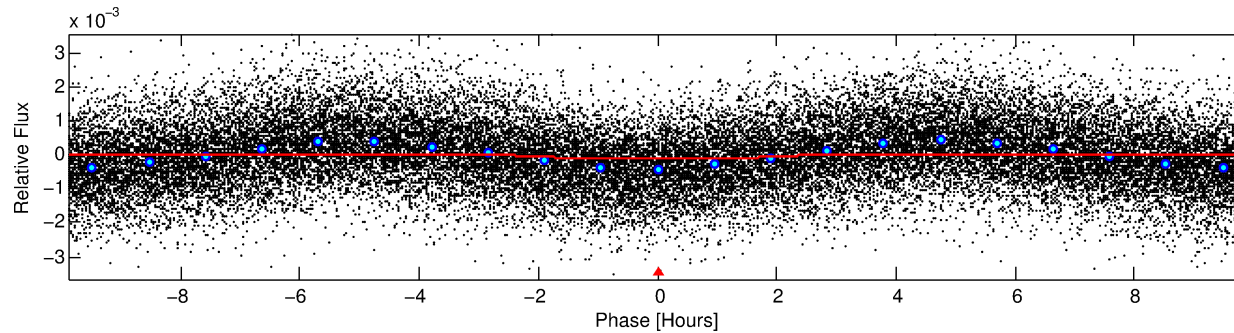
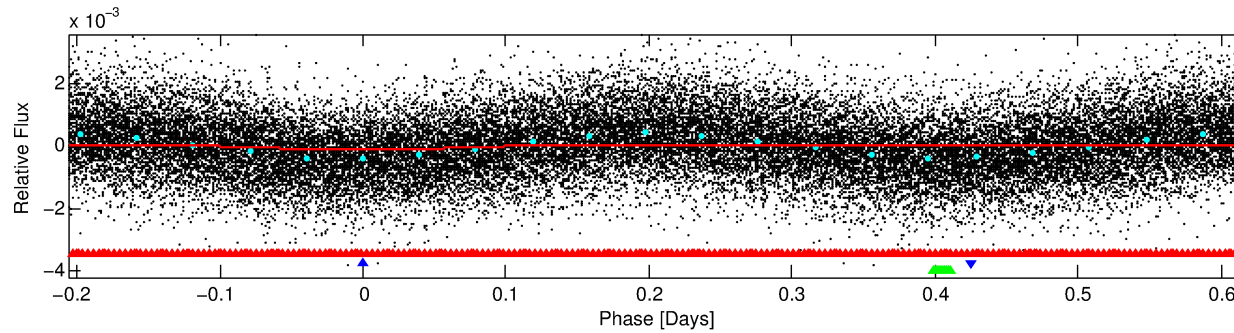
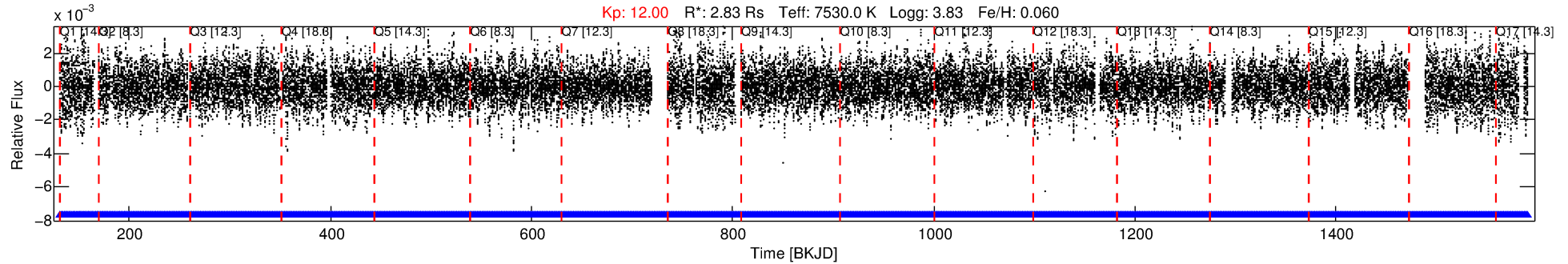
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006784155-02

No Significant Match Found

DV One-Page Summary

KIC: 6784155 Candidate: 2 of 3 Period: 0.824 d



DV Fit Results:

Period = 0.82440 [0.00001] d
Epoch = 131.7388 [0.0027] BKJD
 R_p/R^* = 0.0094 [0.0017]
 a/R^* = 1.11 [0.20]
 b = 0.91 [0.18]
 Seff = 49431.57 [29401.37]
 T_{eq} = 3802 [565] K
 R_p = 2.89 [1.31] R_e
 a = 0.0216 [0.0080] AU
 Ag = 9.97 [6.67] [1.34 σ]
 T_{eff} = 10445 [1043] K [5.60 σ]

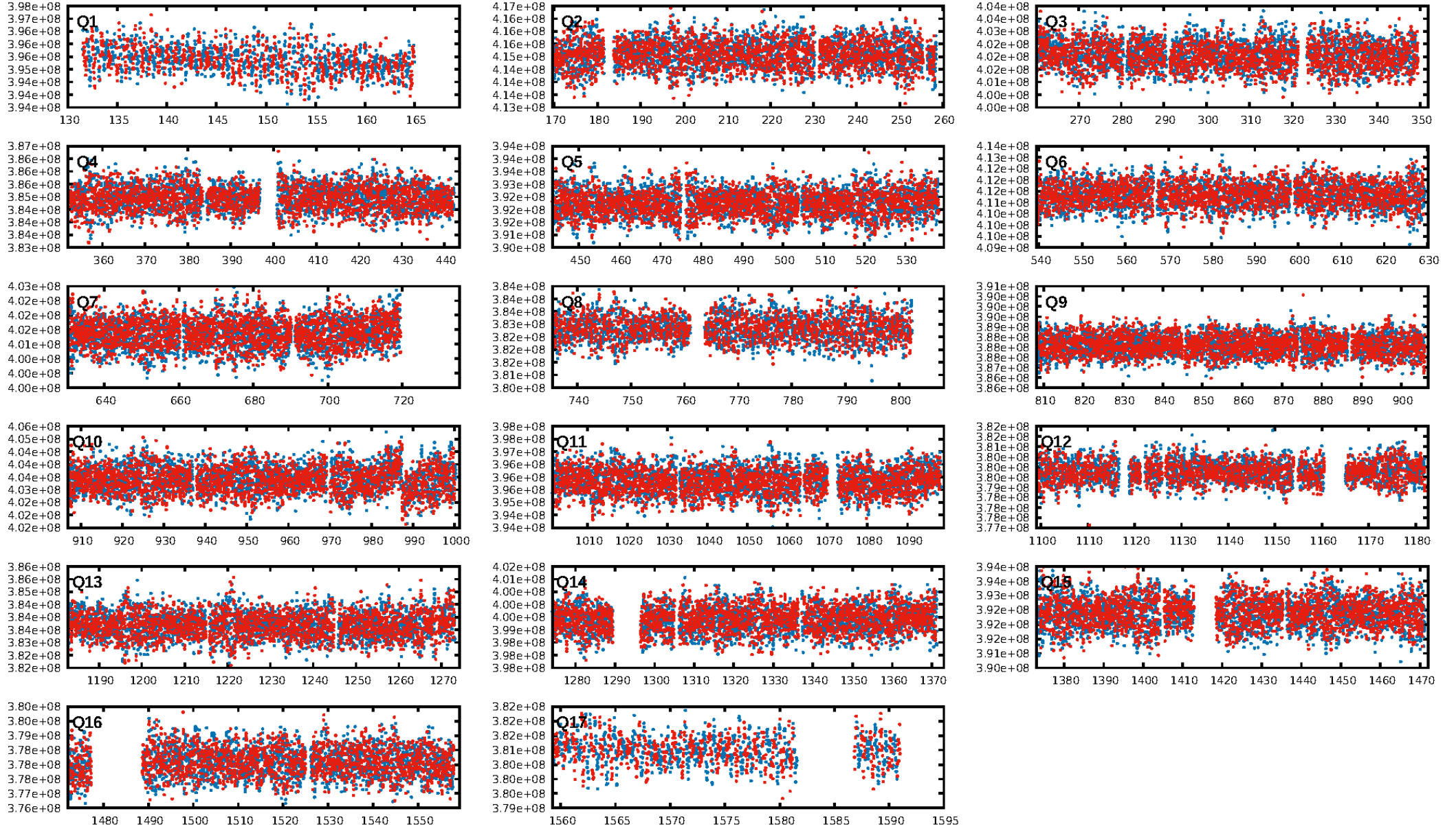
DV Diagnostic Results:

ShortPeriod-sig: 71.5% [1.07 σ]
LongPeriod-sig: 0.0% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1471/1471]
GhostDiagnostic-chr: 6.525
Centroid-sig: 0.0%
Centroid-so: 0.594 arcsec [4.36 σ]
OotOffset-rm: 0.067 arcsec [0.95 σ]
KicOffset-rm: 0.083 arcsec [1.18 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

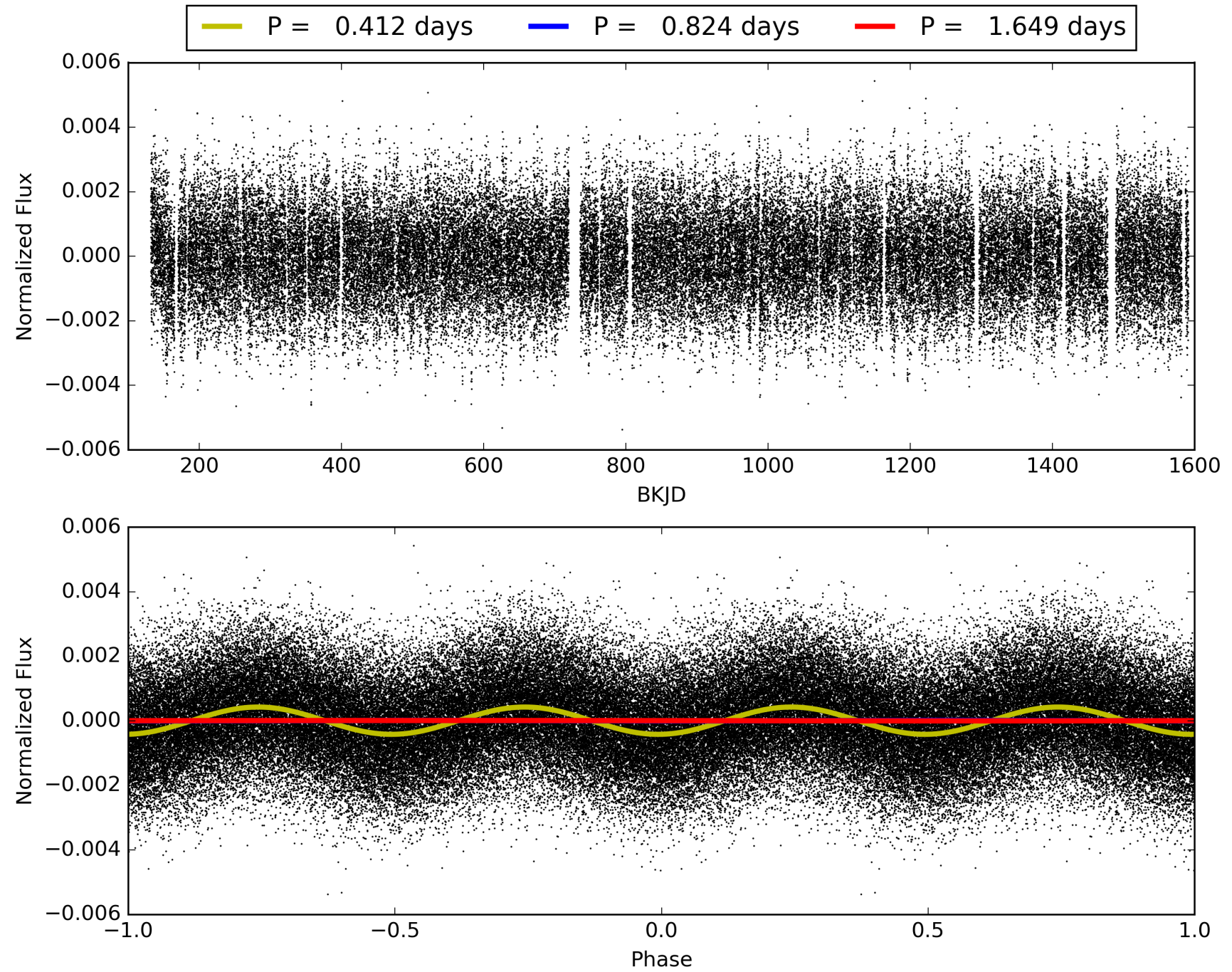
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:18:51 Z

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

TCE 006784155-02, PDC Light Curves

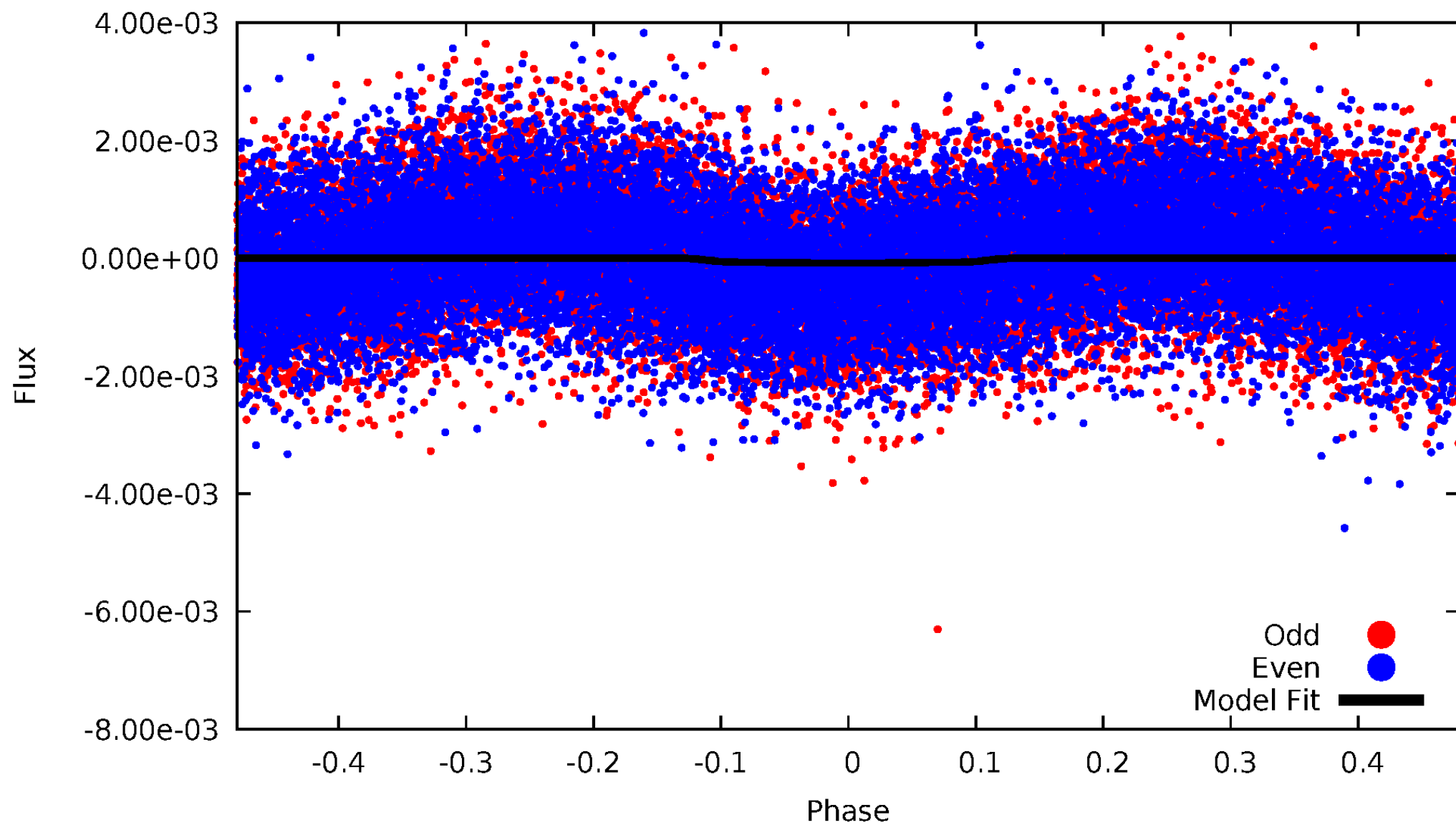


TCE 006784155-02



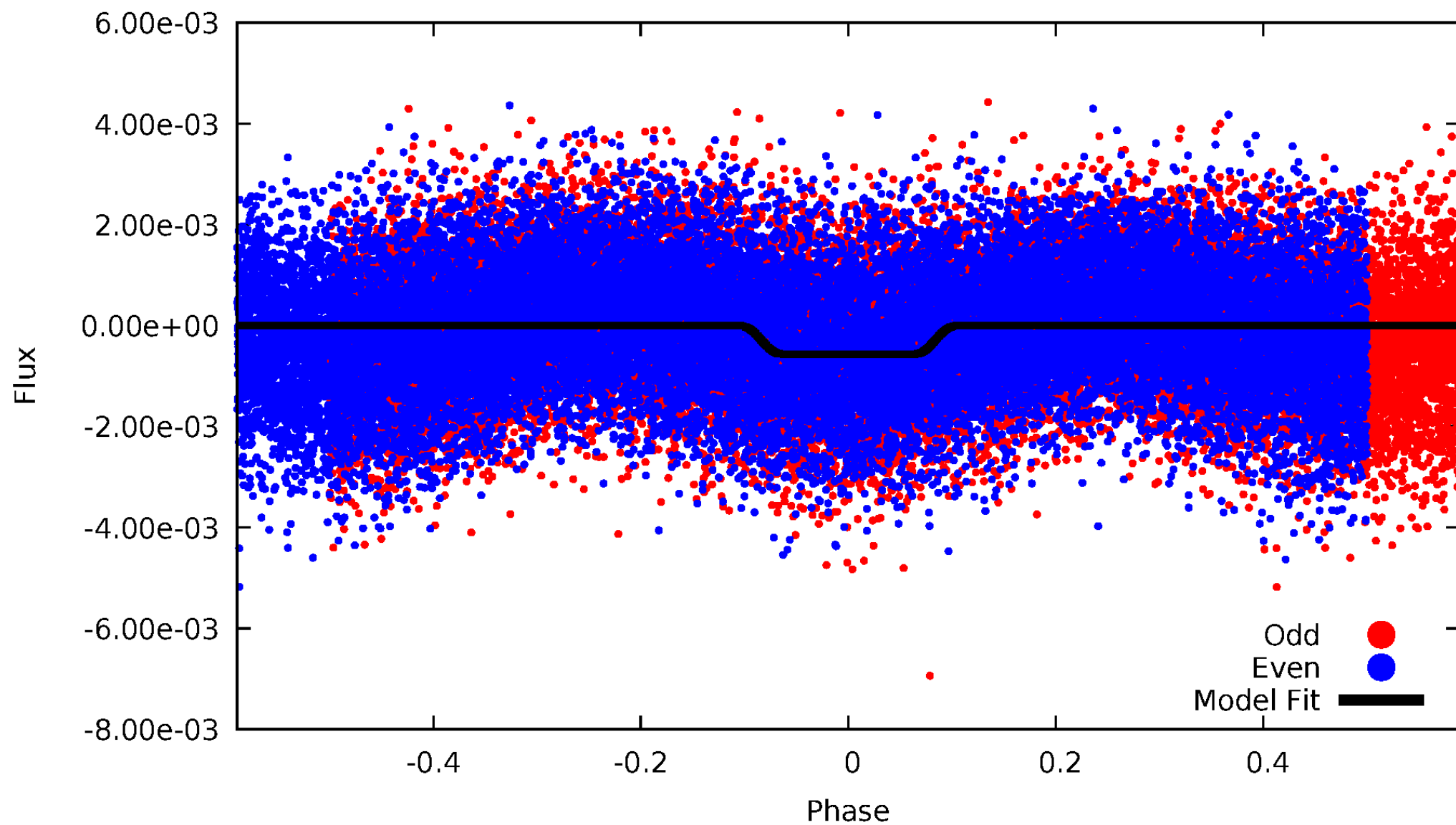
DV Odd/Even

TCE 006784155-02



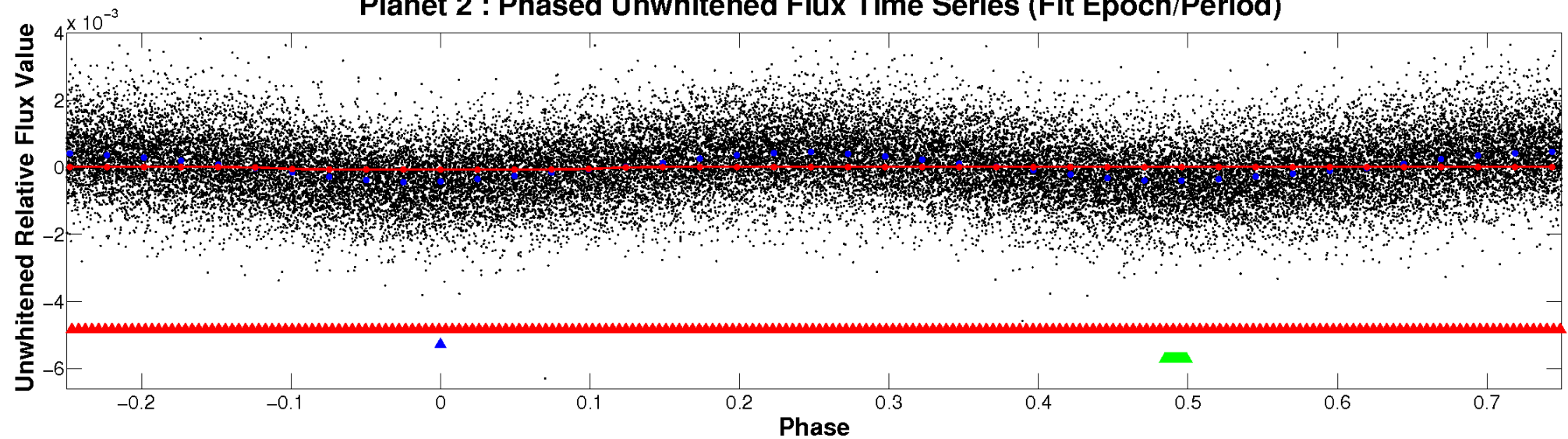
ALT Odd/Even

TCE 006784155-02

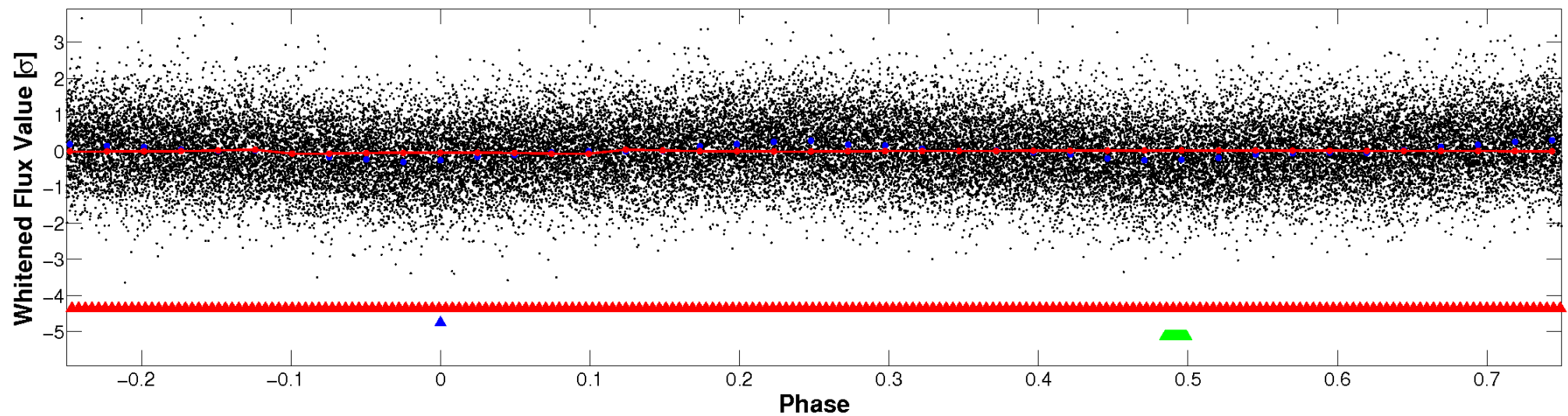


Non-Whitened Vs. Whitened Light Curve

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

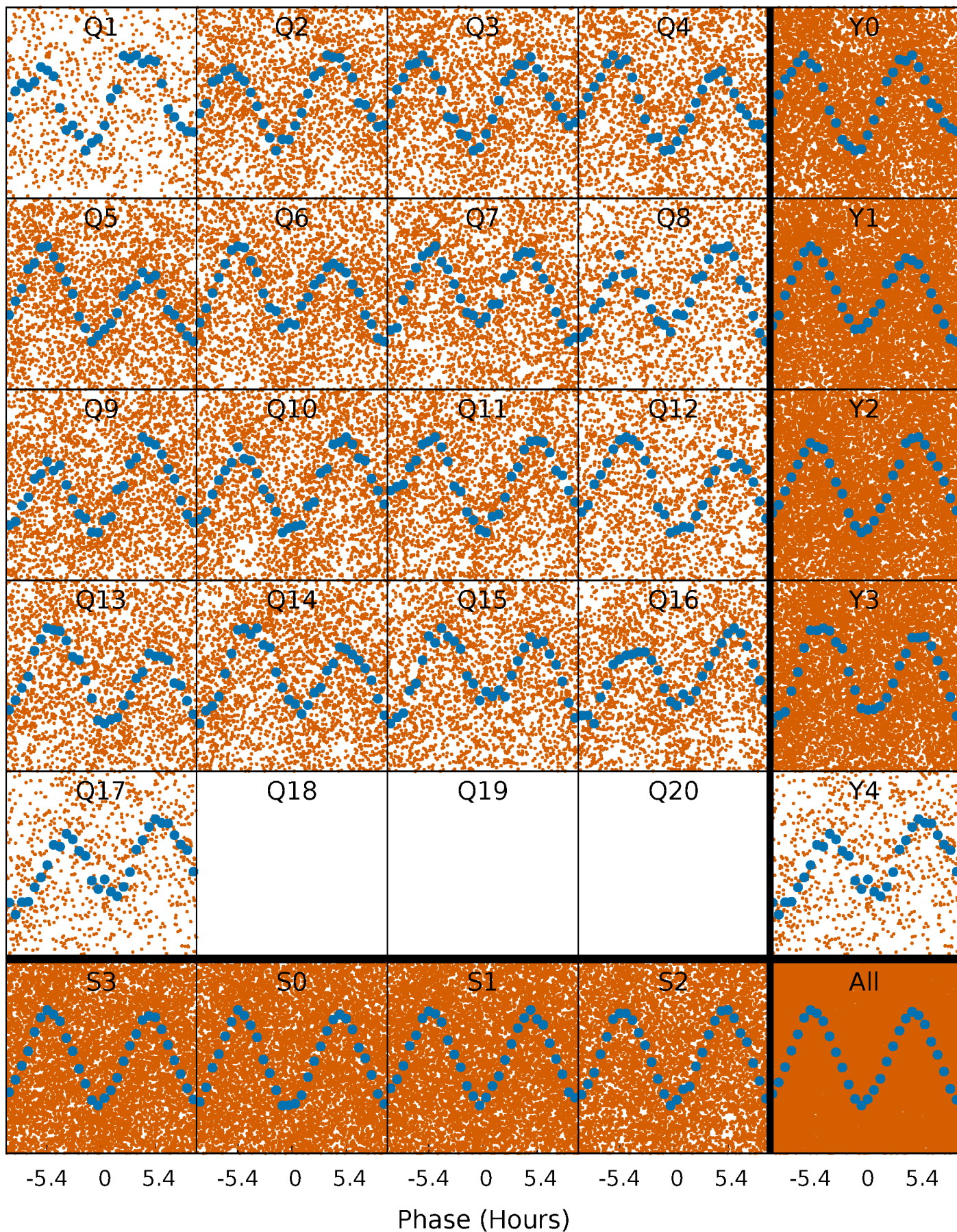


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



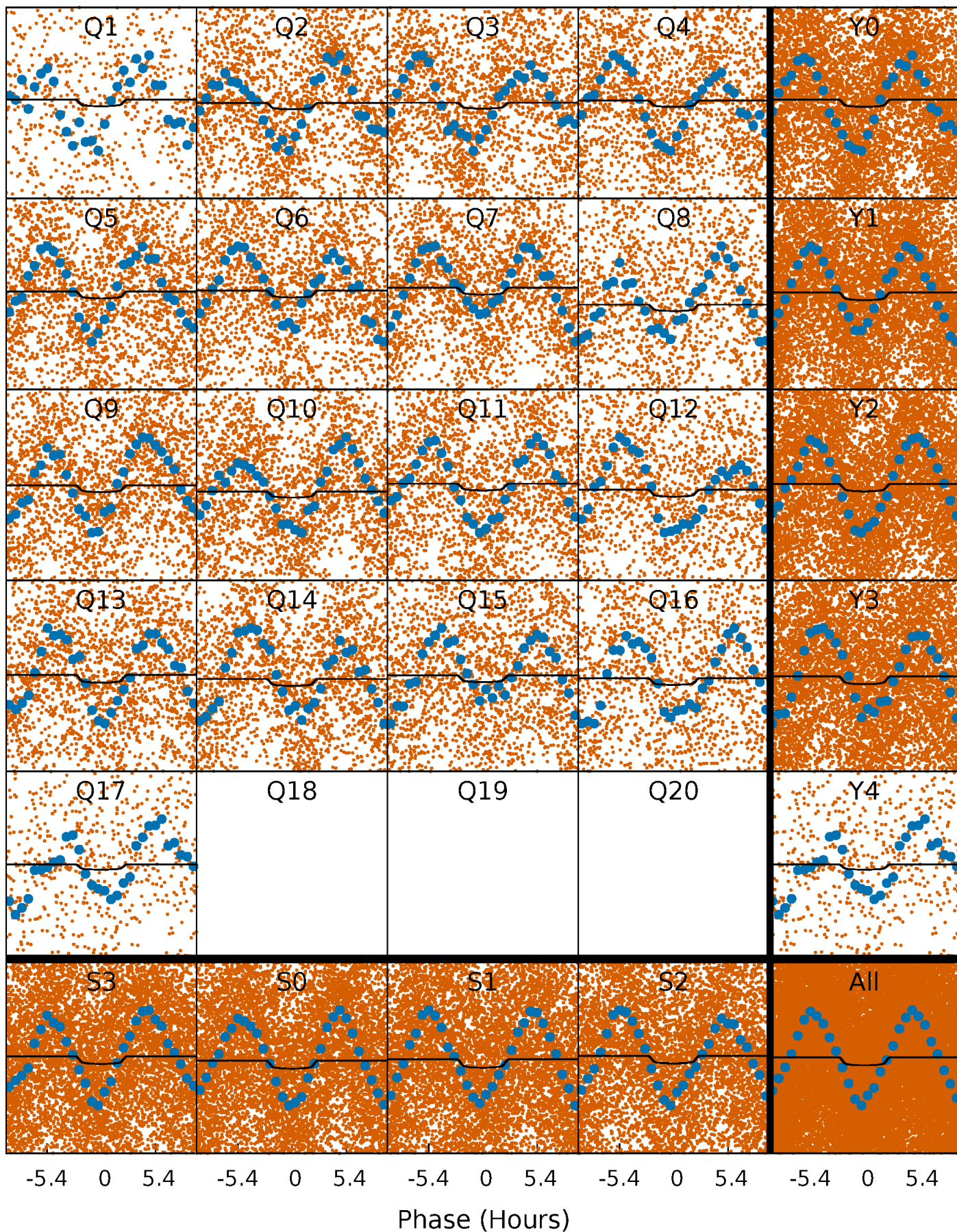
PDC Quarter-Phased Transit Curves

TCE 006784155-02 P= 0.824401 Days $T_0=131.738805$ (BKJD)



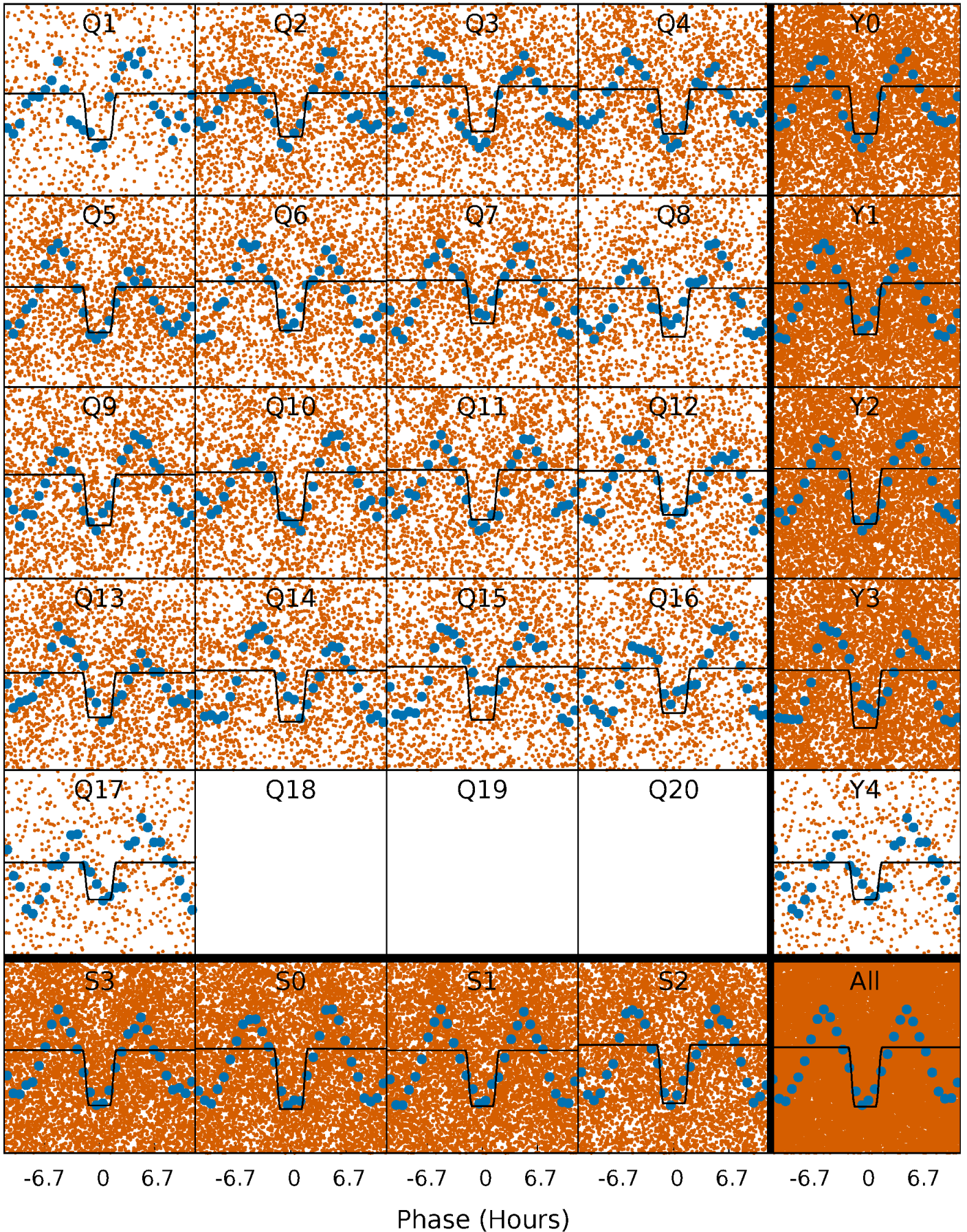
DV Quarter-Phased Transit Curves

TCE 006784155-02 P= 0.824401 Days $T_0=131.738805$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

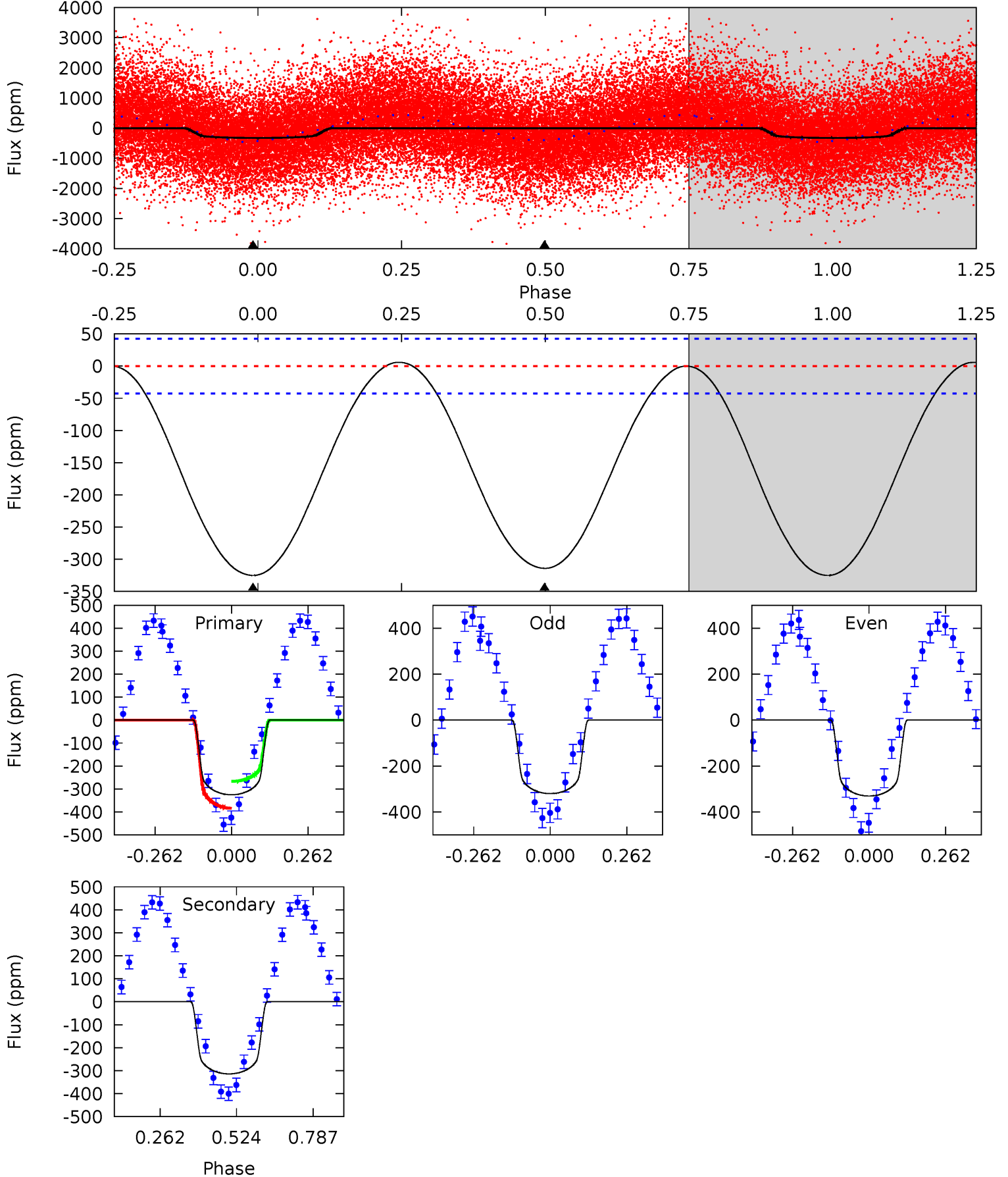
TCE 006784155-02 P= 0.824408 Days $T_0=131.723765$ (BKJD)



DV Model-Shift Uniqueness Test

006784155-02, P = 0.824401 Days, E = 130.914404 Days

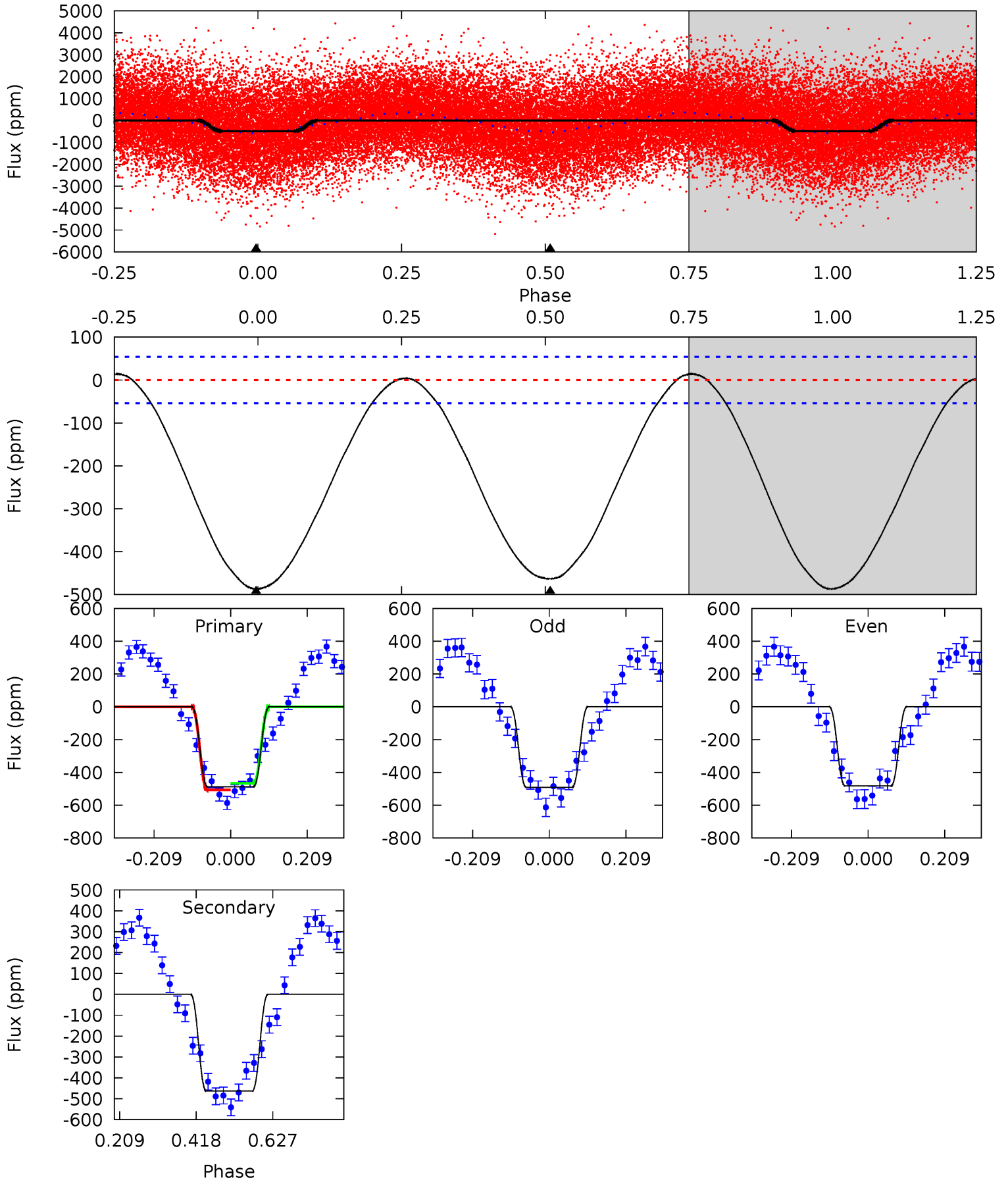
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
33.3	32.1	0	0	4.36	1.12	0.35	33.3	33.3	32.1	32.1	0.54	0.98	0.02	6.67



Alt Model-Shift Uniqueness Test

006784155-02, P = 0.824408 Days, E = 130.899357 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
39.6	37.6	0	0	4.41	1.26	1.10	39.6	39.6	37.6	37.6	0.34	0.96	0.03	1.66



Stellar Parameters For KIC 006784155

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7530^{+209}_{-340}	$3.830^{+0.322}_{-0.107}$	$0.060^{+0.200}_{-0.350}$	$2.826^{+0.470}_{-1.175}$	$1.968^{+0.084}_{-0.475}$	$0.123^{+0.303}_{-0.042}$
	+3%/-5%	+8%/-3%	+333%/-583%	+17%/-42%	+4%/-24%	+247%/-34%
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 006784155-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-314 ± 10	$2.67^{+0.70}_{-0.60}$	5172^{+397}_{-520}	11580^{+2185}_{-1650}	11^{+7}_{-4}
Alt.	-463 ± 12	$7.03^{+1.08}_{-1.48}$	5195^{+362}_{-535}	6791^{+409}_{-389}	$2.365^{+1.156}_{-0.577}$

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 $A_{obs} \gg 1.0$

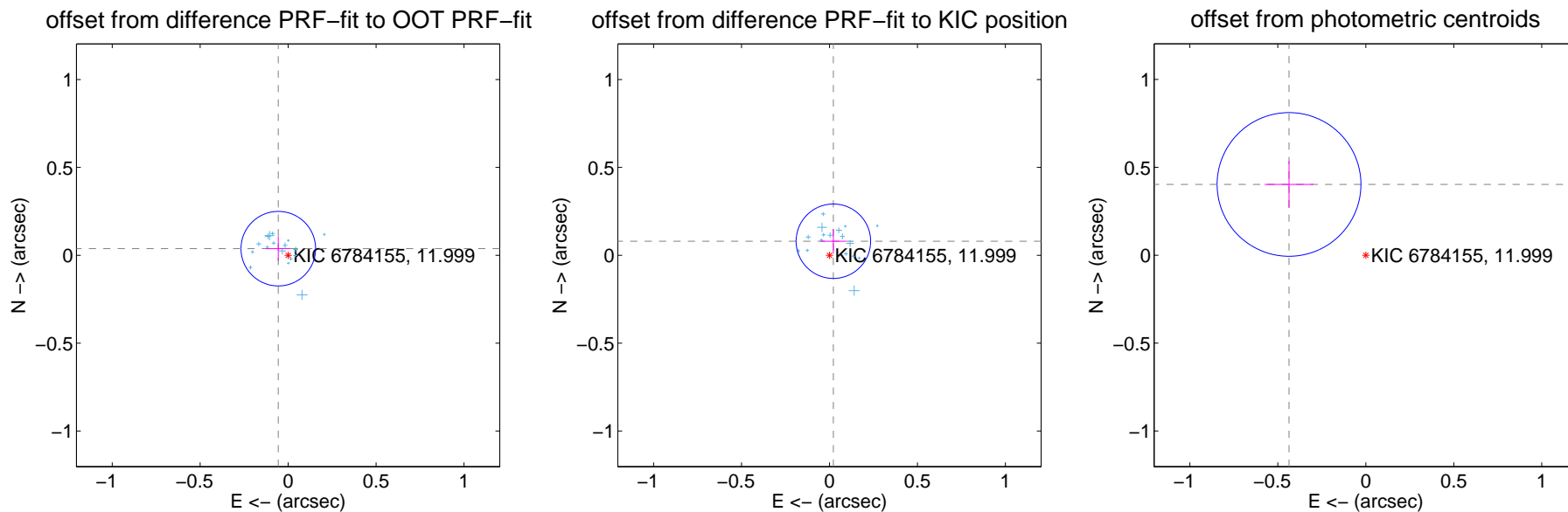
DV Centroid Data

Supplemental centroid analysis for 006784155-02. **Kepler magnitude: 12.00.** Transit SNR 6.50

There are 17 quarters with good PRF difference image offsets

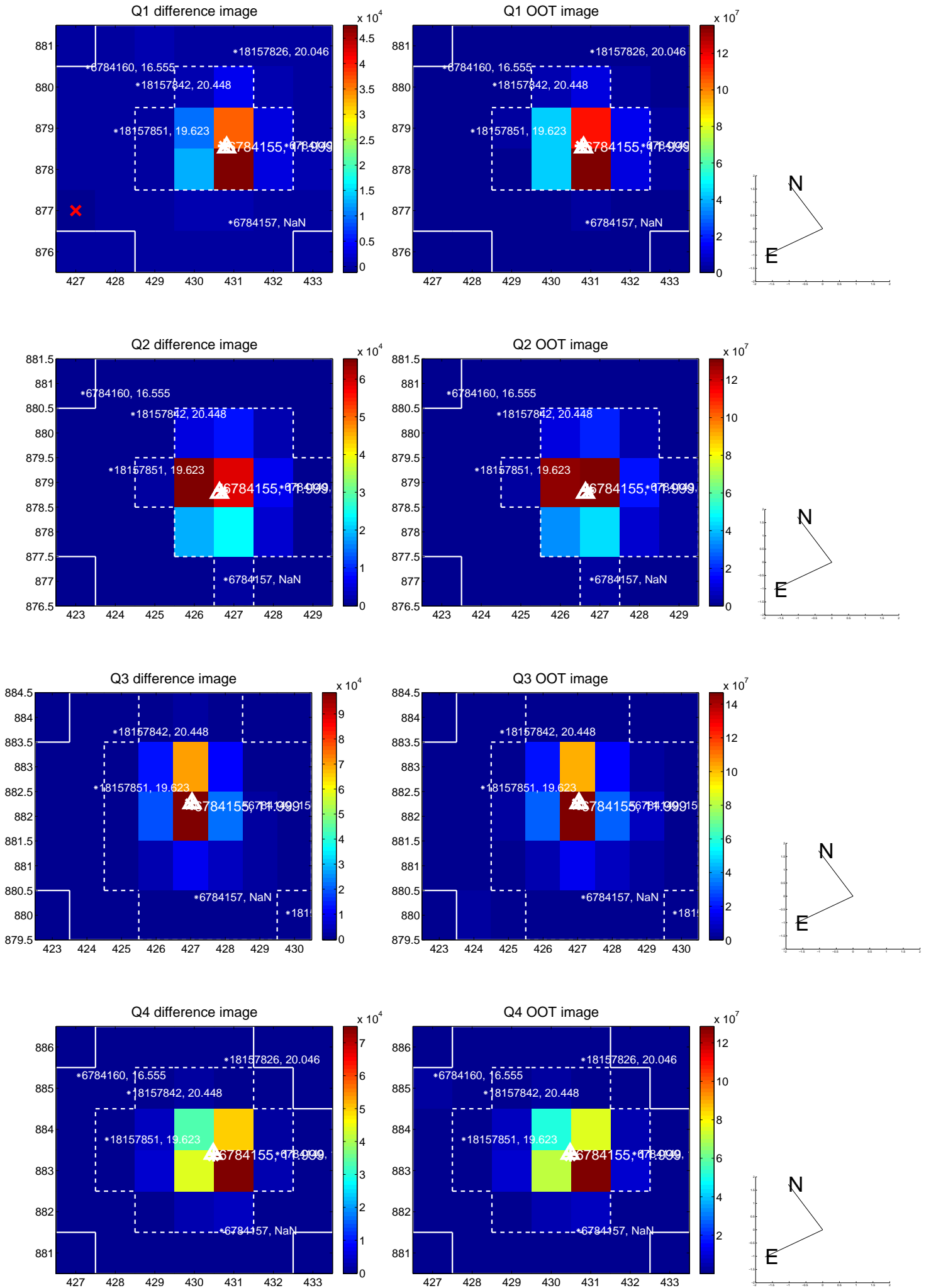
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.067 ± 0.071	0.95	0.056 ± 0.071	0.038 ± 0.070
PRF-fit source offset from KIC position	0.083 ± 0.071	1.18	-0.022 ± 0.074	0.080 ± 0.070
photometric centroid source offset	0.59 ± 0.14	4.36	0.44 ± 0.14	0.40 ± 0.13

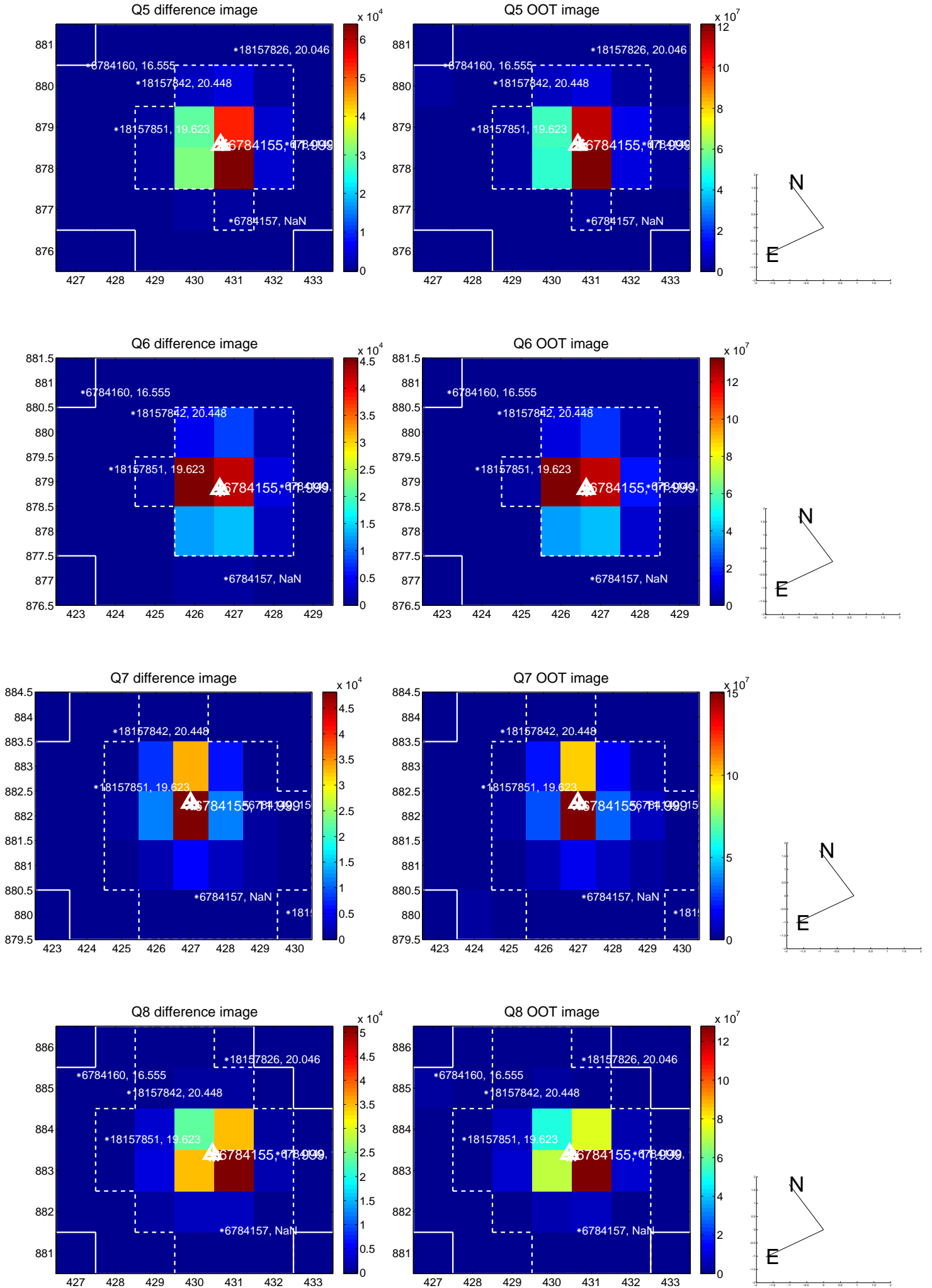


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

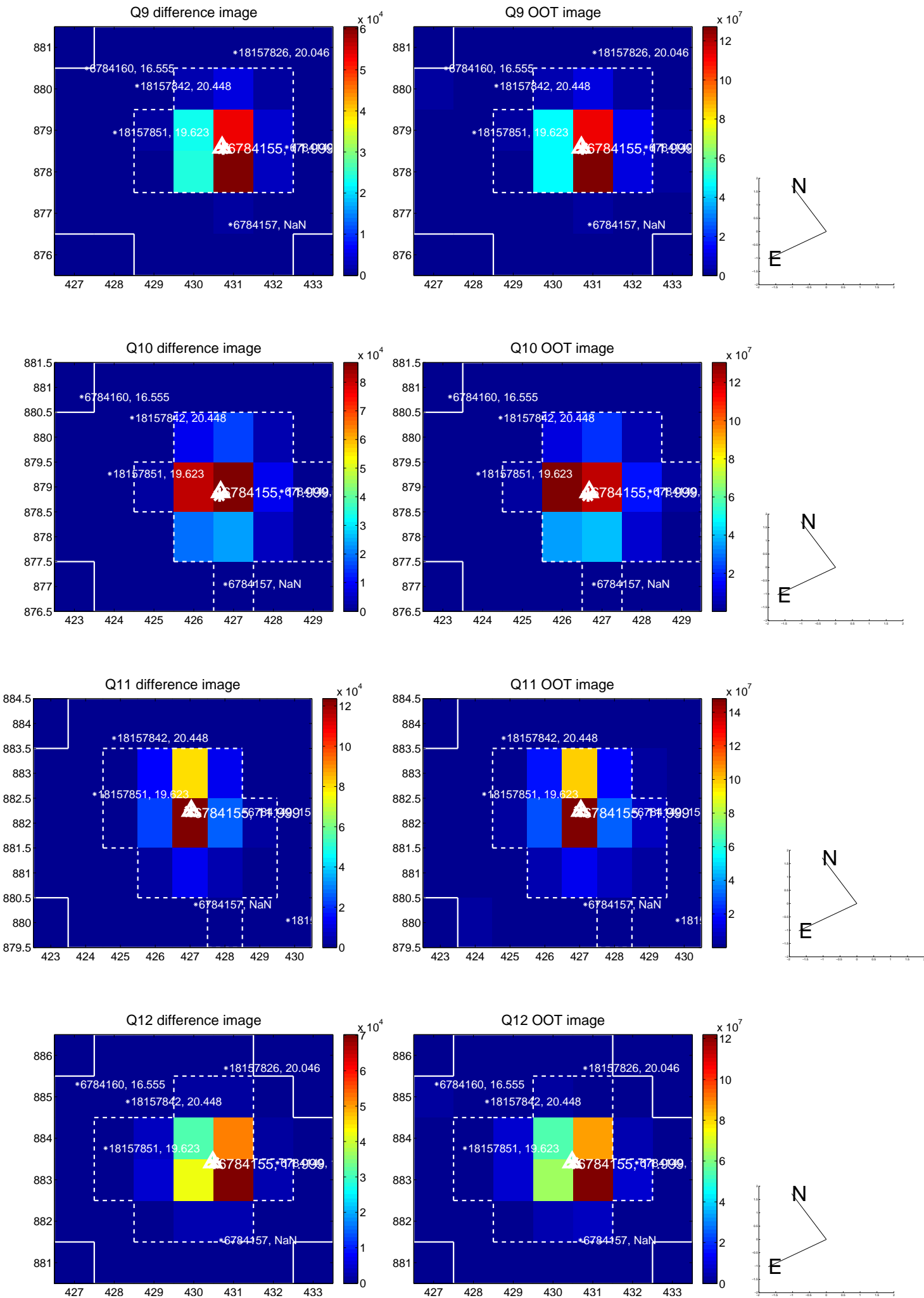
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



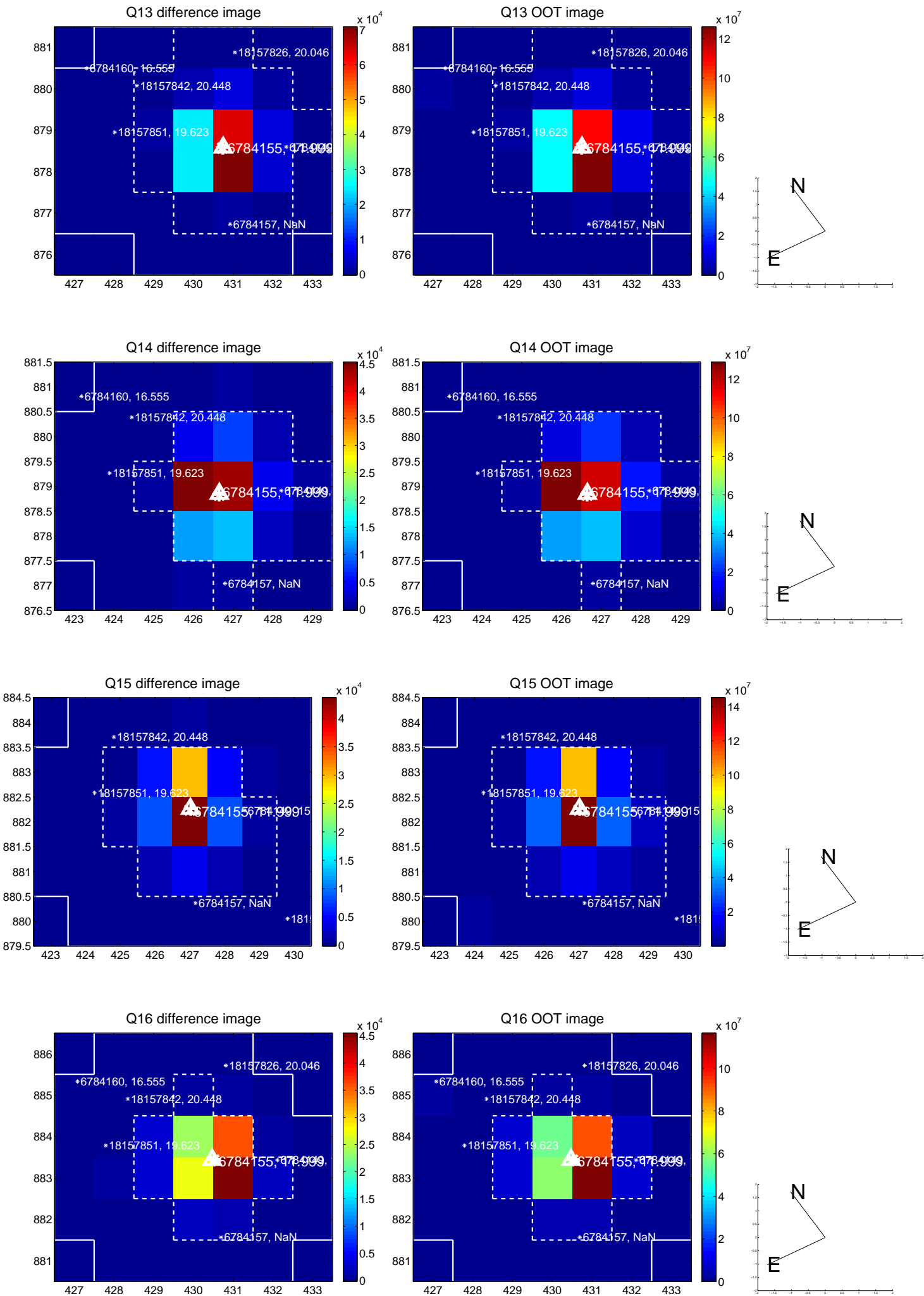
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



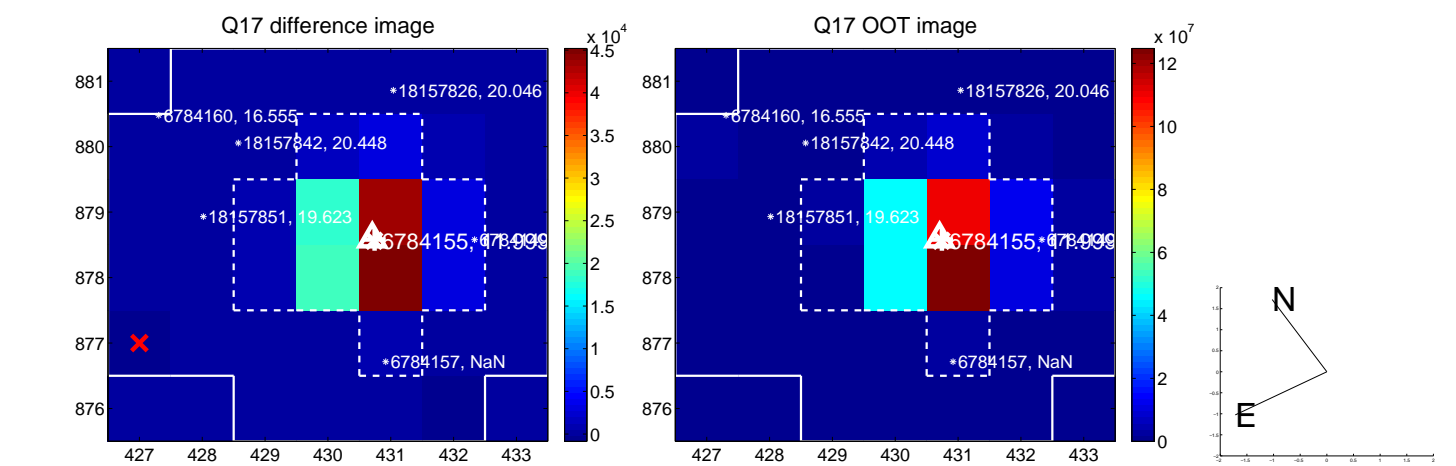
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



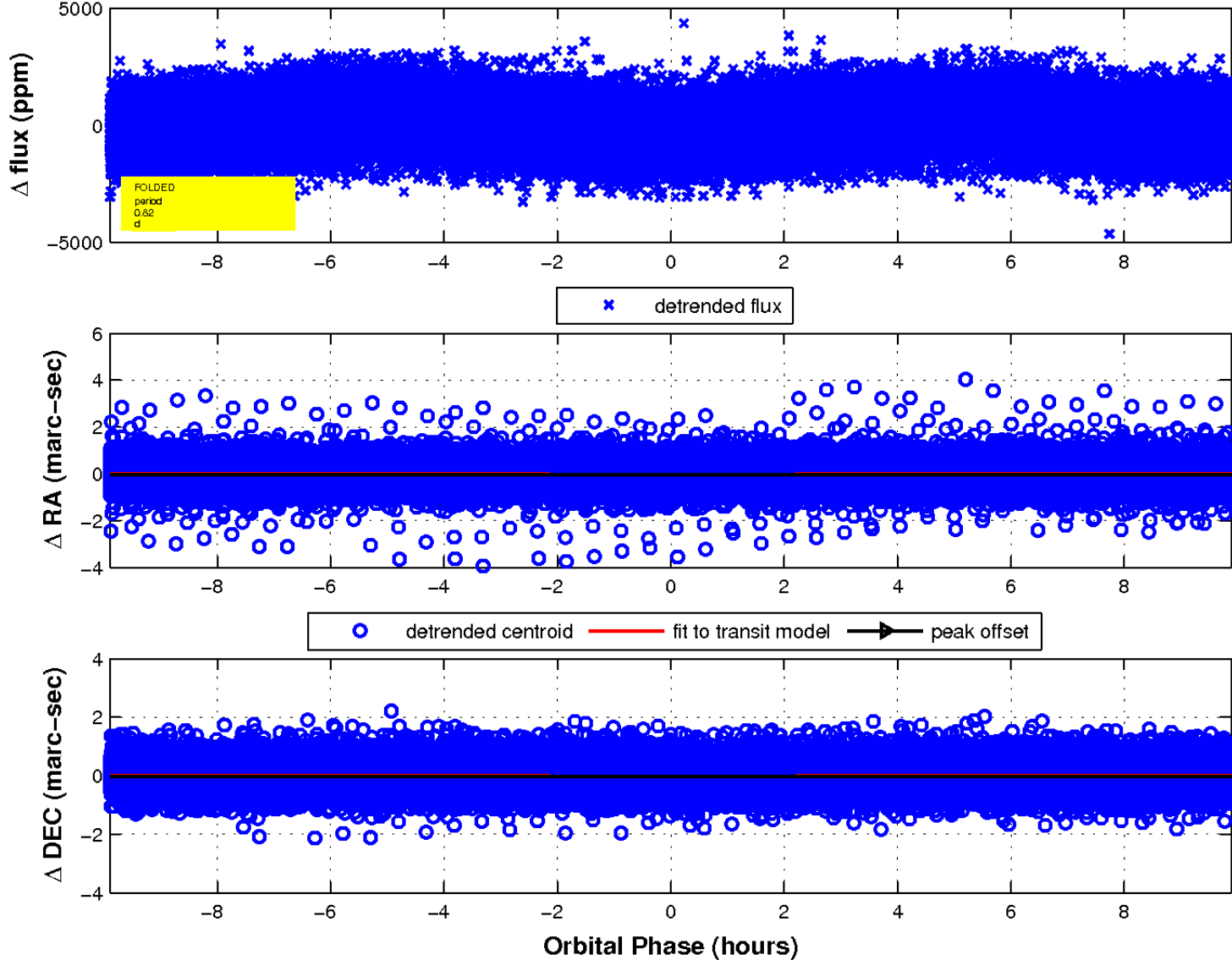
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

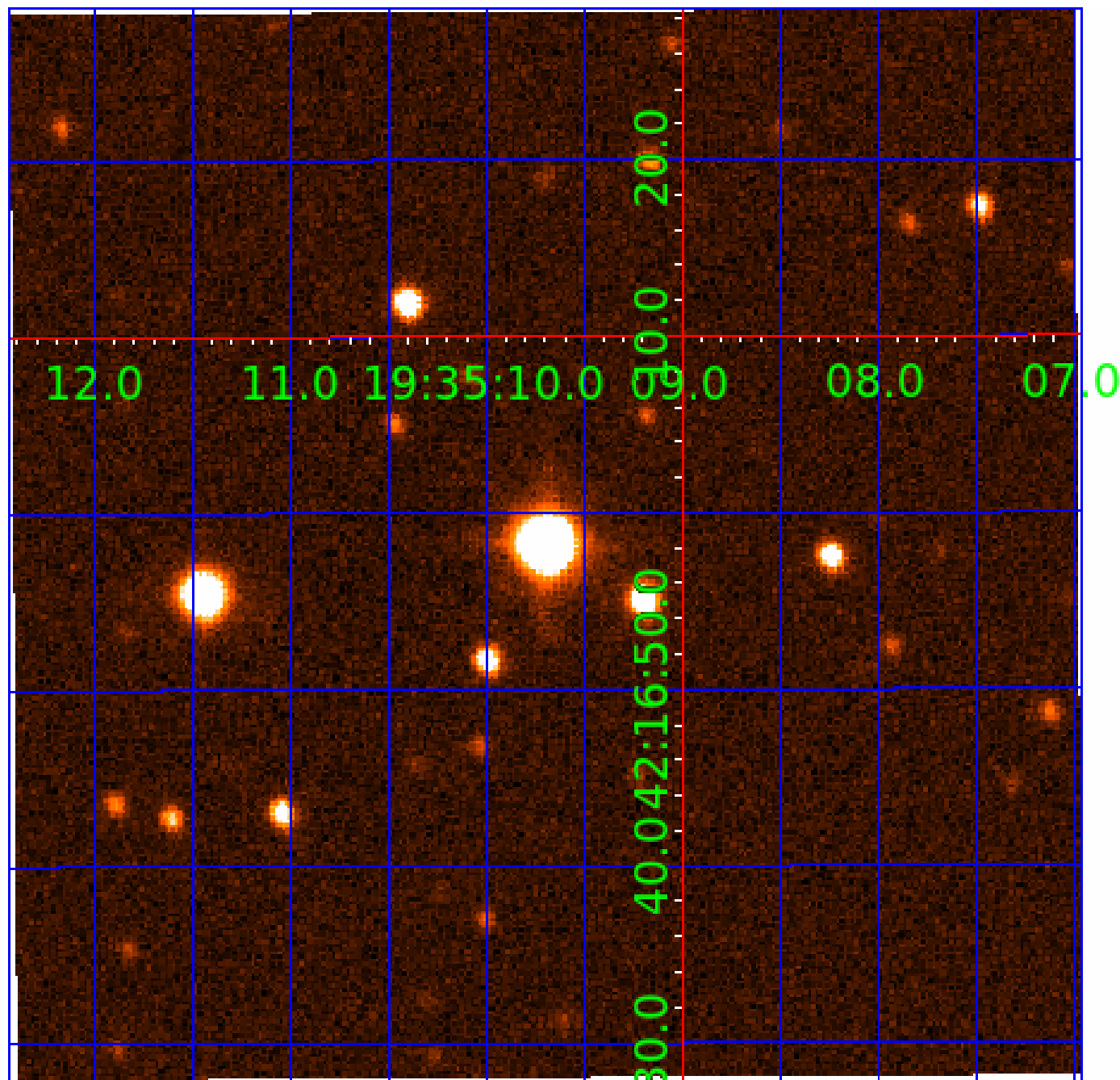


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 006784155

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})
006784155-01	OBS	No	0.599899	132.043629	75.1	1.709	10.2	9.8	2.83	7530	2.84	75524.01
006784155-02	OBS	No	0.824401	131.738805	76.8	4.743	10.6	6.5	2.83	7530	2.89	49431.57
006784155-03	OBS	No	0.824408	132.138277	129.7	3.000	15.3	11.8	2.83	7530	3.34	49431.02

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006784155-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
006784155-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
006784155-03	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—SAME_NTL_PERIOD

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

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

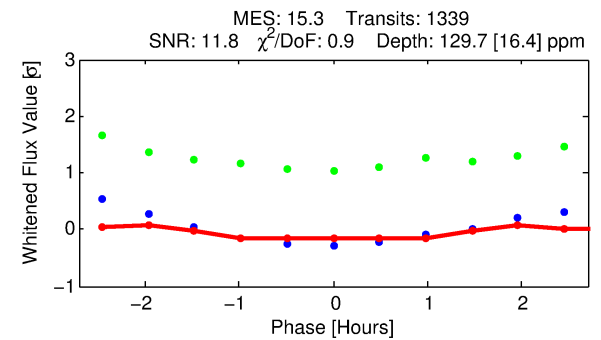
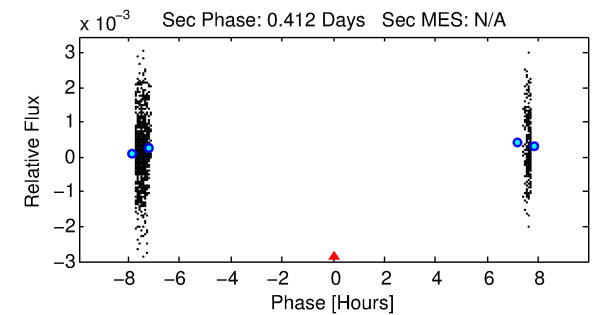
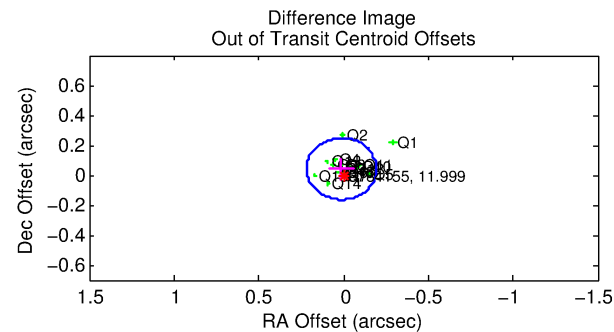
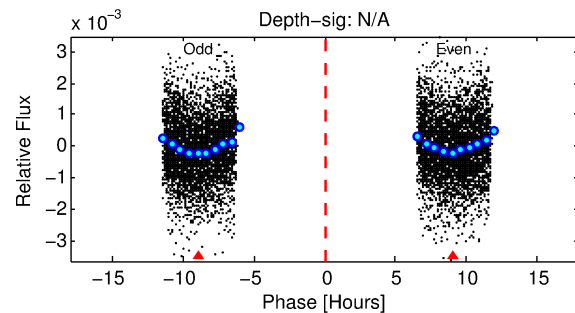
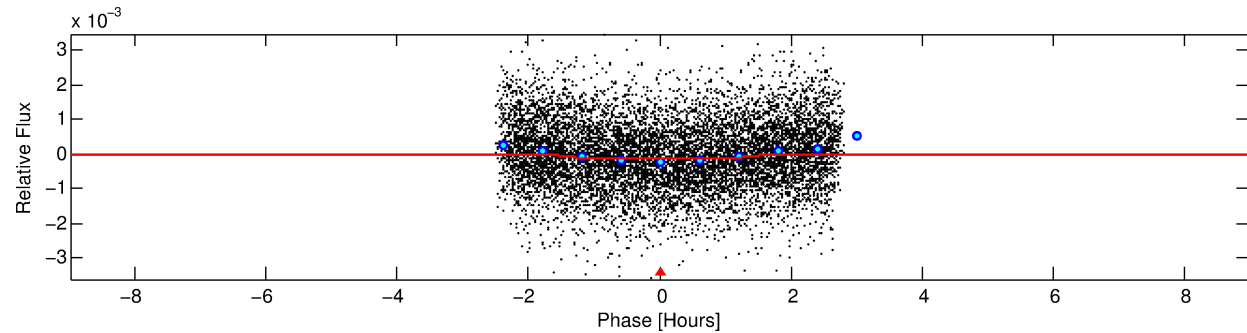
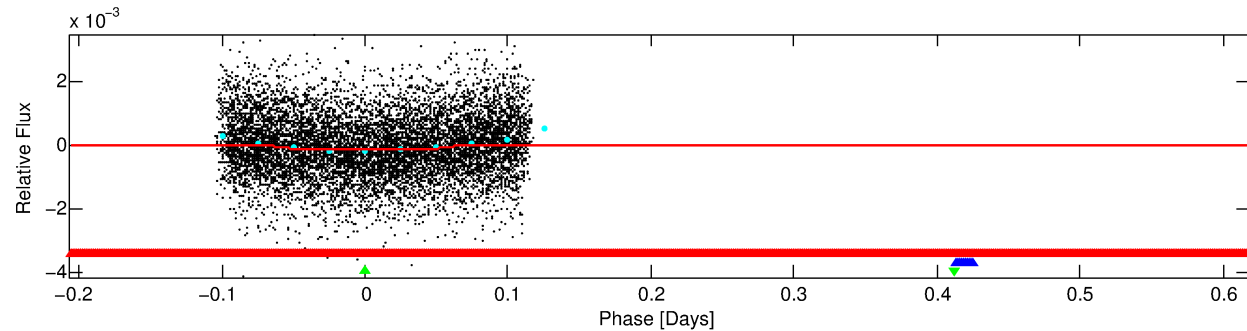
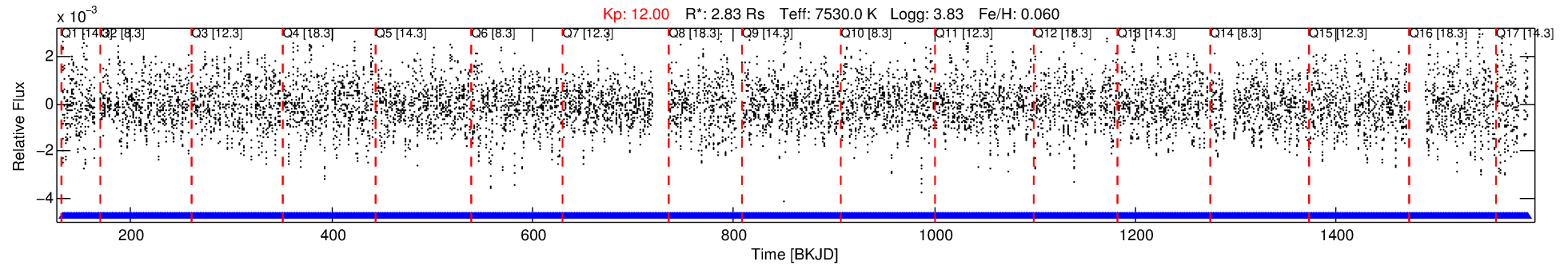
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006784155-03

No Significant Match Found

DV One-Page Summary

KIC: 6784155 Candidate: 3 of 3 Period: 0.824 d



DV Fit Results:

Period = 0.82441 [0.00001] d
Epoch = 132.1383 [0.0020] BKJD
Rp/R* = 0.0108 [0.0036]
a/R* = 1.98 [2.91]
b = 0.50 [2.98]
Seff = 49431.02 [29401.05]
Teq = 3802 [565] K
Rp = 3.34 [1.78] Re
a = 0.0216 [0.0080] AU

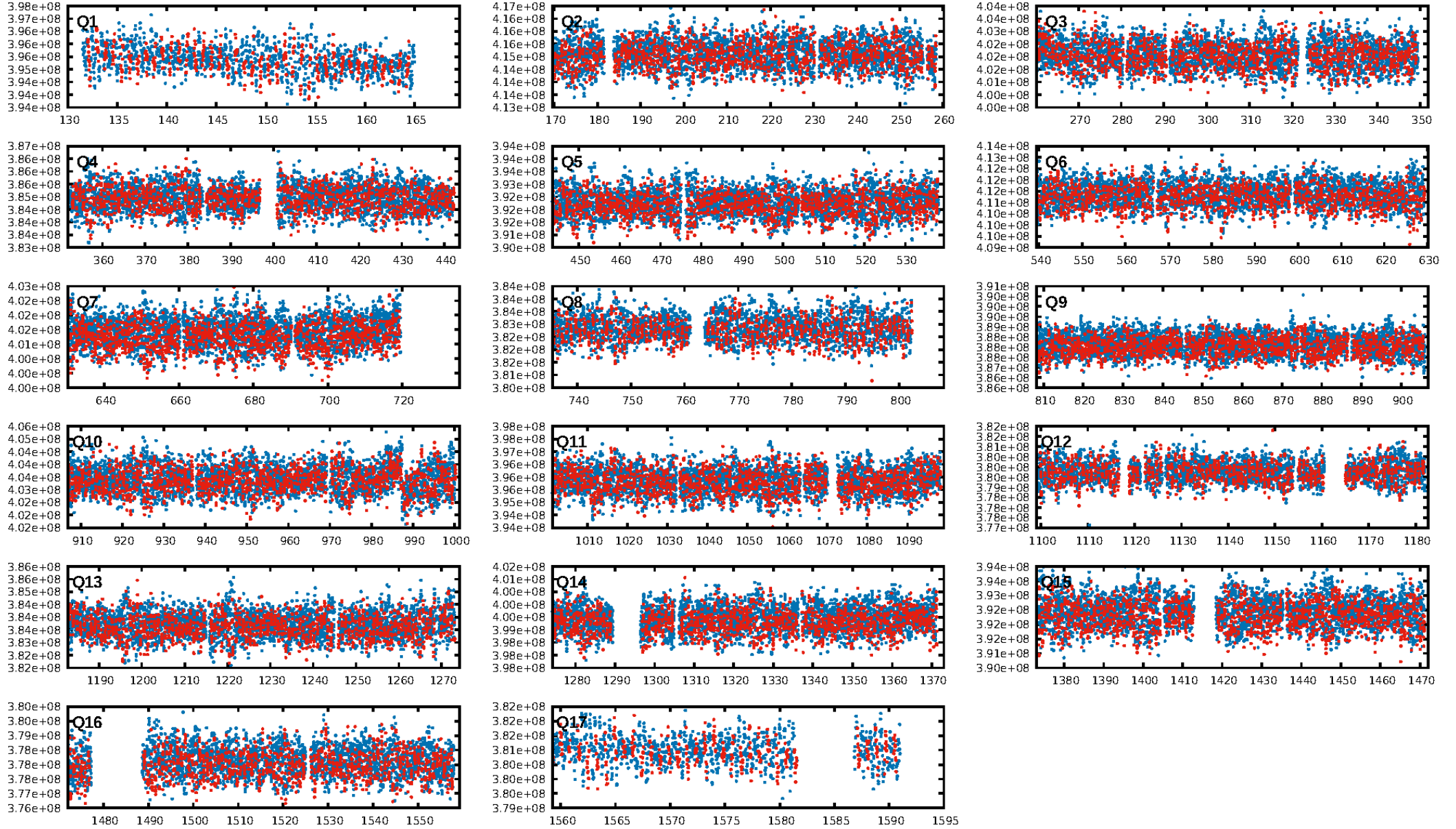
DV Diagnostic Results:

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 [1277/1277]
GhostDiagnostic-chr: 7.039
Centroid-sig: 0.0%
Centroid-so: 0.281 arcsec [3.11σ]
OotOffset-rm: 0.044 arcsec [0.64σ]
KicOffset-rm: 0.101 arcsec [1.43σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

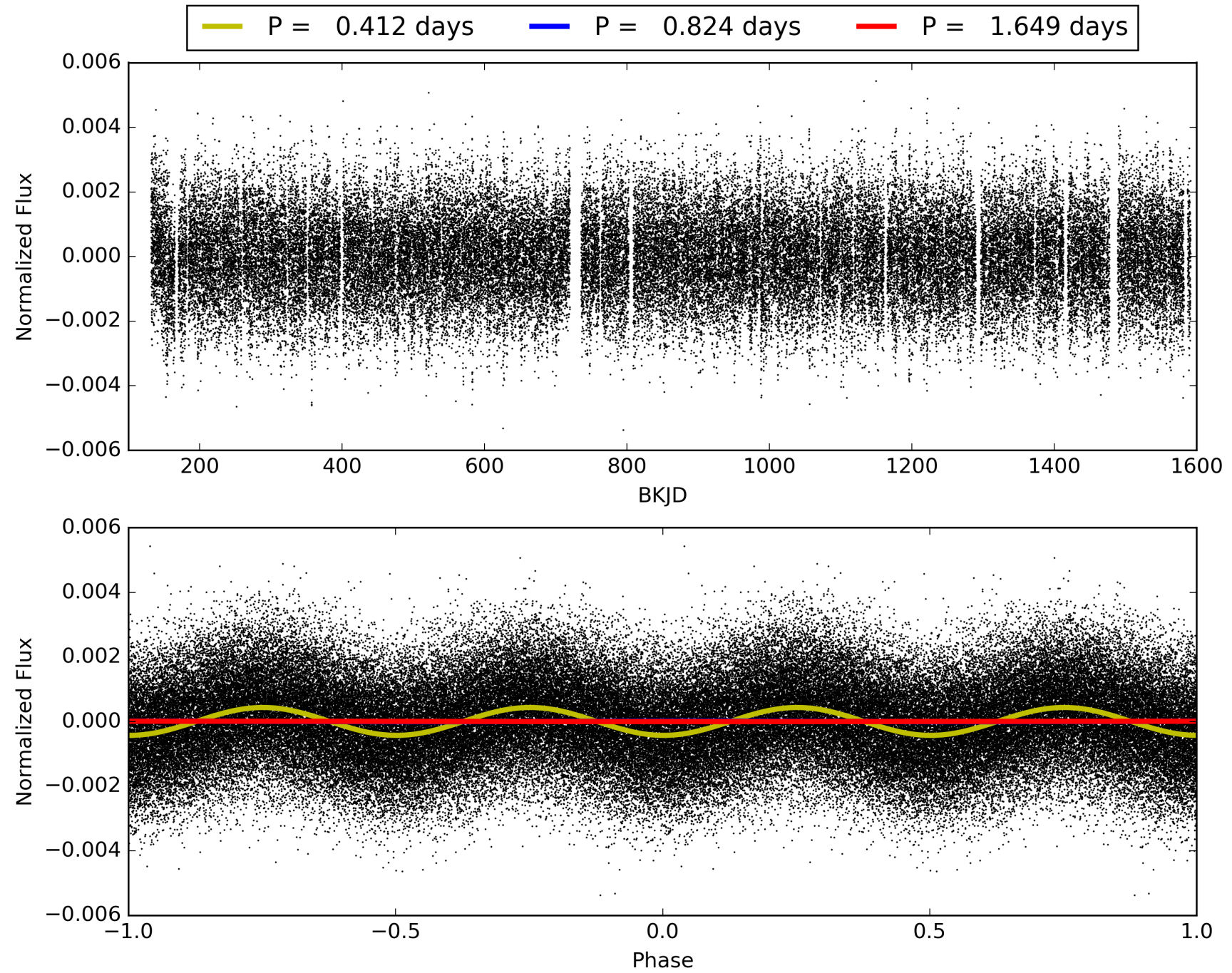
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:19:01 Z

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

TCE 006784155-03, PDC Light Curves

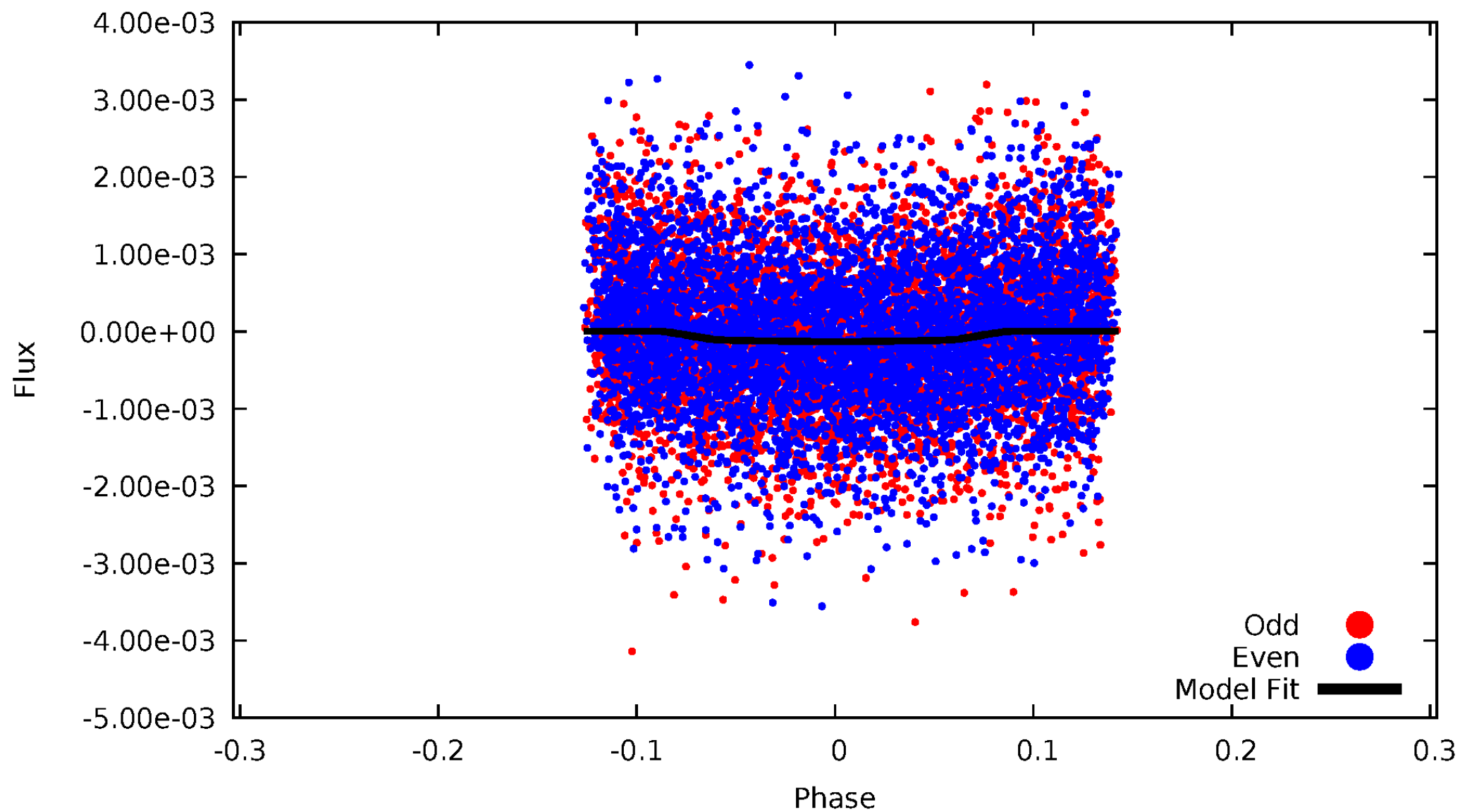


TCE 006784155-03



DV Odd/Even

TCE 006784155-03

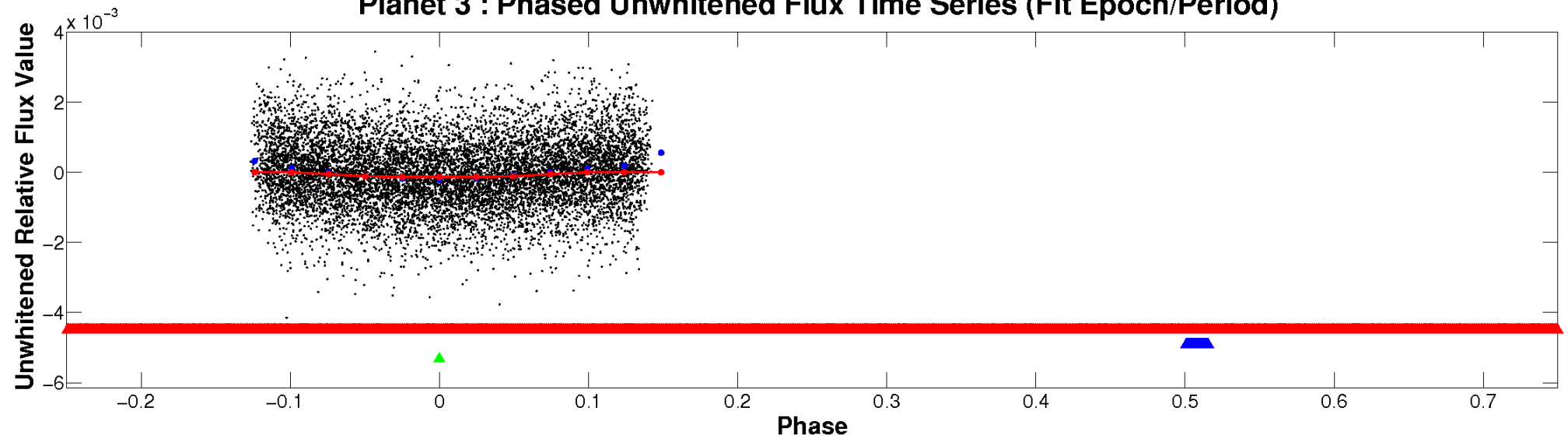


ALT Odd/Even

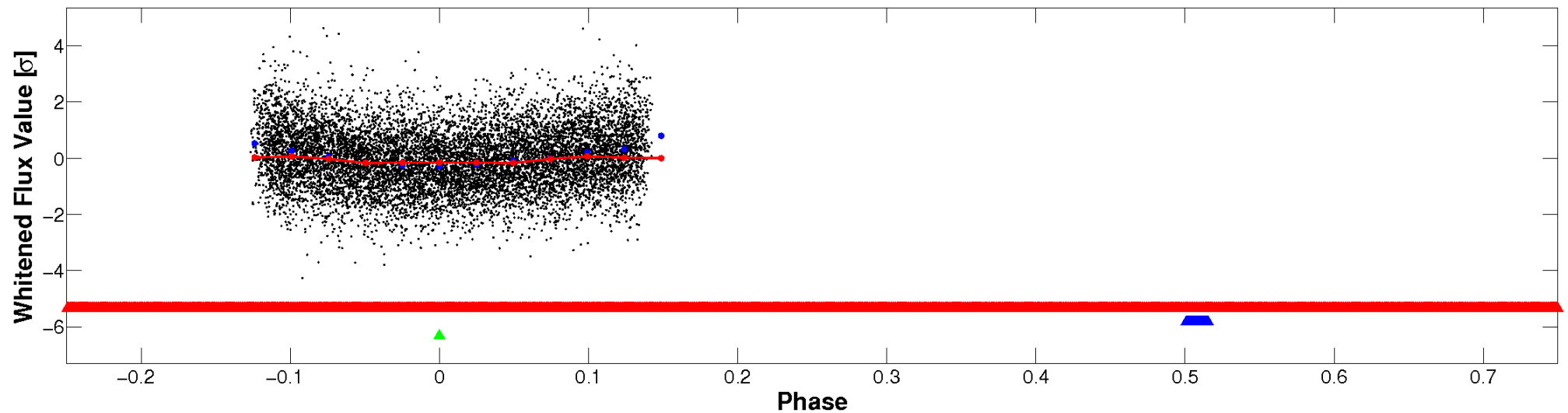
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

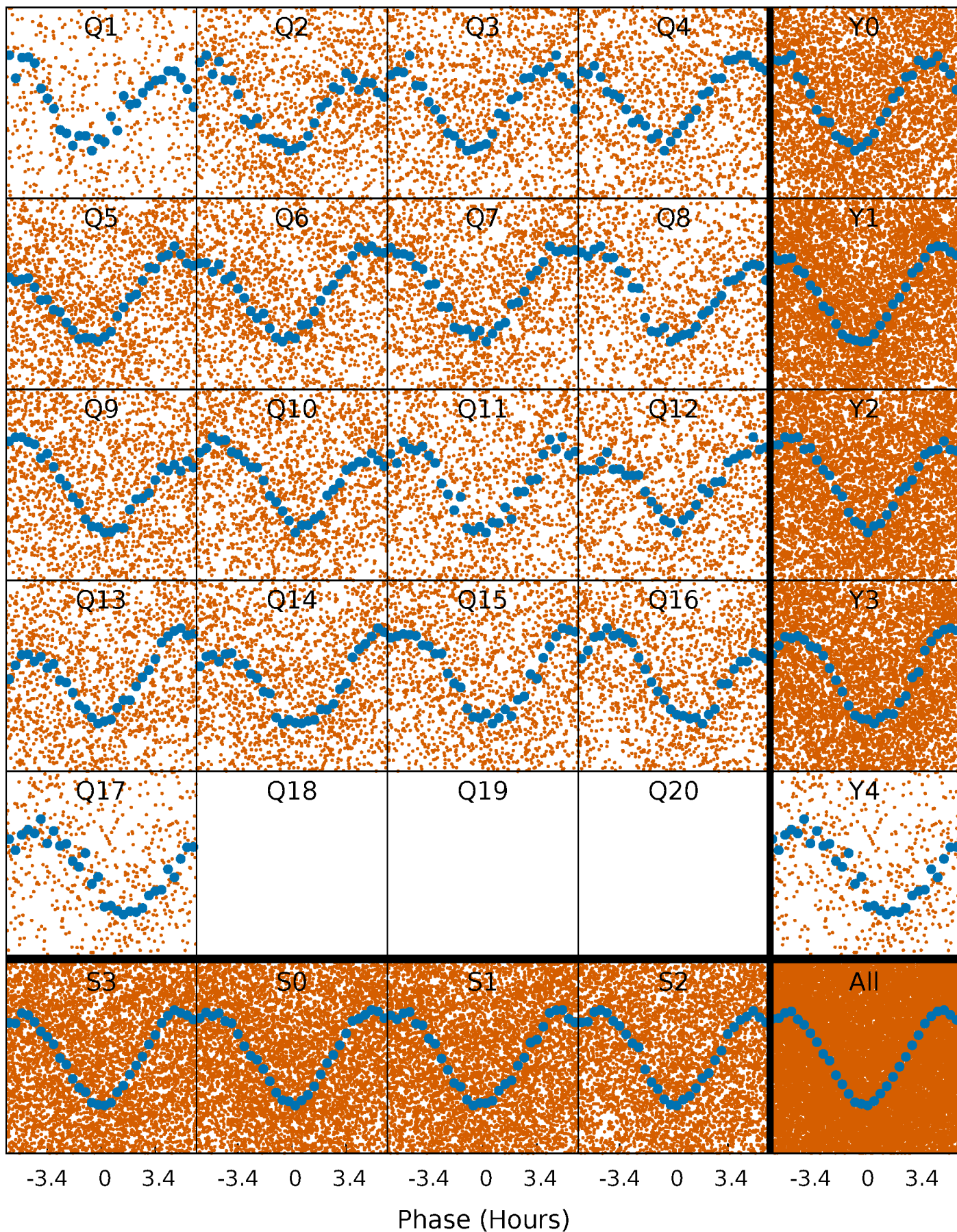


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



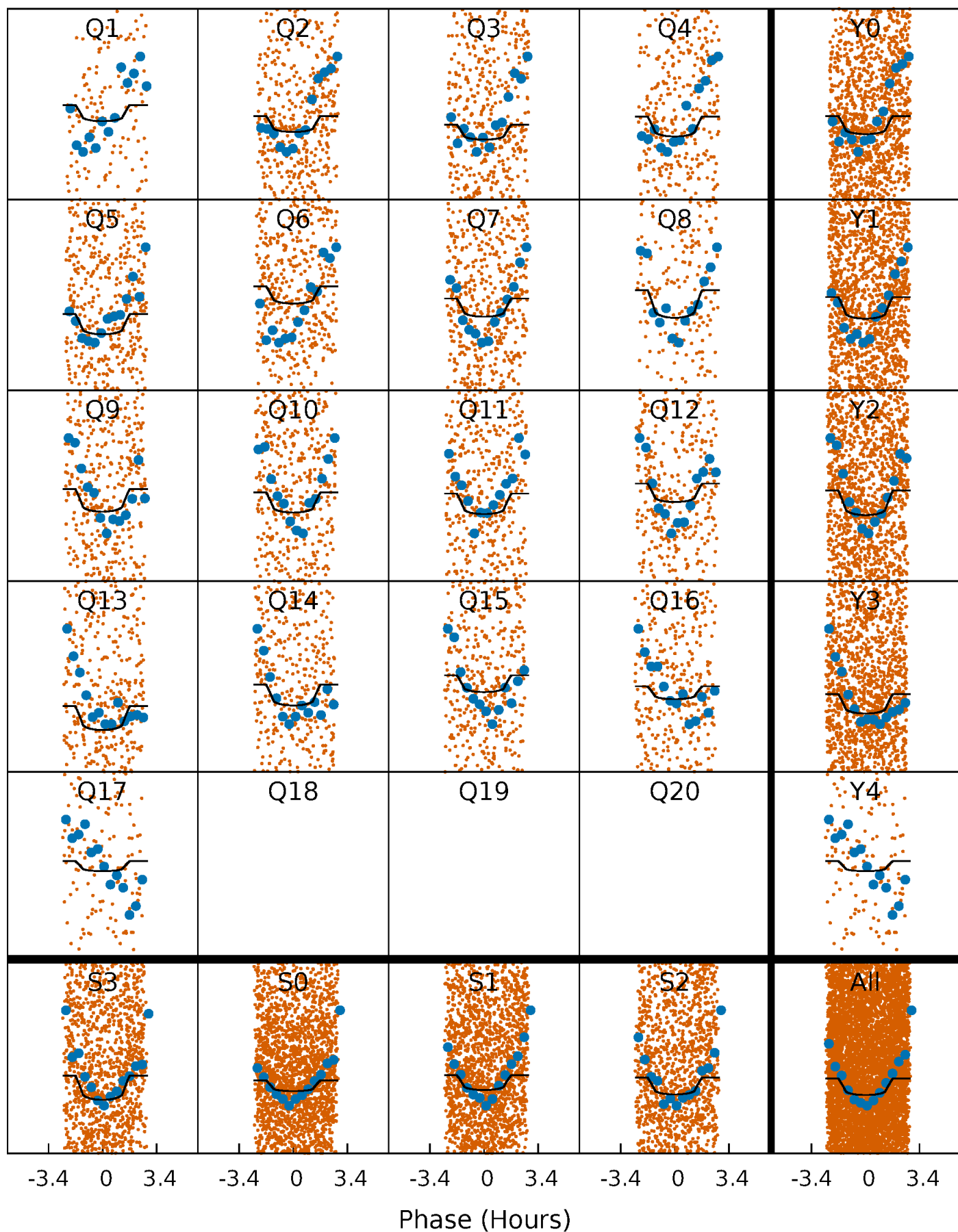
PDC Quarter-Phased Transit Curves

TCE 006784155-03 P= 0.824408 Days $T_0=132.138277$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 006784155-03 P= 0.824408 Days $T_0=132.138277$ (BKJD)

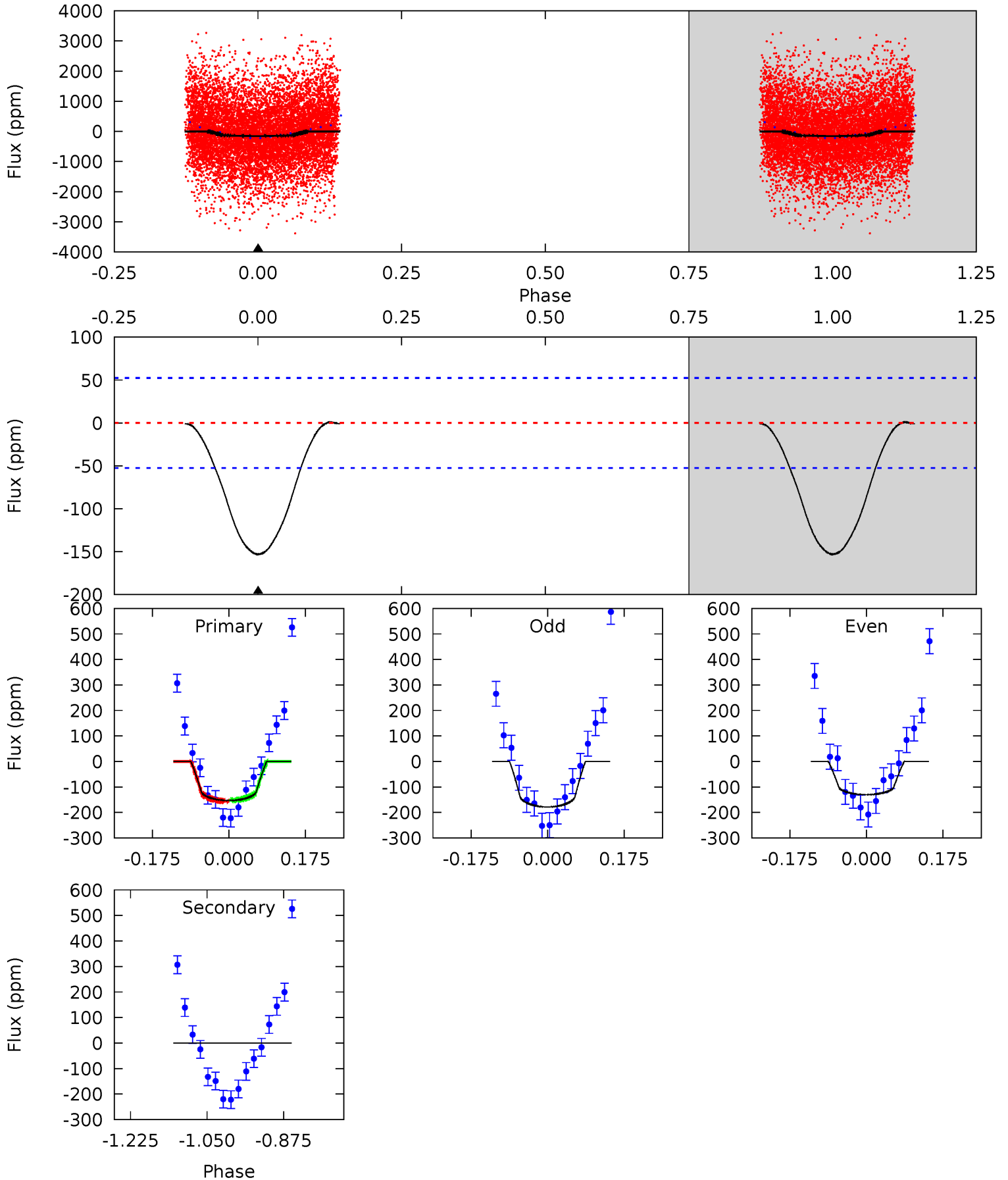


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

006784155-03, P = 0.824408 Days, E = 132.138277 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.0	0	0	0	4.45	1.36	0.10	13.0	13.0	0	0	2.04	0.96	0.01	0.16



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 006784155

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7530^{+209}_{-340}	$3.830^{+0.322}_{-0.107}$	$0.060^{+0.200}_{-0.350}$	$2.826^{+0.470}_{-1.175}$	$1.968^{+0.084}_{-0.475}$	$0.123^{+0.303}_{-0.042}$
	+3%/-5%	+8%/-3%	+333%/-583%	+17%/-42%	+4%/-24%	+247%/-34%
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 006784155-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 12	$3.02^{+1.22}_{-1.10}$	5156^{+383}_{-512}	-4379^{+7306}_{-767}	$0.001^{+0.323}_{-0.369}$
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 $A_{obs} \gg 1.0$

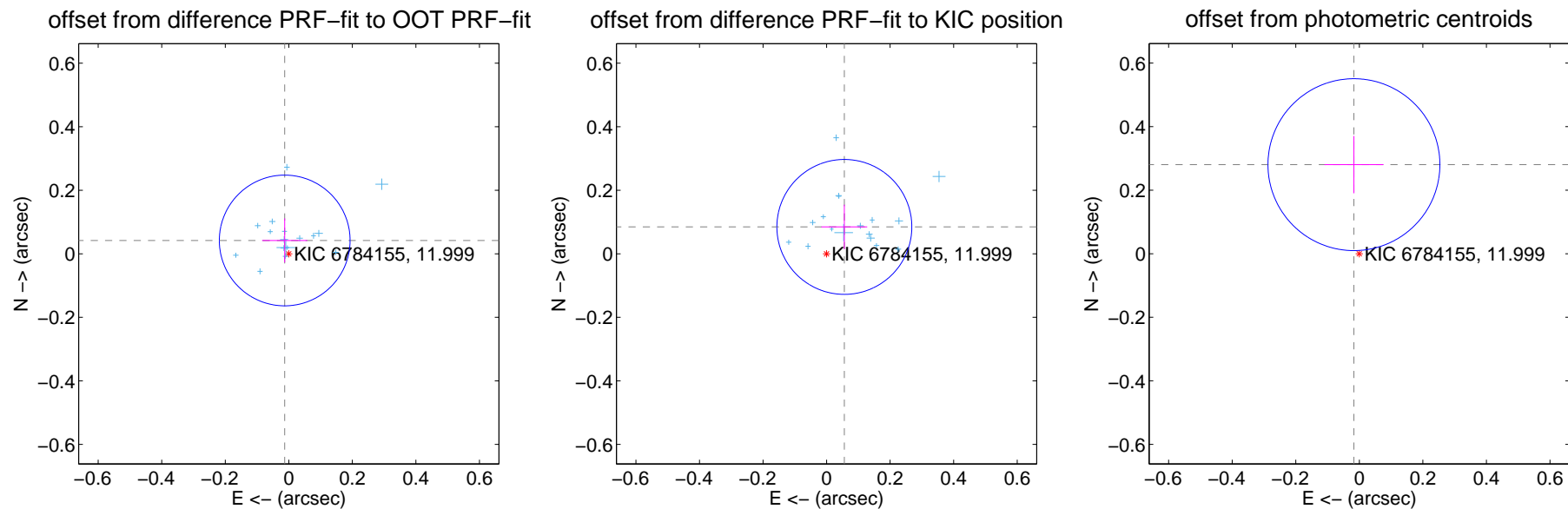
DV Centroid Data

Supplemental centroid analysis for 006784155-03. **Kepler magnitude: 12.00.** Transit SNR 11.79

There are 17 quarters with good PRF difference image offsets

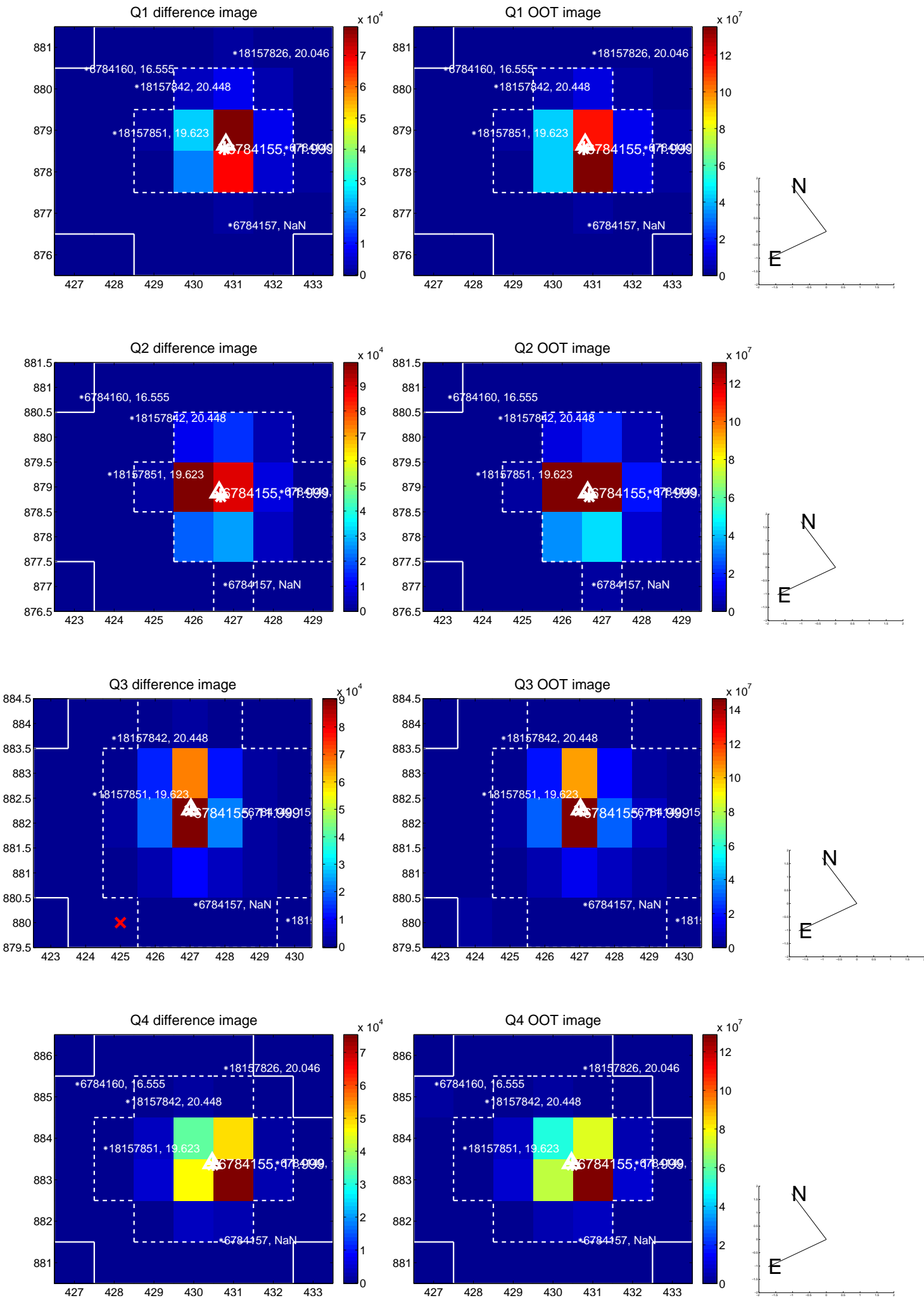
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.044 ± 0.069	0.64	0.013 ± 0.071	0.042 ± 0.069
PRF-fit source offset from KIC position	0.101 ± 0.071	1.43	-0.056 ± 0.072	0.085 ± 0.070
photometric centroid source offset	0.28 ± 0.09	3.11	0.02 ± 0.09	0.28 ± 0.09

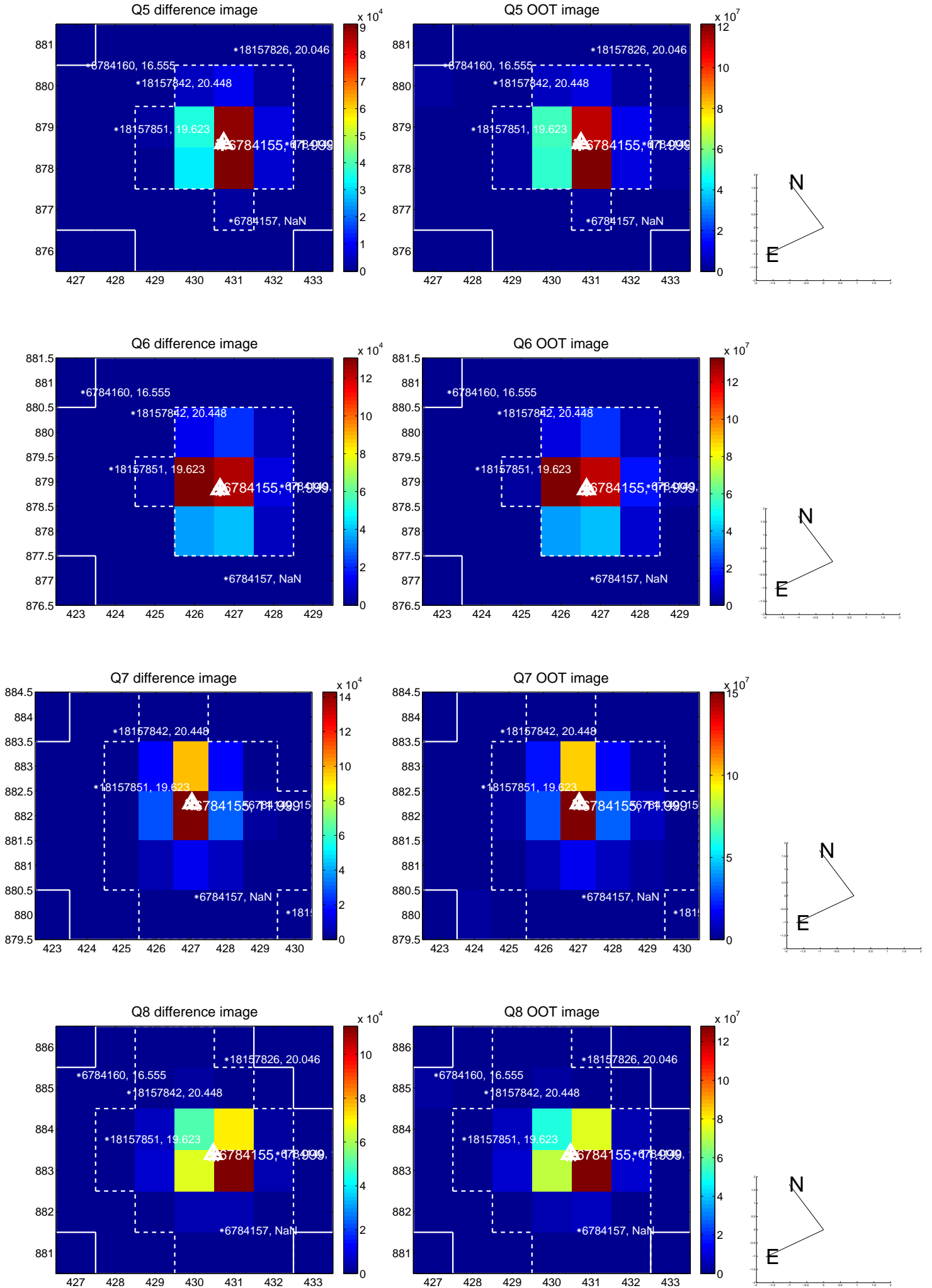


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

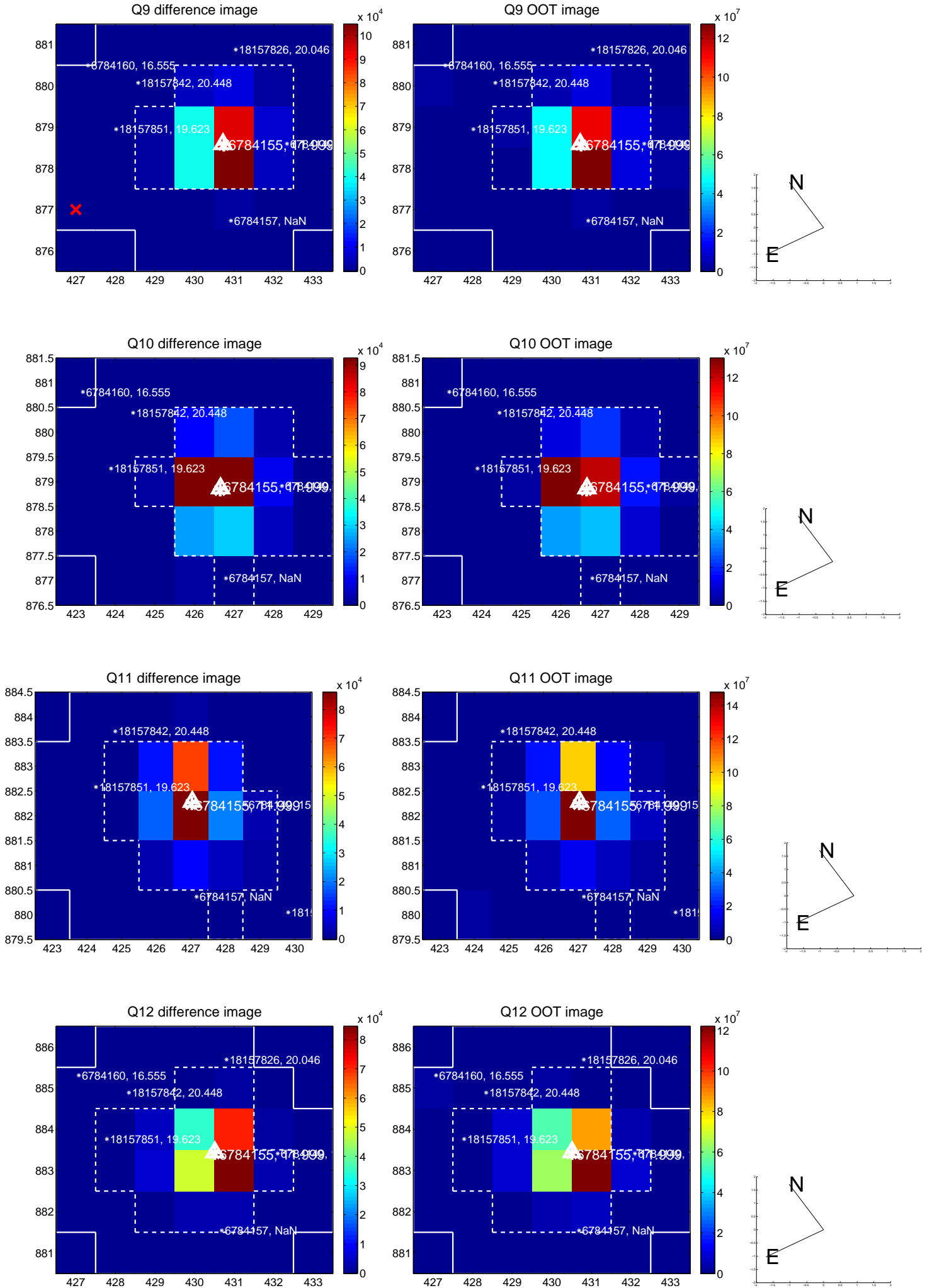
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



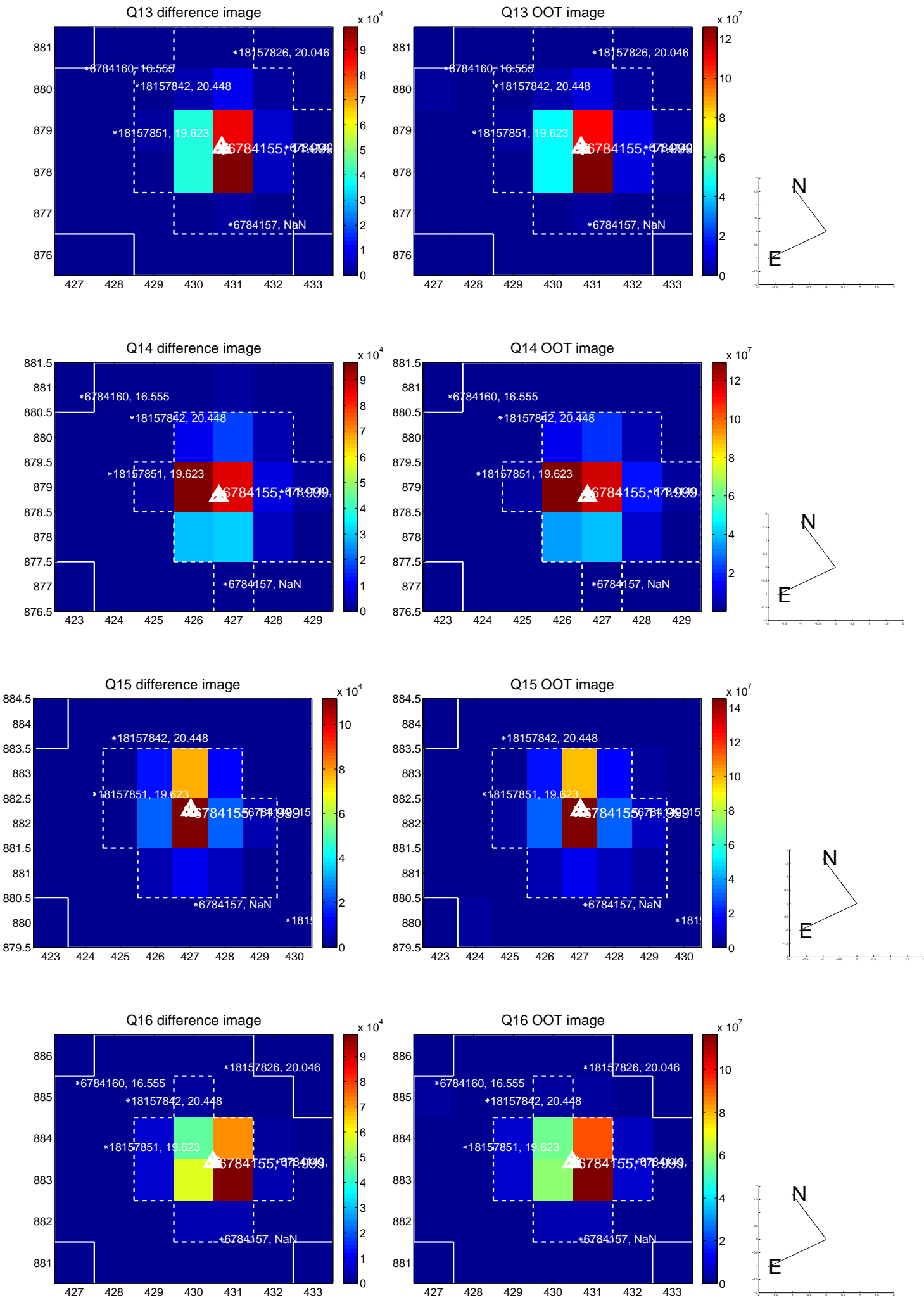
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



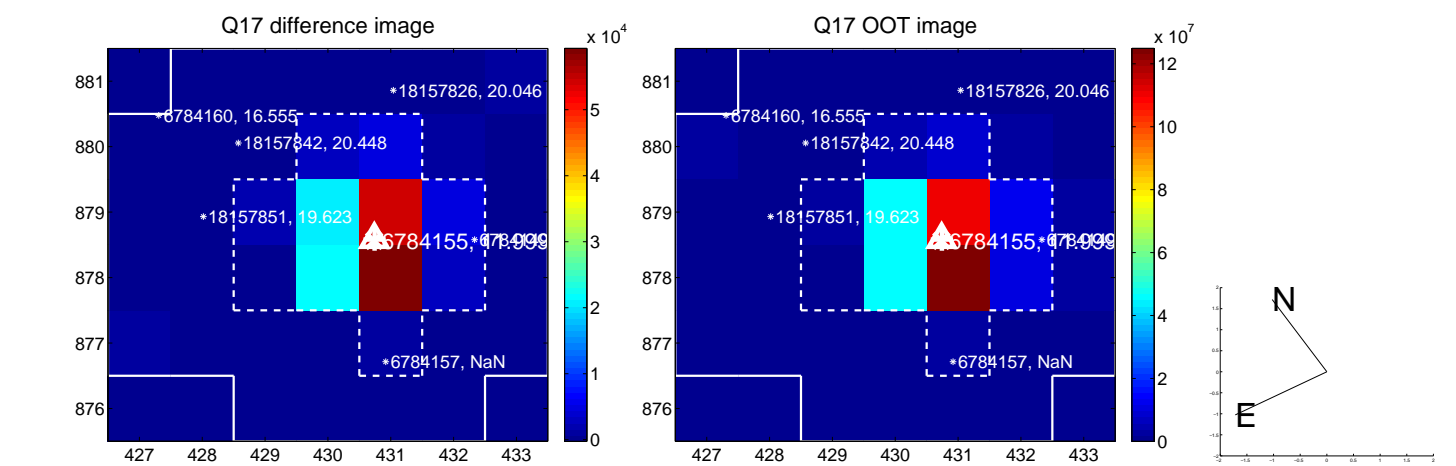
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



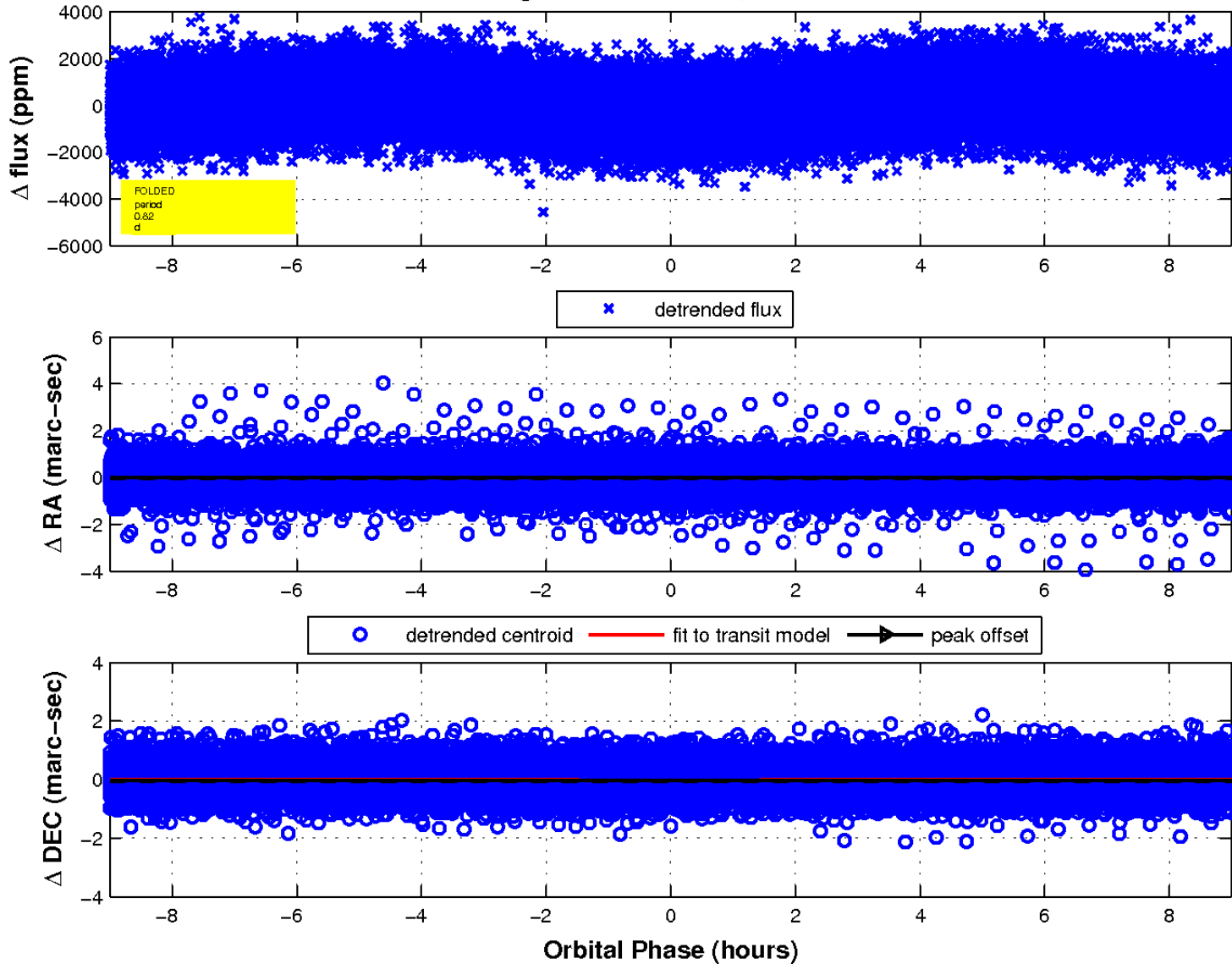
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

