

KIC 008496367

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})
008496367-01	OBS	No	3.519395	132.356612	71.0	16.030	10.5	10.1	1.65	6952	1.62	2255.13
008496367-02	OBS	No	200.711047	137.207199	962.2	20.856	9.0	9.6	1.65	6952	9.54	10.27
008496367-03	OBS	No	12.951233	135.677430	373.8	23.938	8.3	9.3	1.65	6952	6.06	396.93

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008496367-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV
008496367-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV
008496367-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV

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

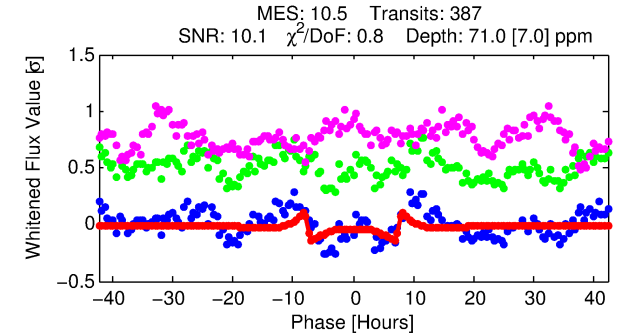
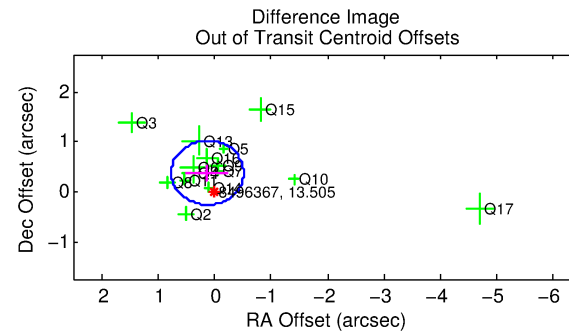
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

Ephemeris Match Information For 008496367-01

No Significant Match Found

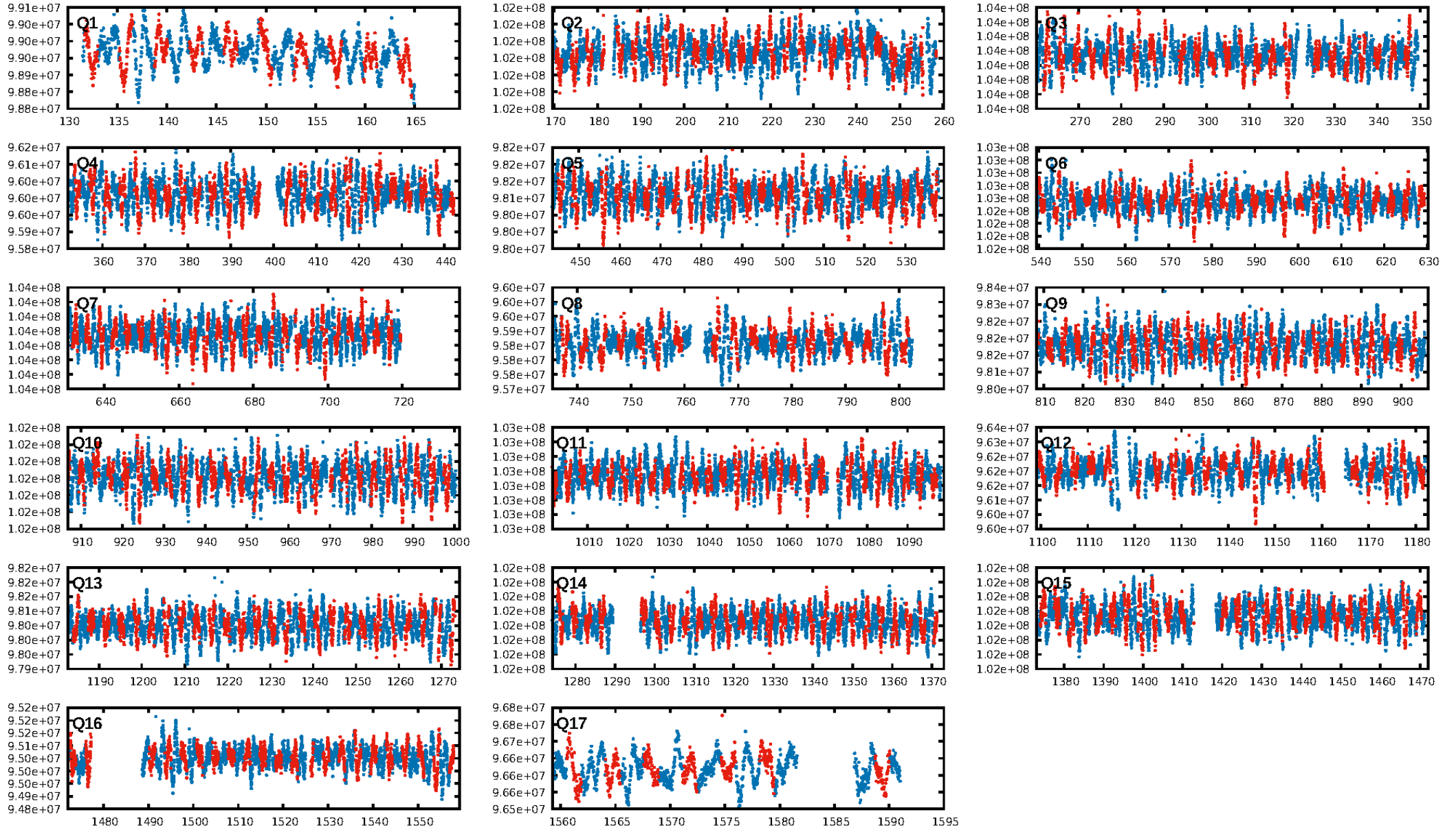
KIC: 8496367 Candidate: 1 of 3 Period: 3.519 d



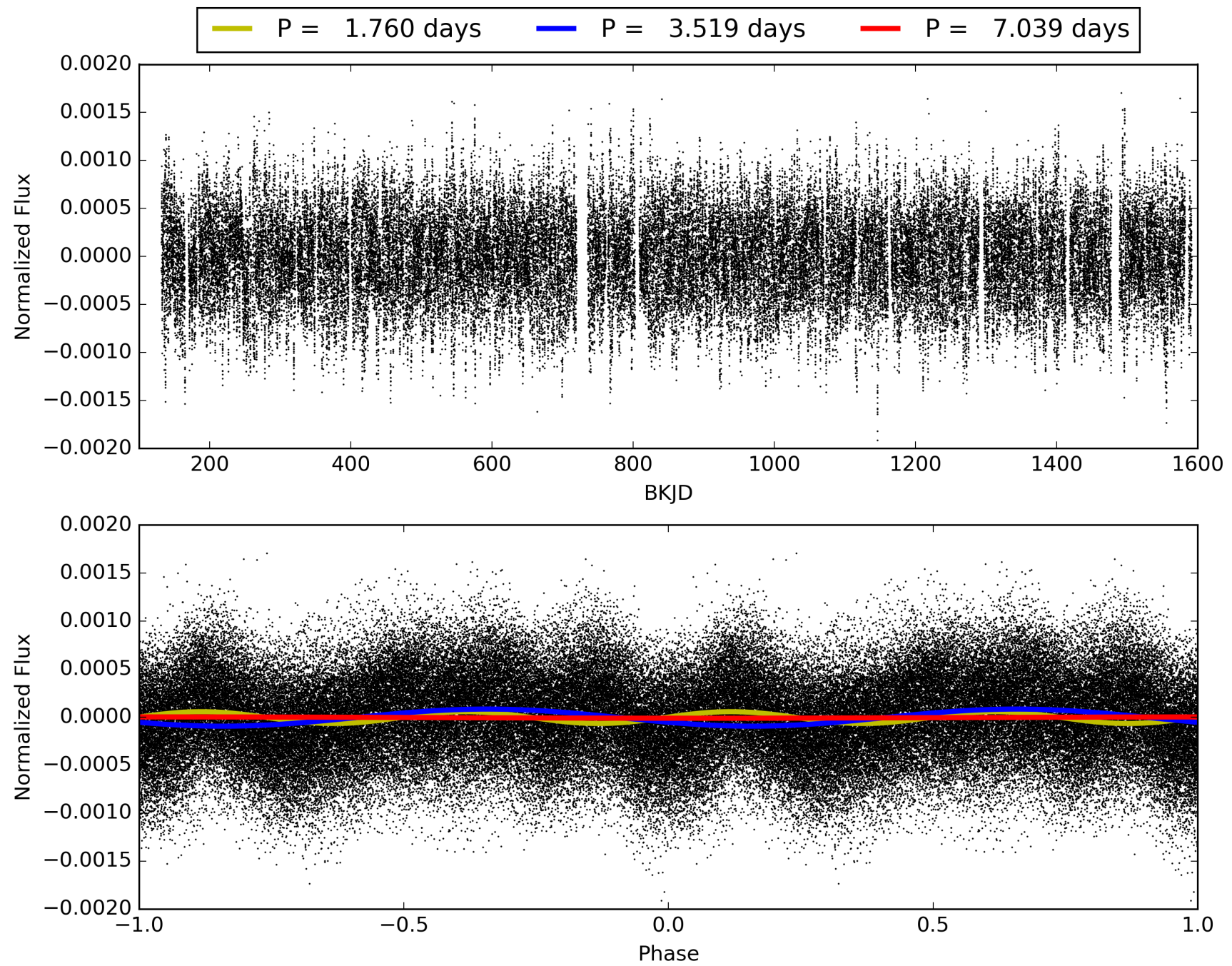
ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [7.86σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.00e-18
RollingBand-fgt: 1.00 [369/370]
GhostDiagnostic-chr: 4.027

Centroid-sig: 11.1%
Centroid-so: 0.446 arcsec [1.35σ]
OotOffset-rm: 0.398 arcsec [1.86σ]
KicOffset-rm: 0.251 arcsec [1.31σ]
OotOffset-st: 4/4/3/4 [15]
KicOffset-st: 4/4/3/4 [15]
DiffImageQuality-fgm: 0.87 [13/15]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 008496367-01, PDC Light Curves

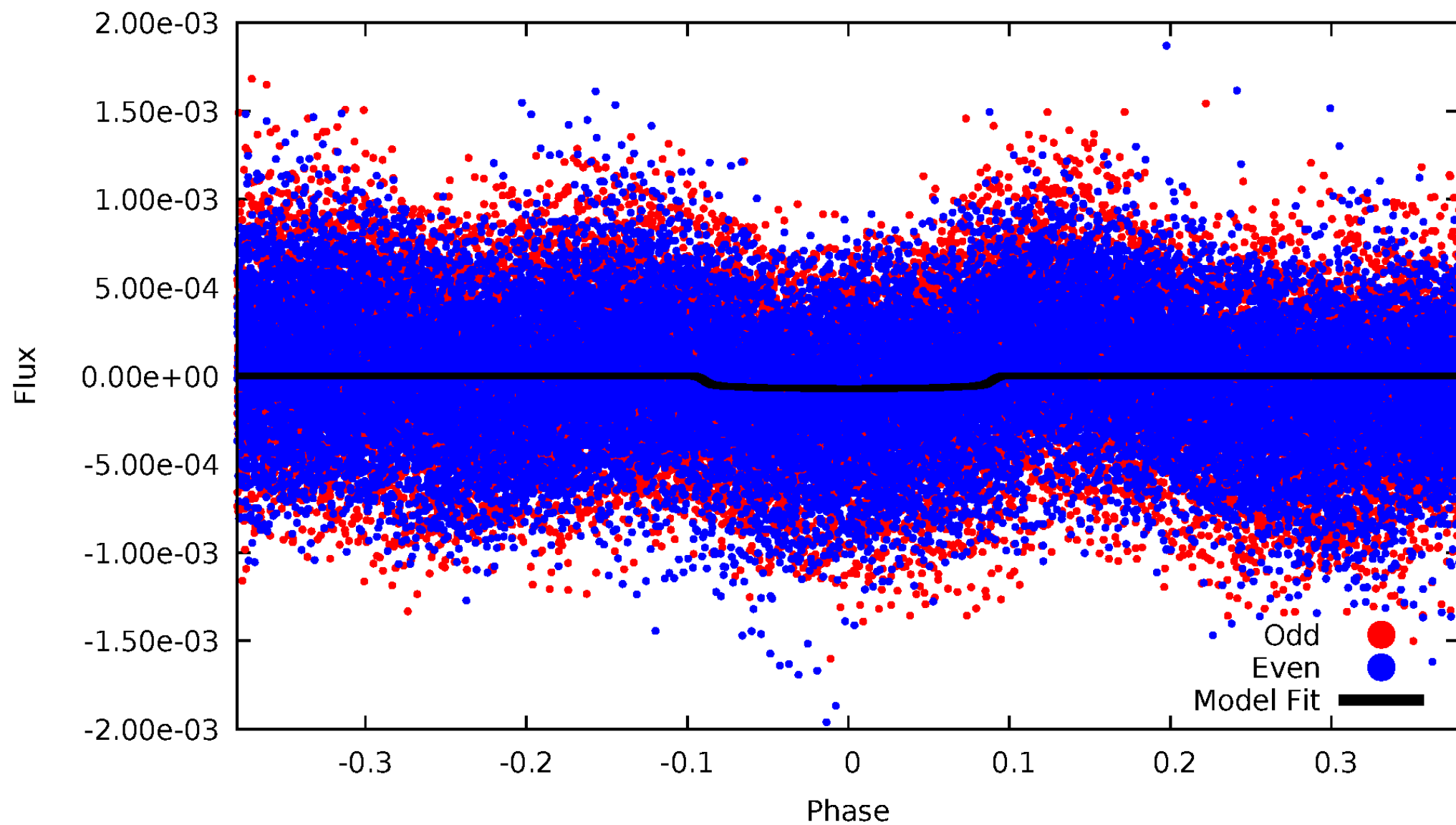


TCE 008496367-01



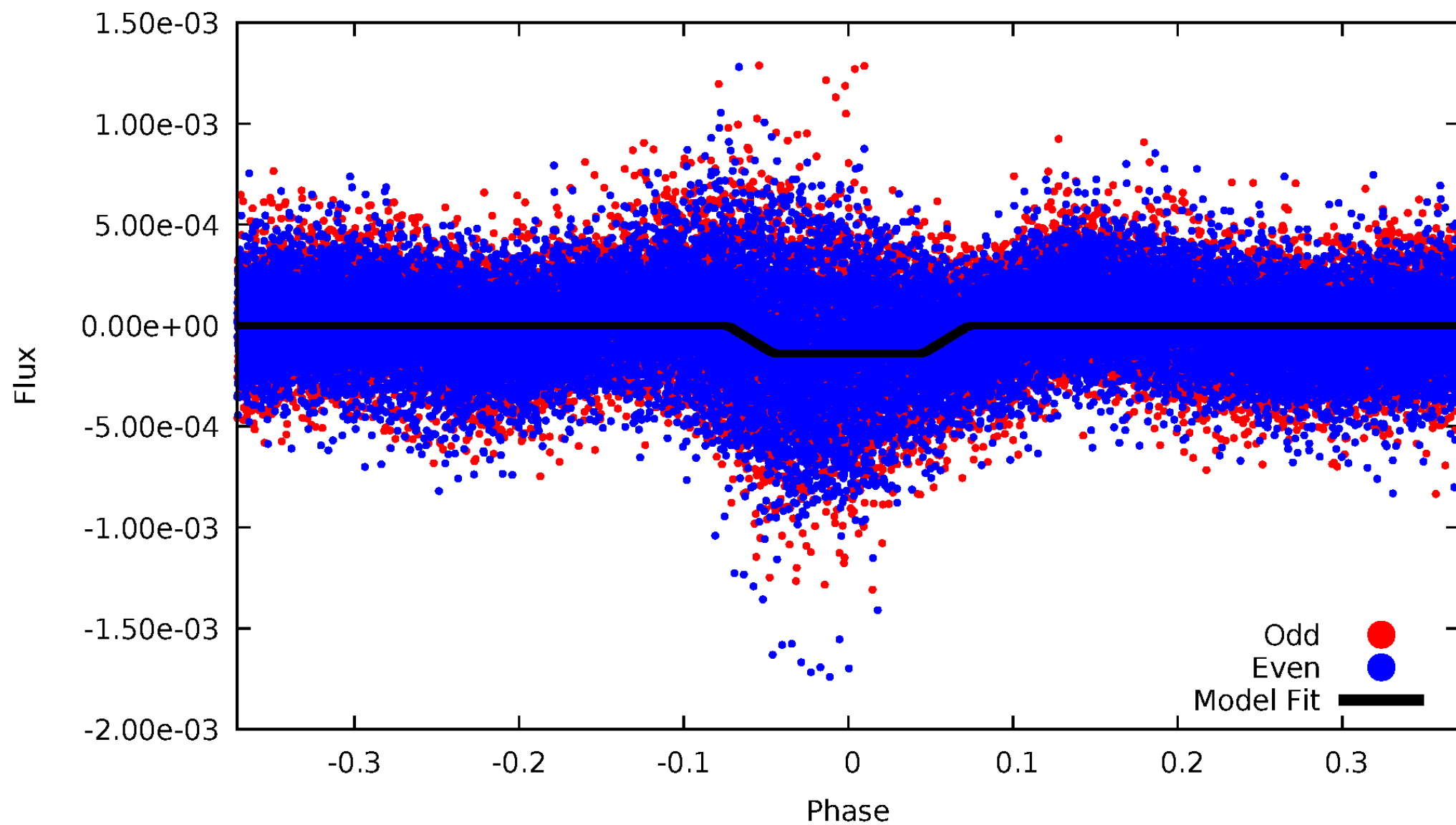
DV Odd/Even

TCE 008496367-01

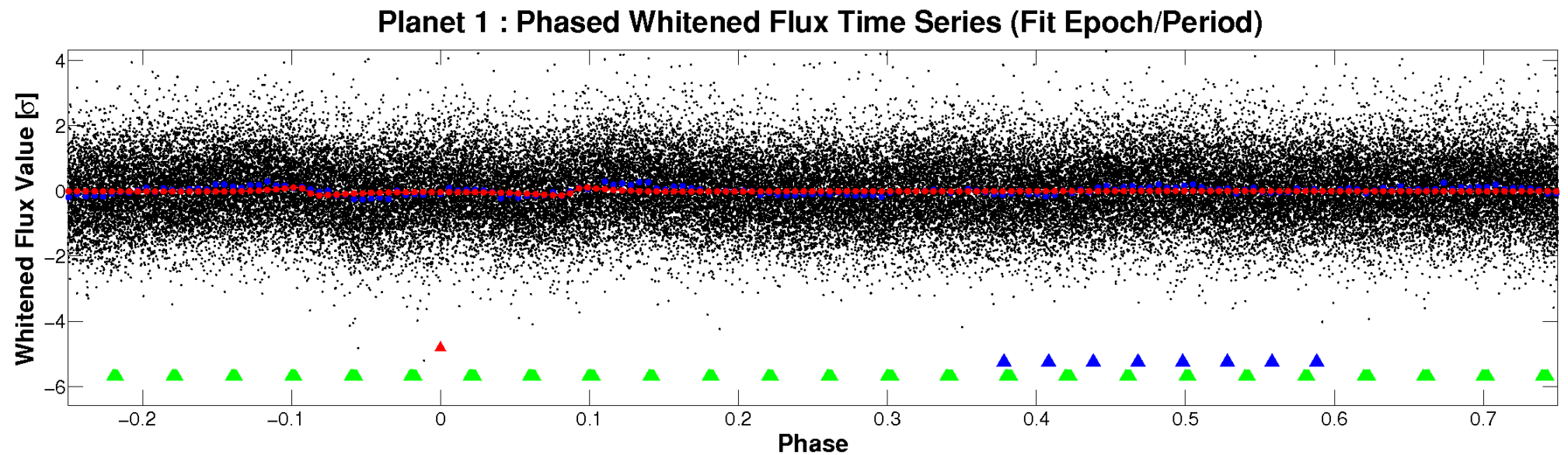
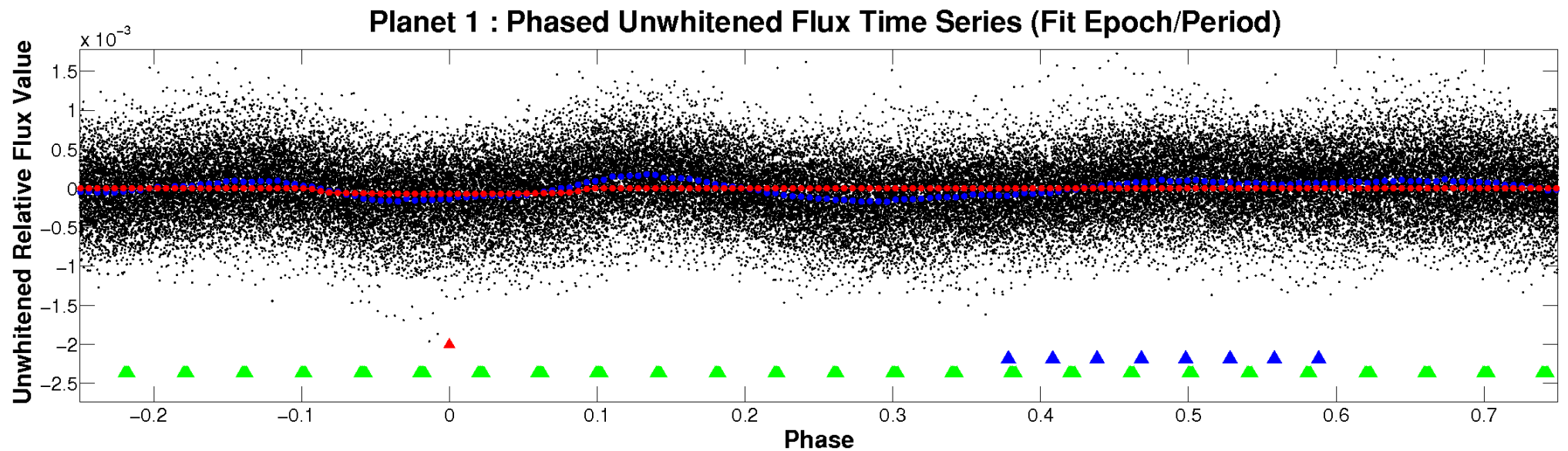


ALT Odd/Even

TCE 008496367-01

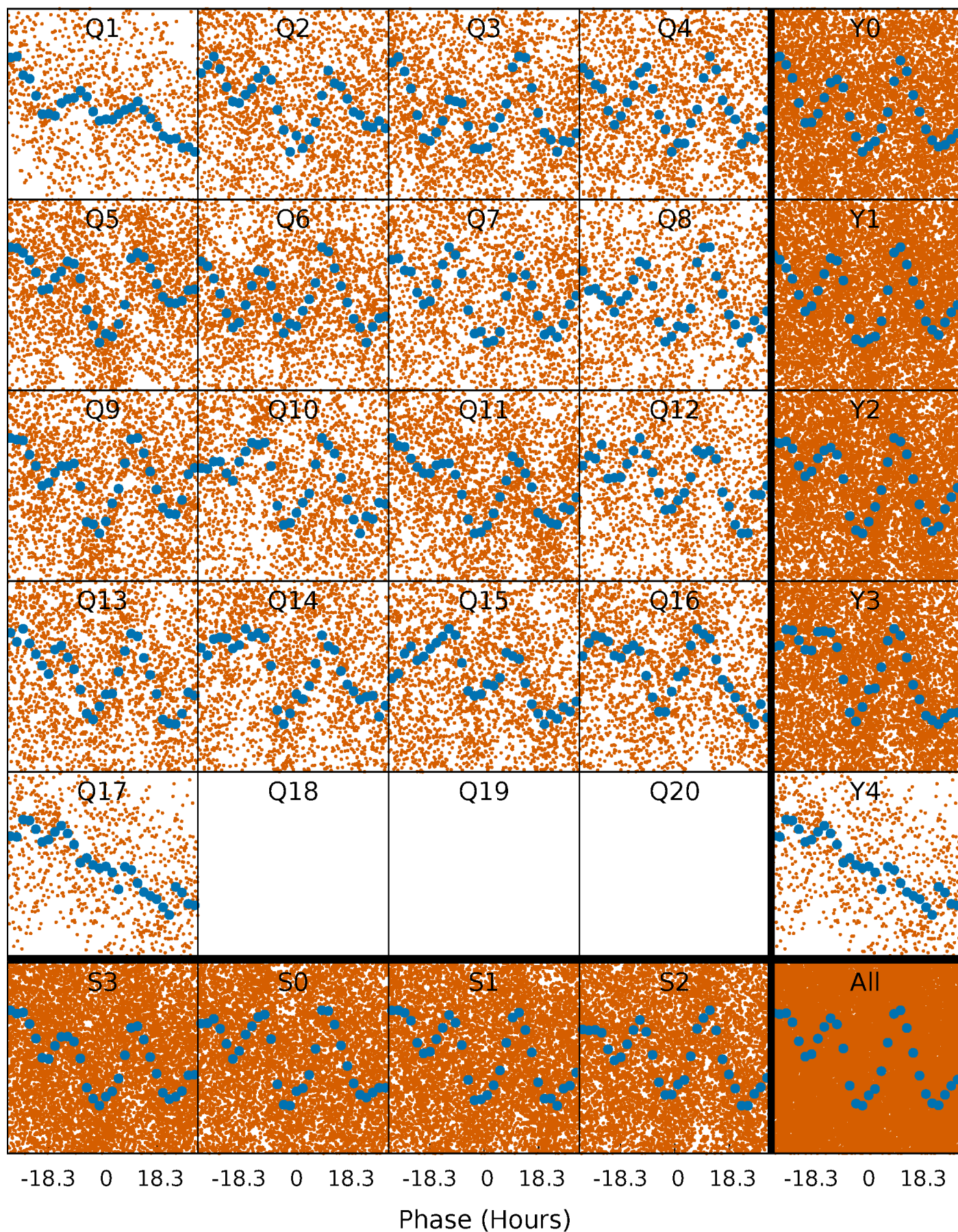


Non-Whitened Vs. Whitened Light Curve



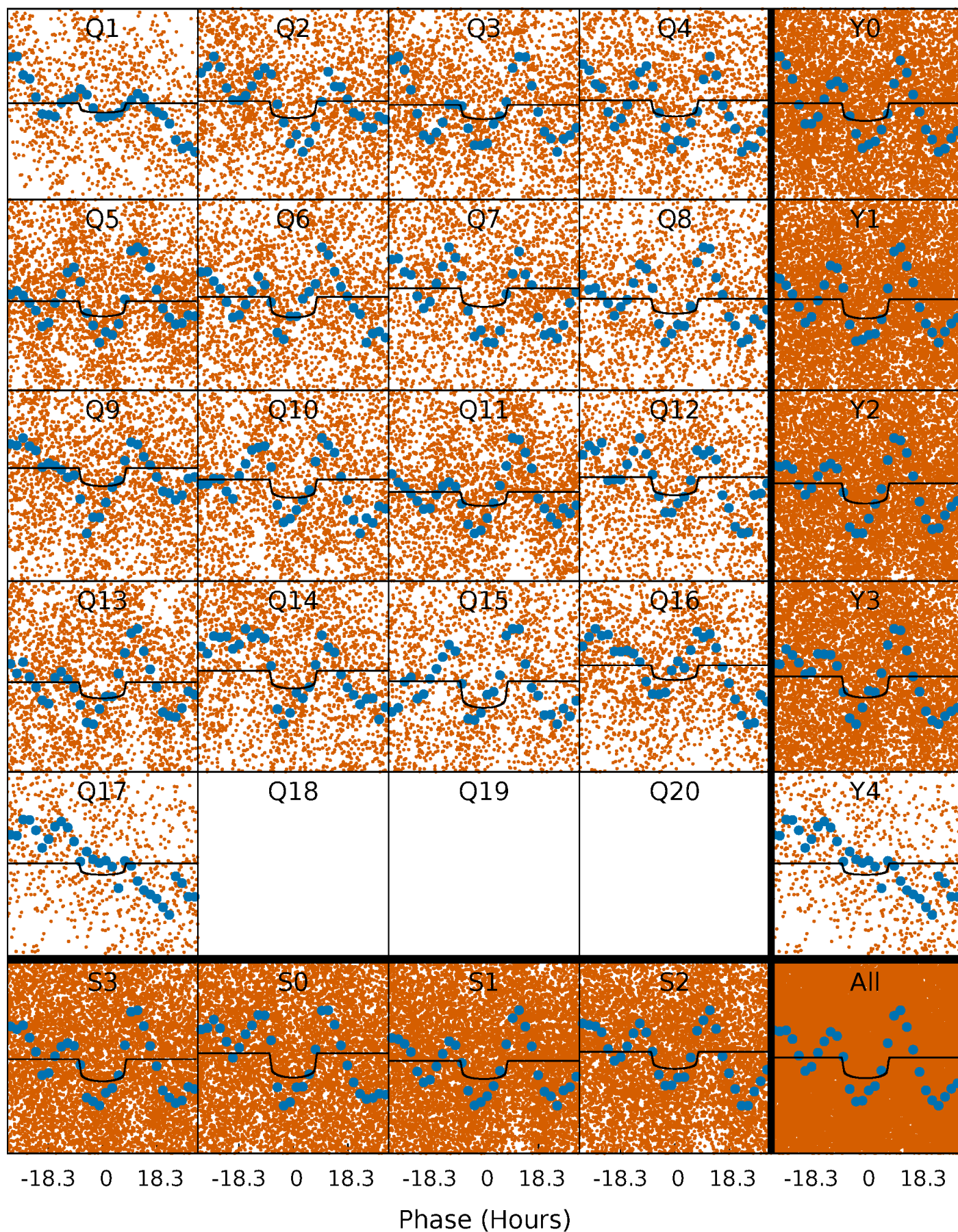
PDC Quarter-Phased Transit Curves

TCE 008496367-01 P= 3.519395 Days $T_0=132.356613$ (BKJD)



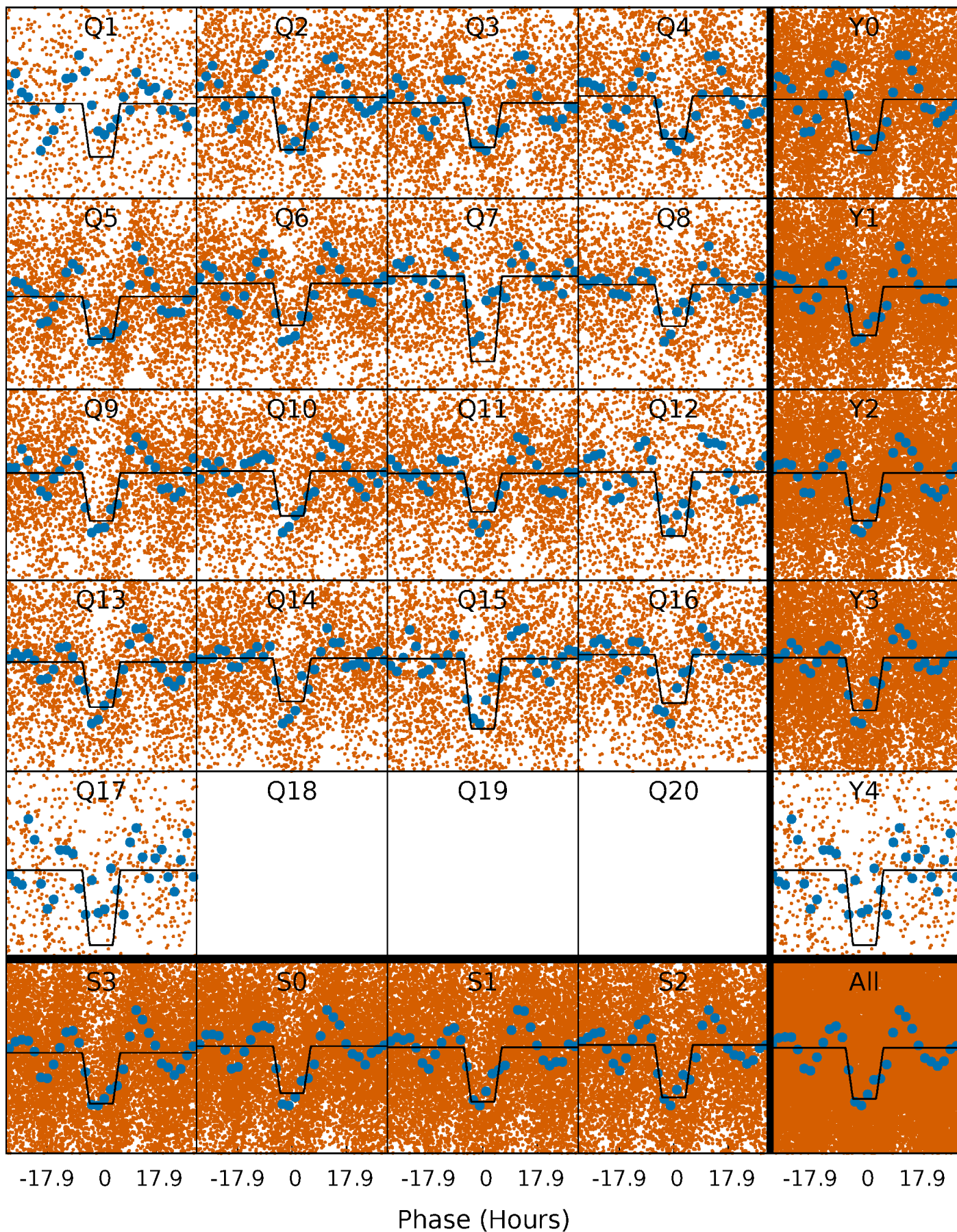
DV Quarter-Phased Transit Curves

TCE 008496367-01 P= 3.519395 Days $T_0=132.356613$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

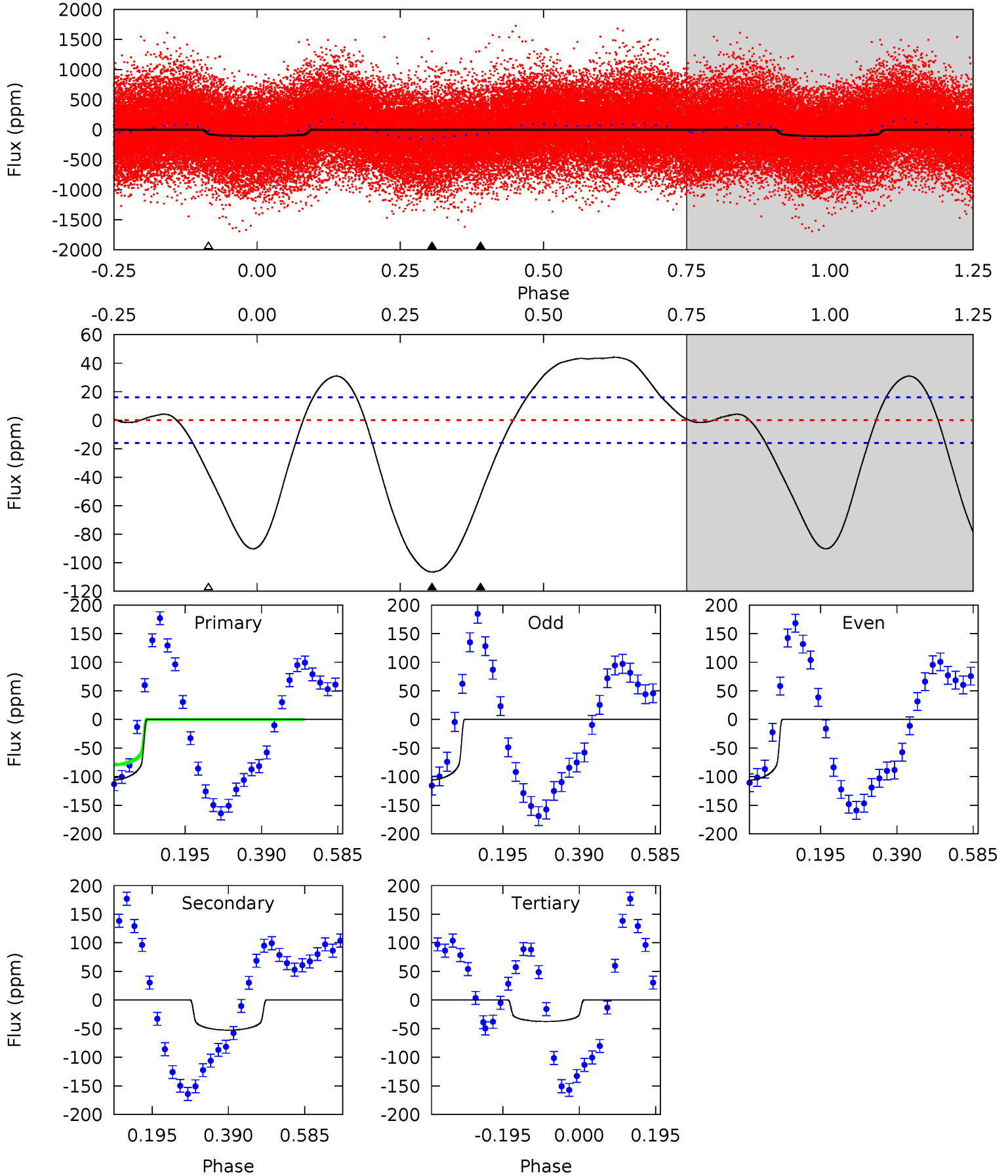
TCE 008496367-01 P= 3.519222 Days $T_0=132.336512$ (BKJD)



DV Model-Shift Uniqueness Test

008496367-01, P = 3.519395 Days, E = 128.837218 Days

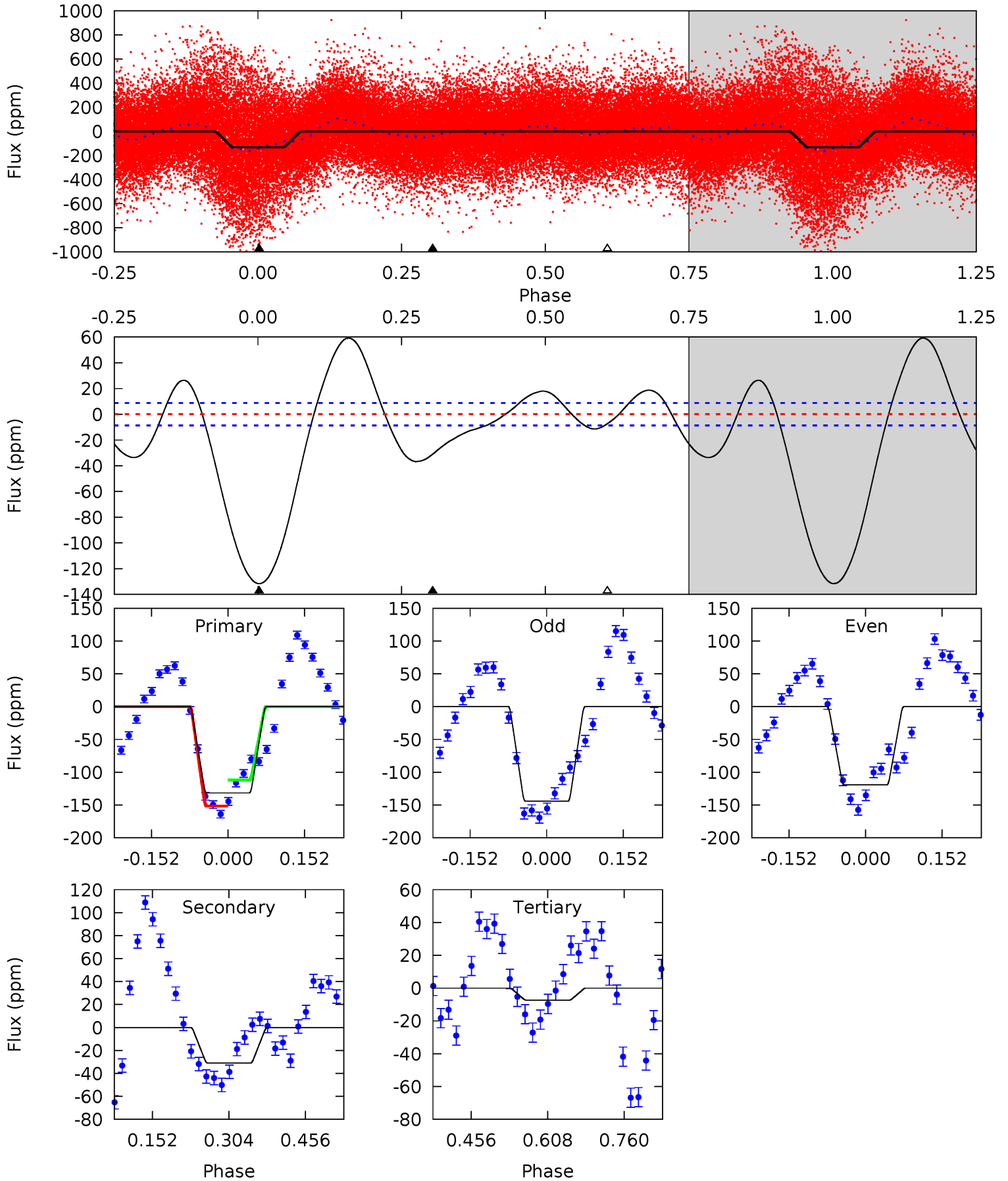
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.4	14.5	10.4	0	4.42	1.30	11.2	19.1	29.4	4.15	14.5	0.03	1.34	0.29	7.43



Alt Model-Shift Uniqueness Test

008496367-01, P = 3.519222 Days, E = 128.817290 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
67.6	15.9	3.76	0	4.48	1.43	8.38	63.8	67.6	12.2	15.9	6.36	1.17	0.31	10.1



Stellar Parameters For KIC 008496367

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6952^{+192}_{-264}	$4.138^{+0.180}_{-0.180}$	$-0.220^{+0.250}_{-0.350}$	$1.647^{+0.487}_{-0.398}$	$1.364^{+0.202}_{-0.224}$	$0.430^{+0.407}_{-0.206}$
	+3%/-4%	+4%/-4%	+114%/-159%	+30%/-24%	+15%/-16%	+94%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 008496367-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-53 ± 4	$1.64^{+0.31}_{-0.26}$	2460^{+198}_{-187}	6161^{+316}_{-301}	27^{+10}_{-7}
Alt.	-31 ± 2	$2.13^{+0.35}_{-0.29}$	2452^{+201}_{-162}	4826^{+173}_{-179}	$9.607^{+2.928}_{-2.480}$

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

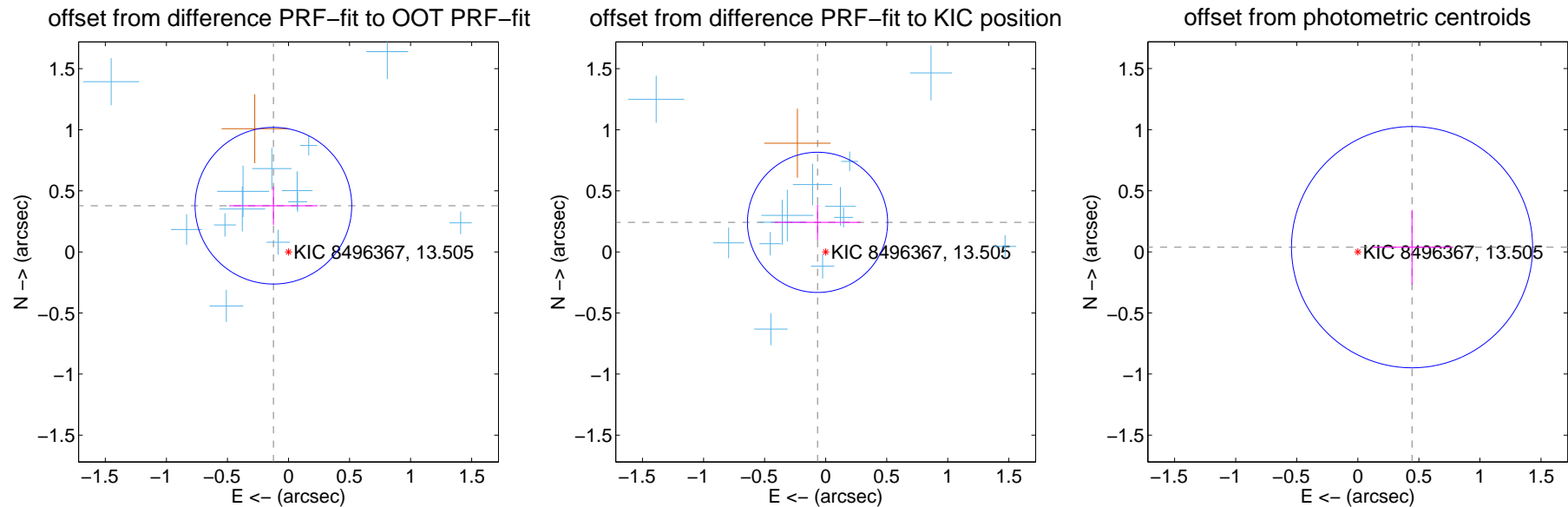
DV Centroid Data

Supplemental centroid analysis for 008496367-01. Kepler magnitude: 13.51. Transit SNR 10.14

There are 13 quarters with good PRF difference image offsets

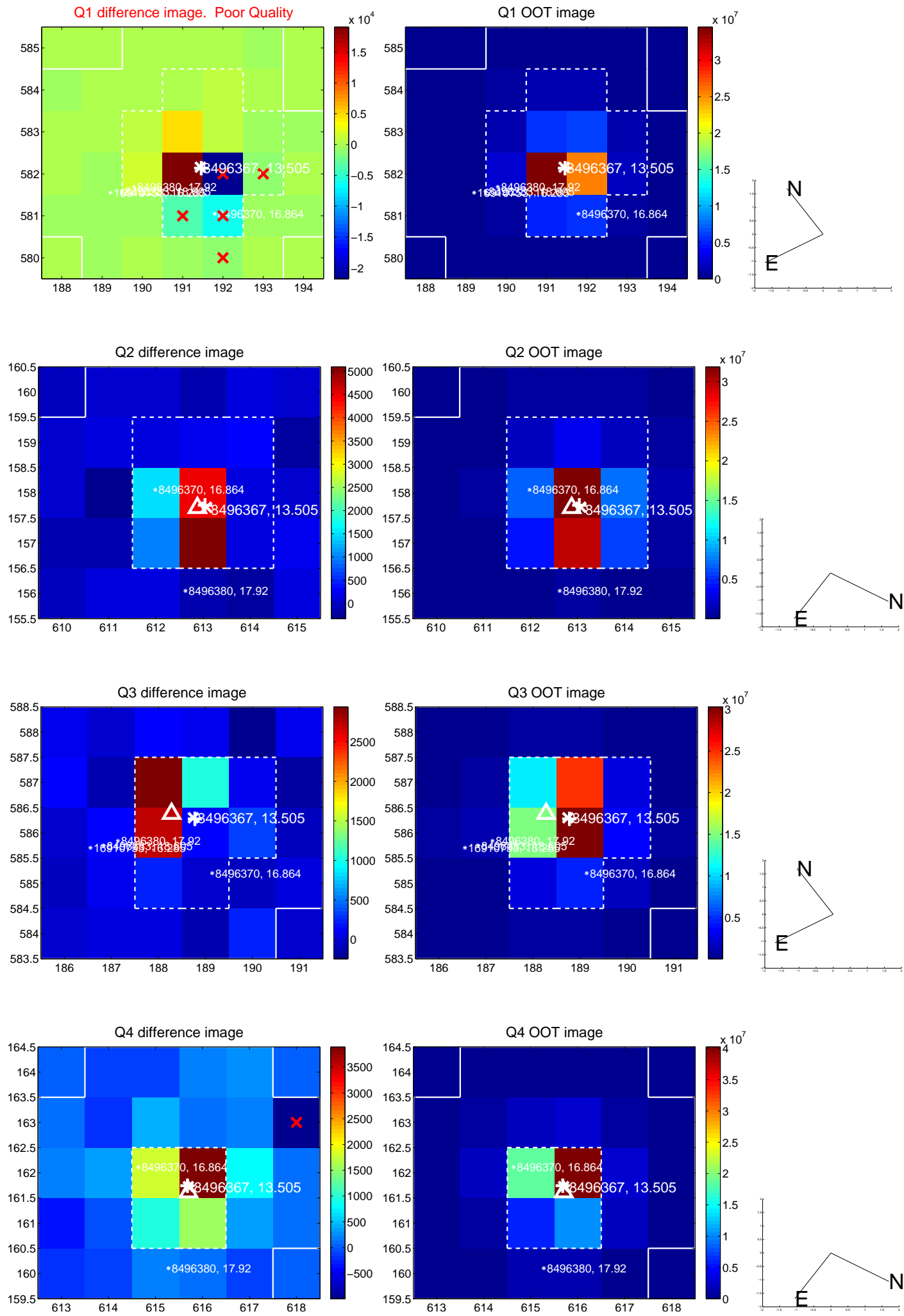
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.398 ± 0.214	1.86	0.124 ± 0.363	0.378 ± 0.157
PRF-fit source offset from KIC position	0.251 ± 0.191	1.31	0.066 ± 0.351	0.242 ± 0.145
photometric centroid source offset	0.45 ± 0.33	1.35	-0.44 ± 0.33	0.04 ± 0.30

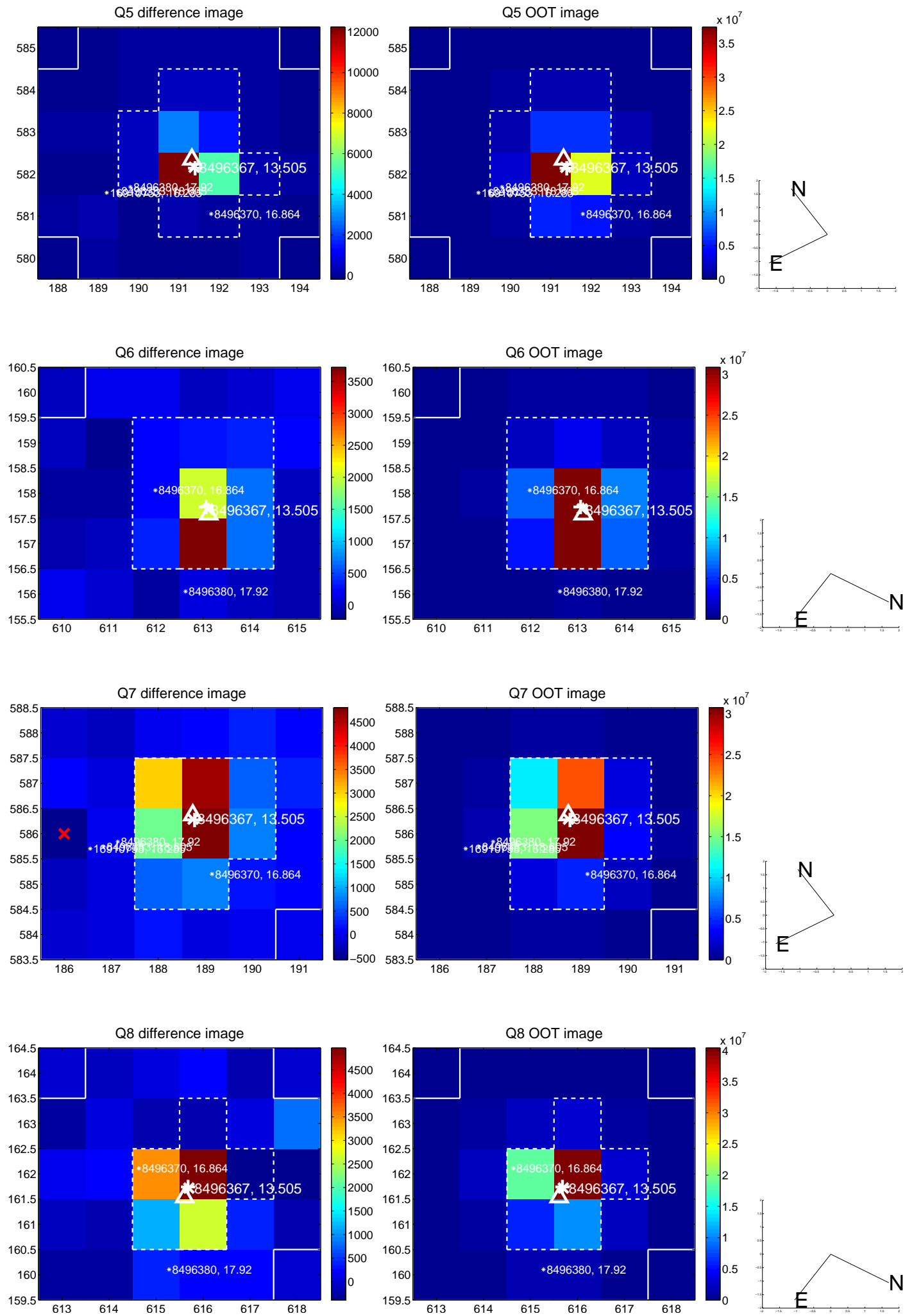


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

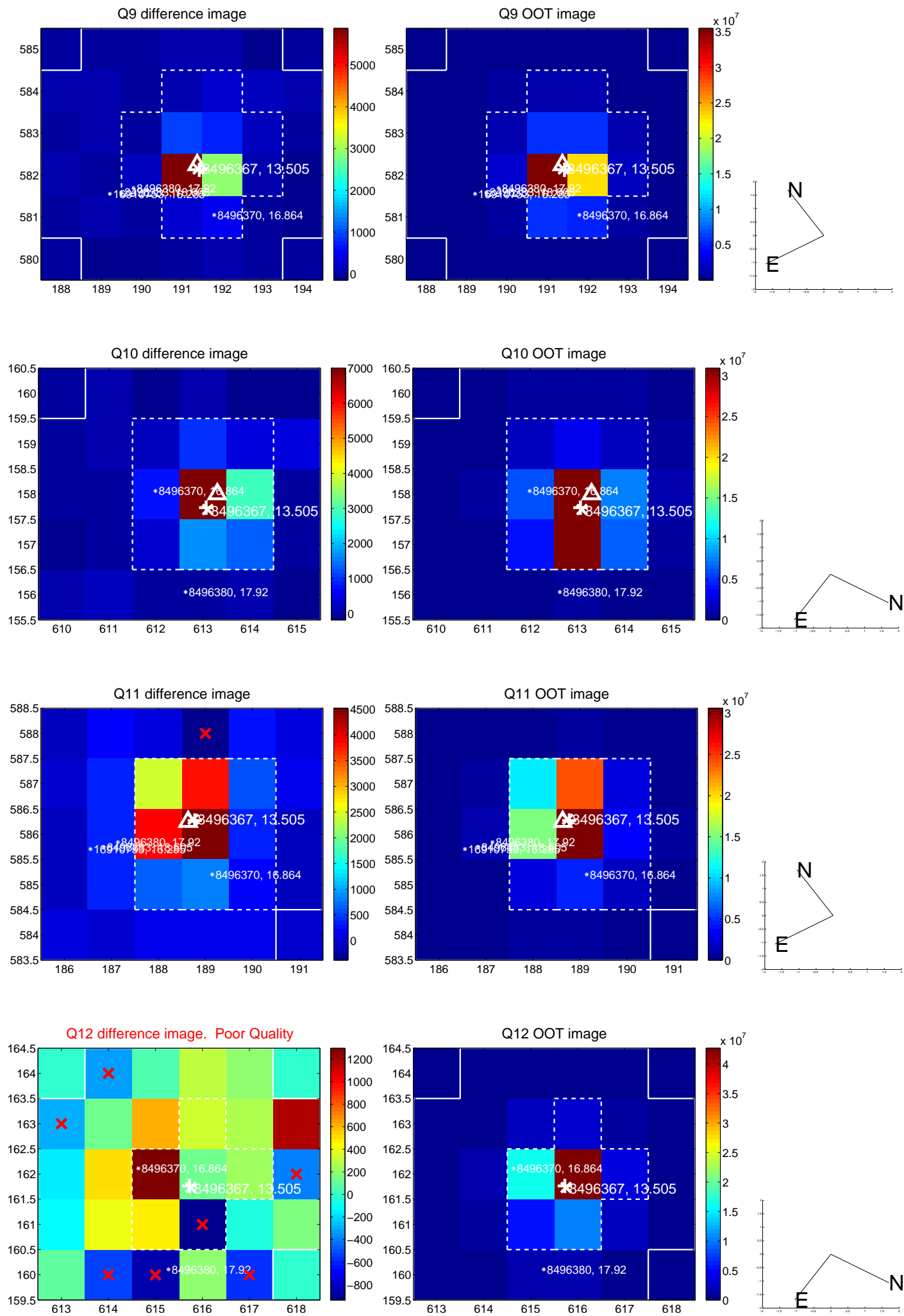
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



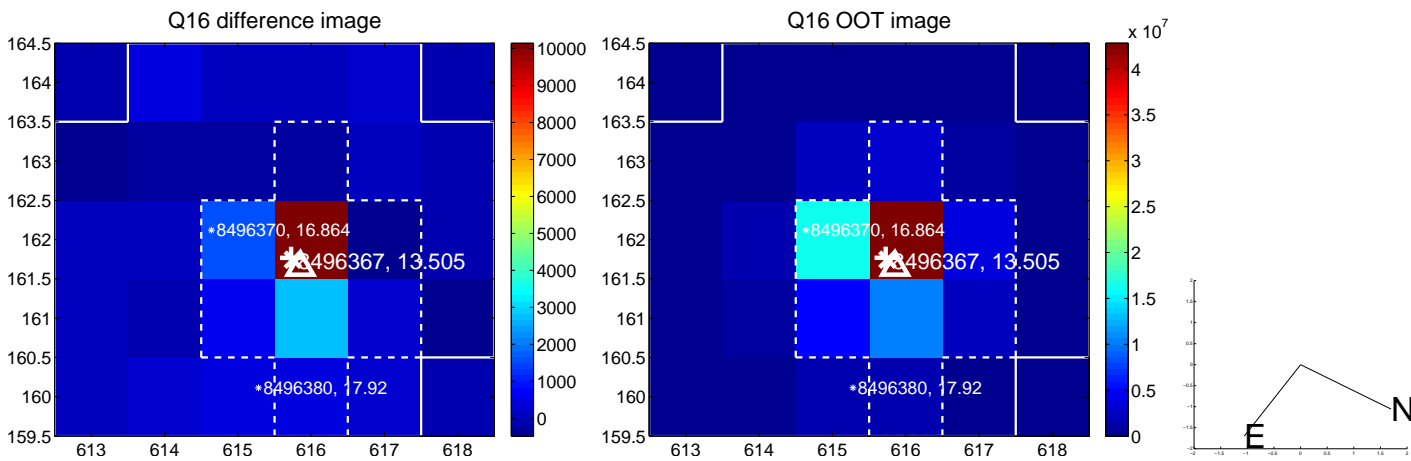
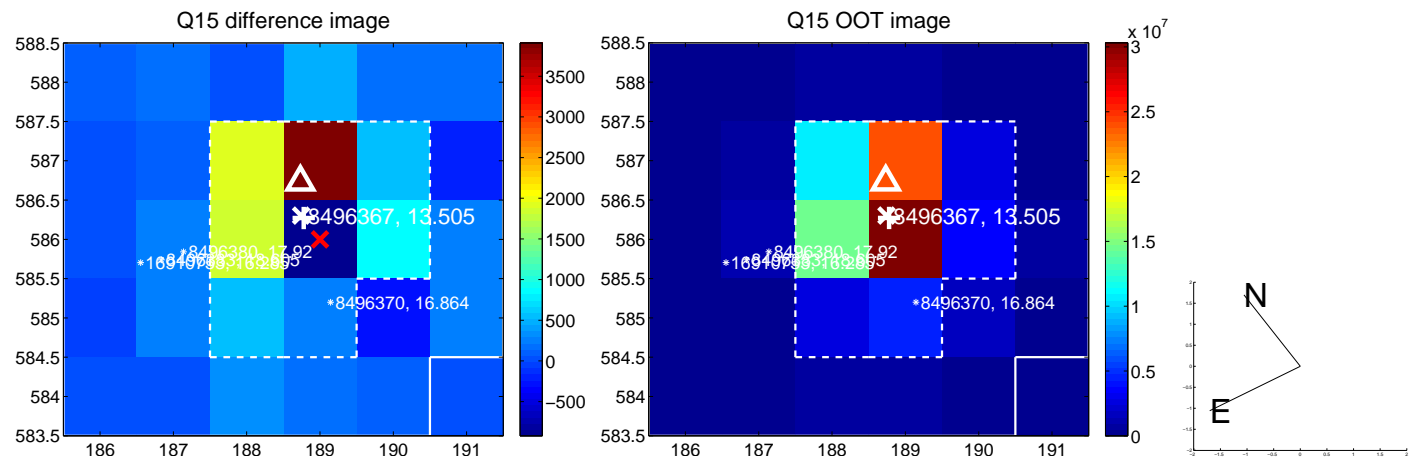
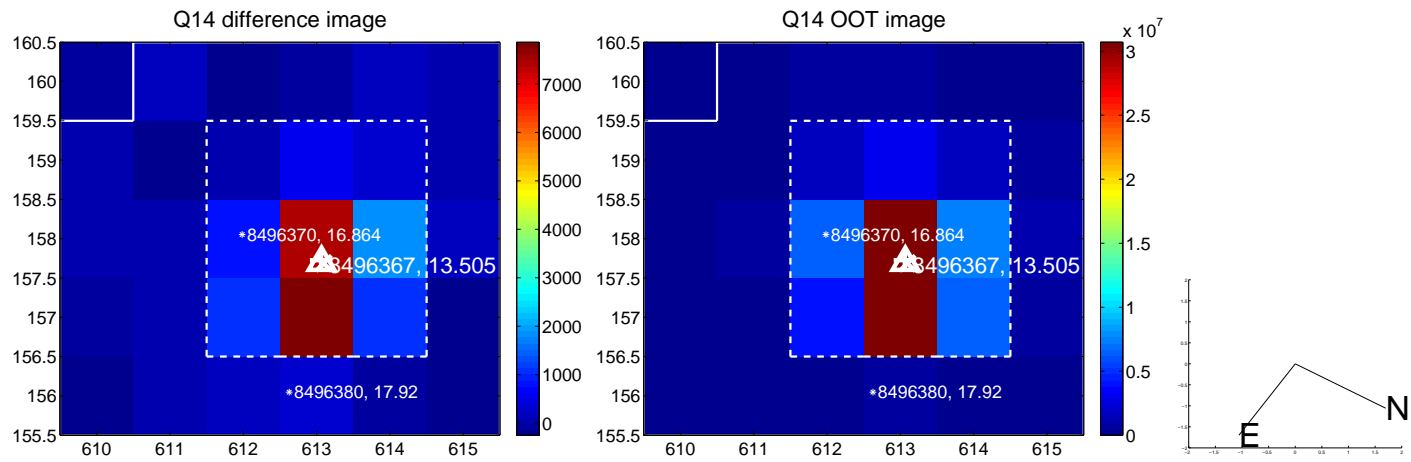
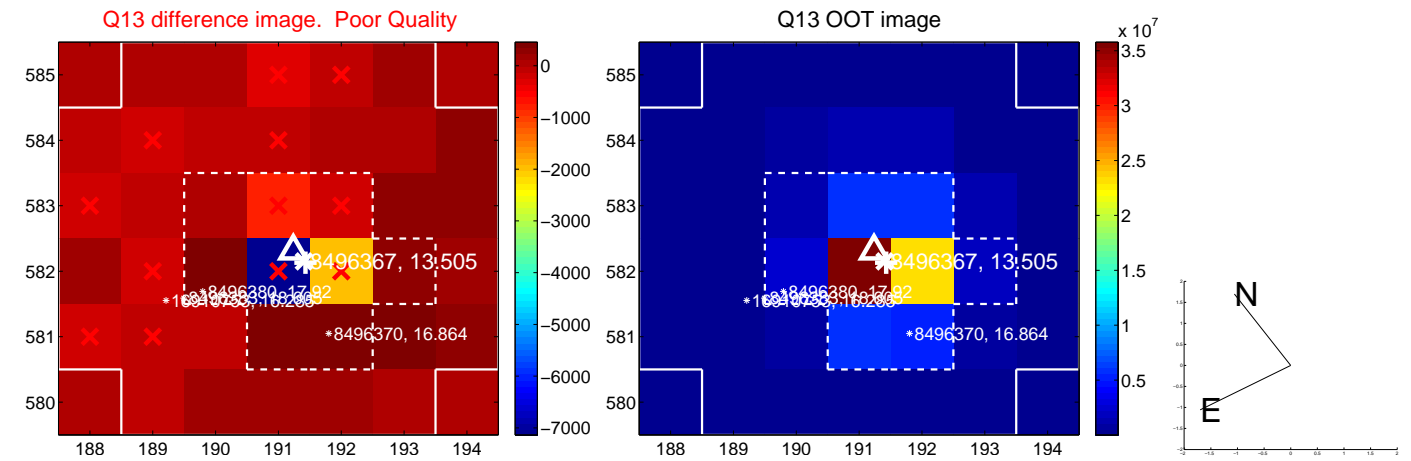
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



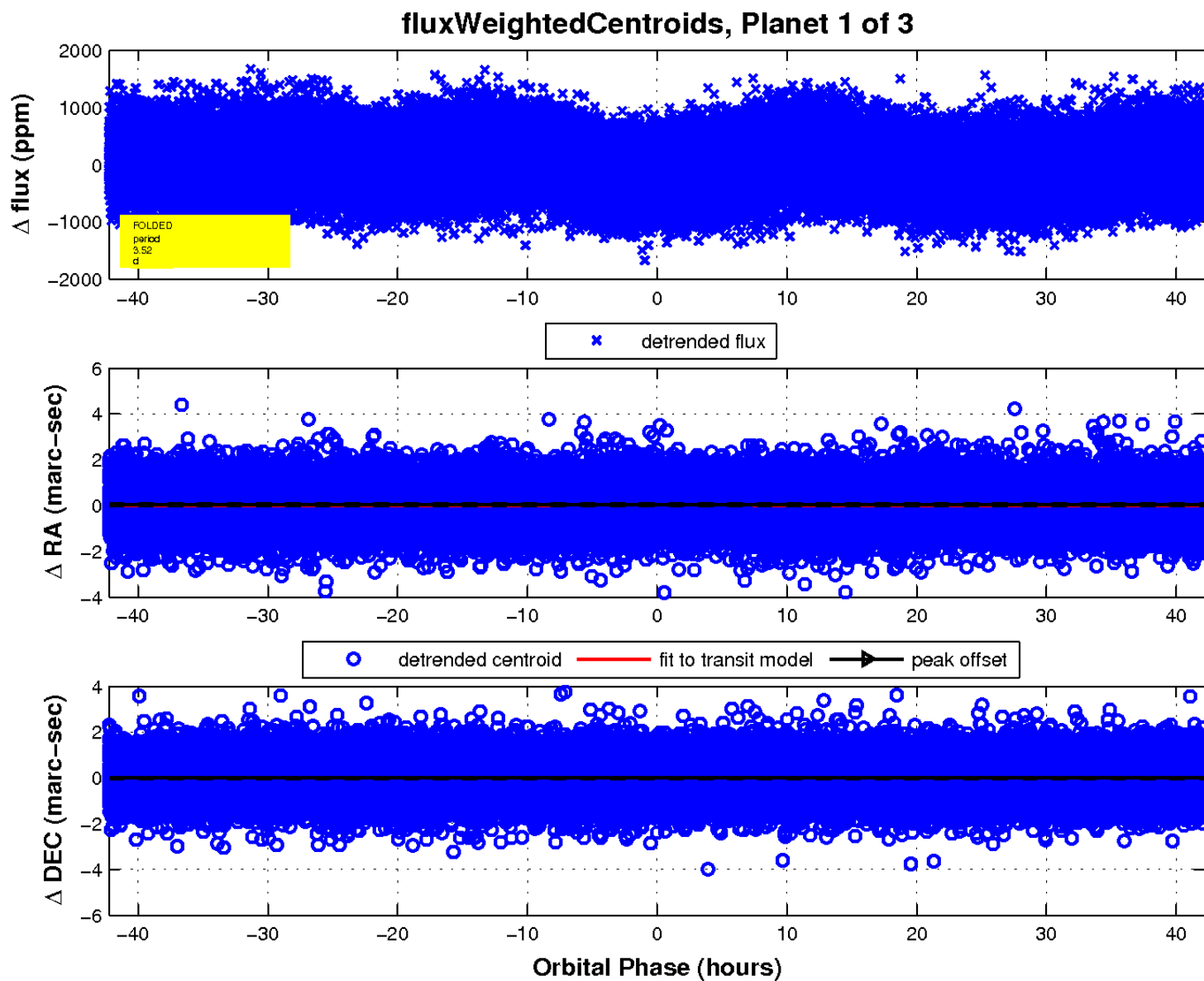
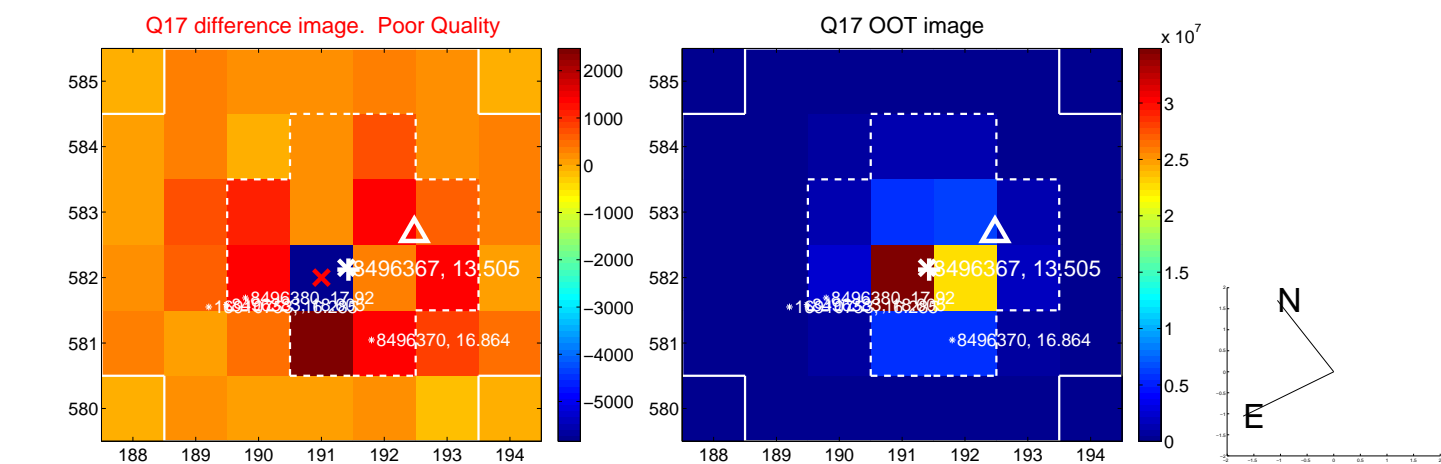
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

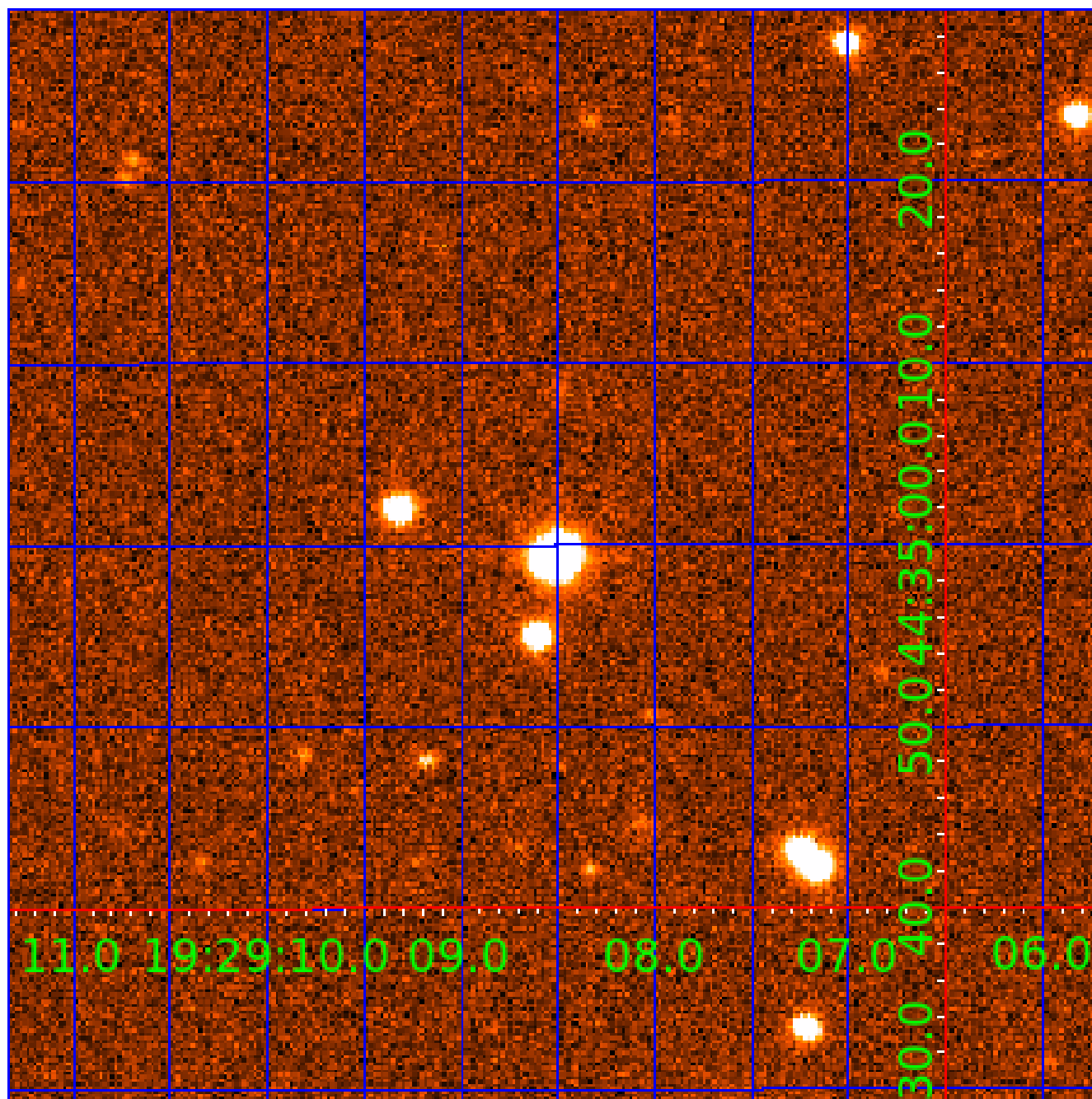


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008496367

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})
008496367-01	OBS	No	3.519395	132.356612	71.0	16.030	10.5	10.1	1.65	6952	1.62	2255.13
008496367-02	OBS	No	200.711047	137.207199	962.2	20.856	9.0	9.6	1.65	6952	9.54	10.27
008496367-03	OBS	No	12.951233	135.677430	373.8	23.938	8.3	9.3	1.65	6952	6.06	396.93

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008496367-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV
008496367-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV
008496367-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV

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

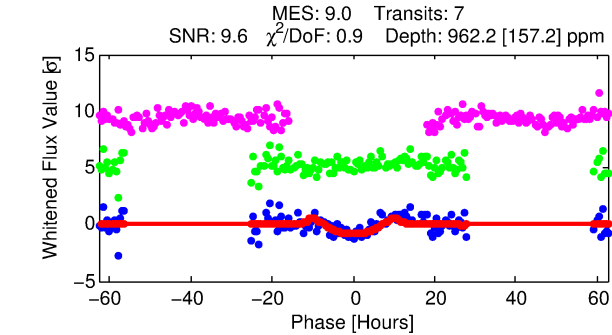
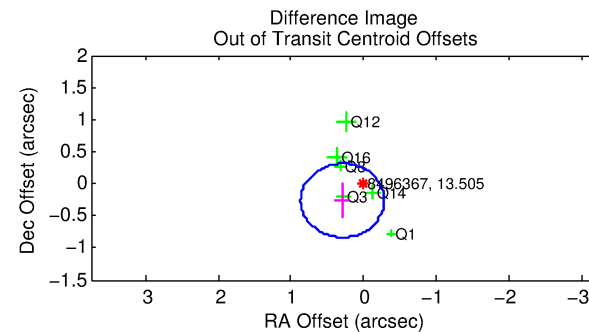
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

Ephemeris Match Information For 008496367-02

No Significant Match Found

KIC: 8496367 Candidate: 2 of 3 Period: 200.711 d

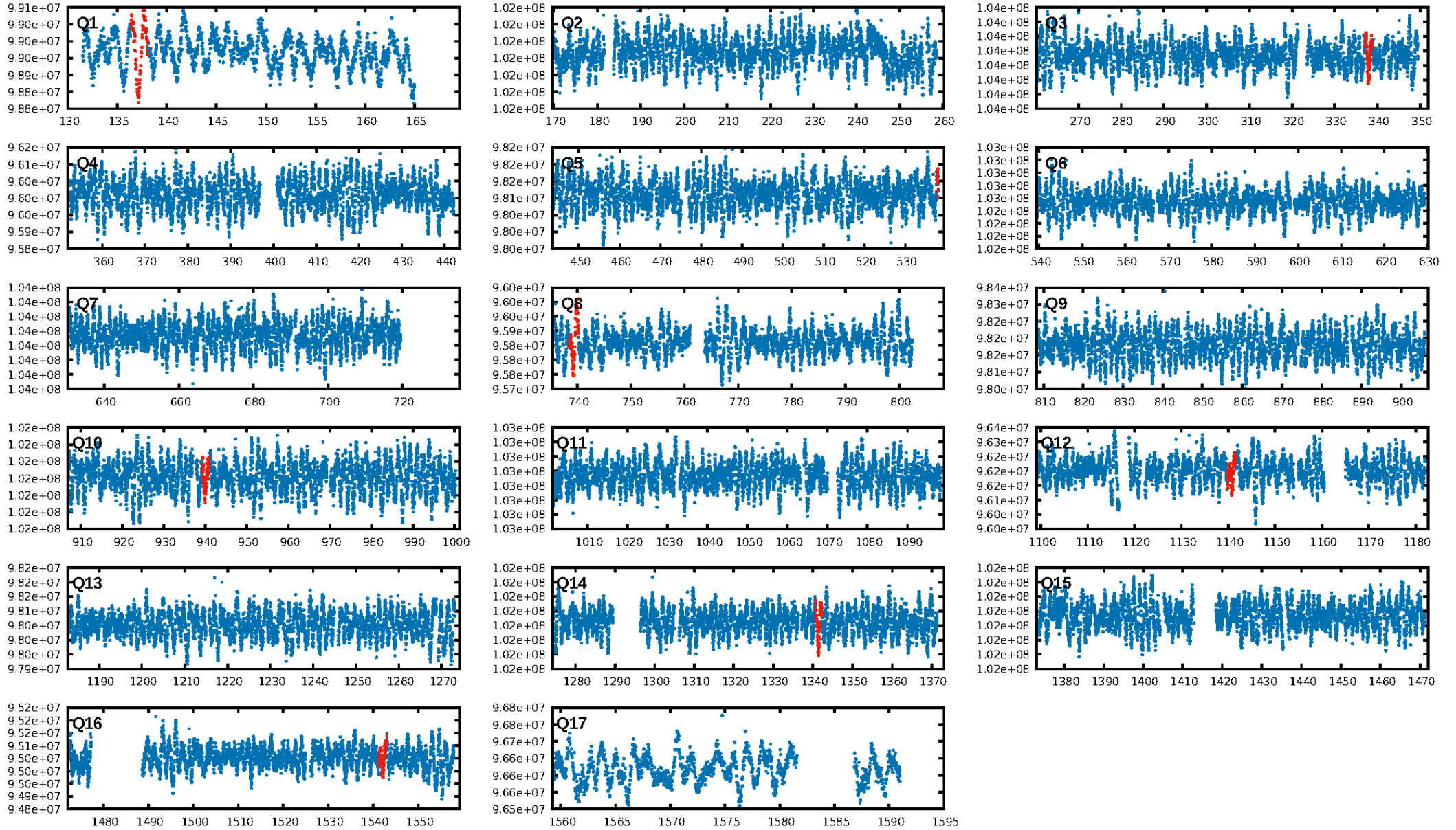


ShortPeriod-sig: 100.0% [141.93σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 6.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.22e-10
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: 2.582

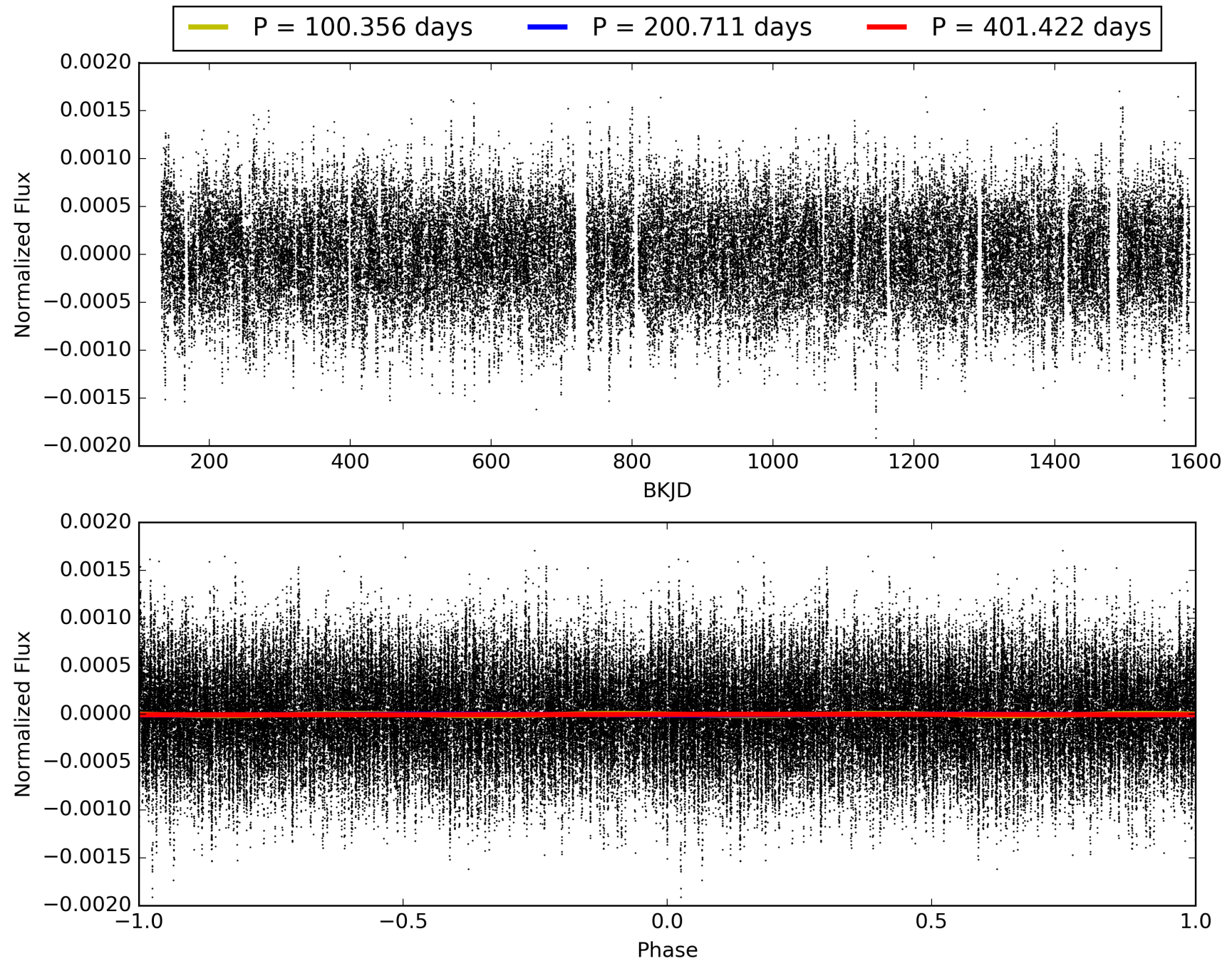
Centroid-sig: 66.1%
Centroid-so: 0.237 arcsec [1.10σ]
OotOffset-rm: 0.393 arcsec [2.05σ]
KicOffset-rm: 0.405 arcsec [1.52σ]
OotOffset-st: 1/1/3/1 [6]
KicOffset-st: 1/1/3/1 [6]
DiffImageQuality-fgm: 1.00 [6/6]
DiffImageOverlap-fno: 0.00 [0/6]

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

TCE 008496367-02, PDC Light Curves

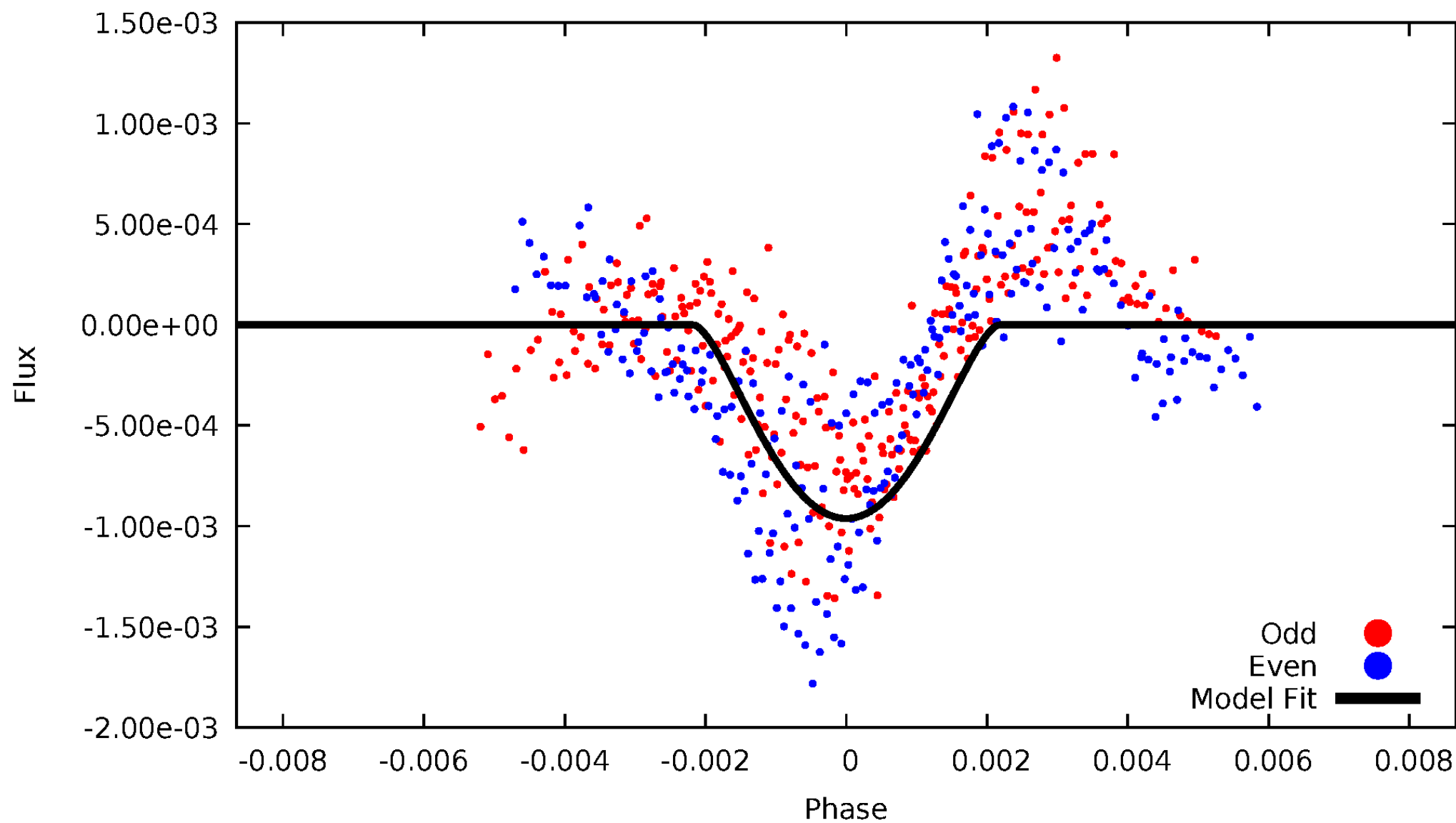


TCE 008496367-02



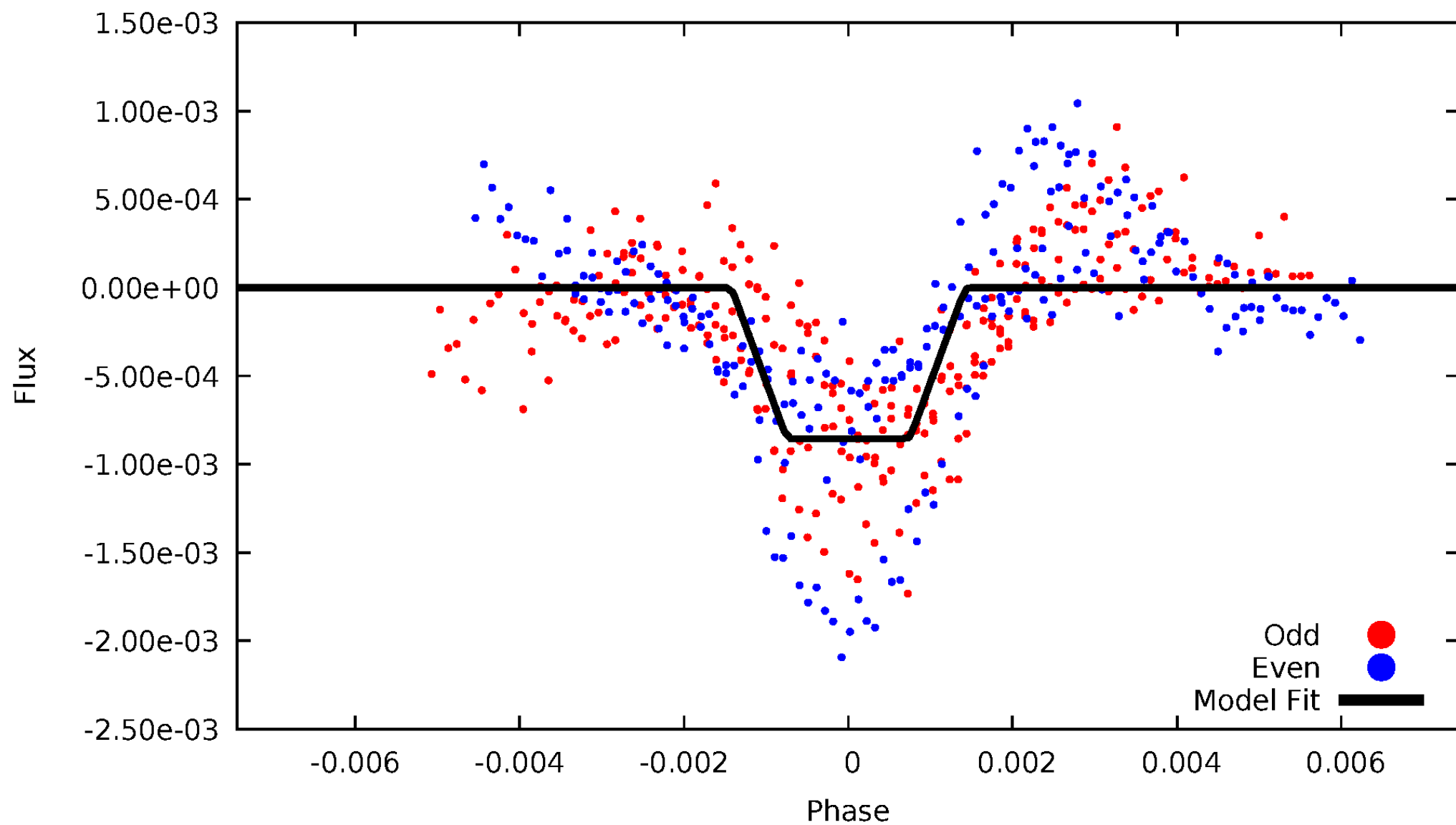
DV Odd/Even

TCE 008496367-02



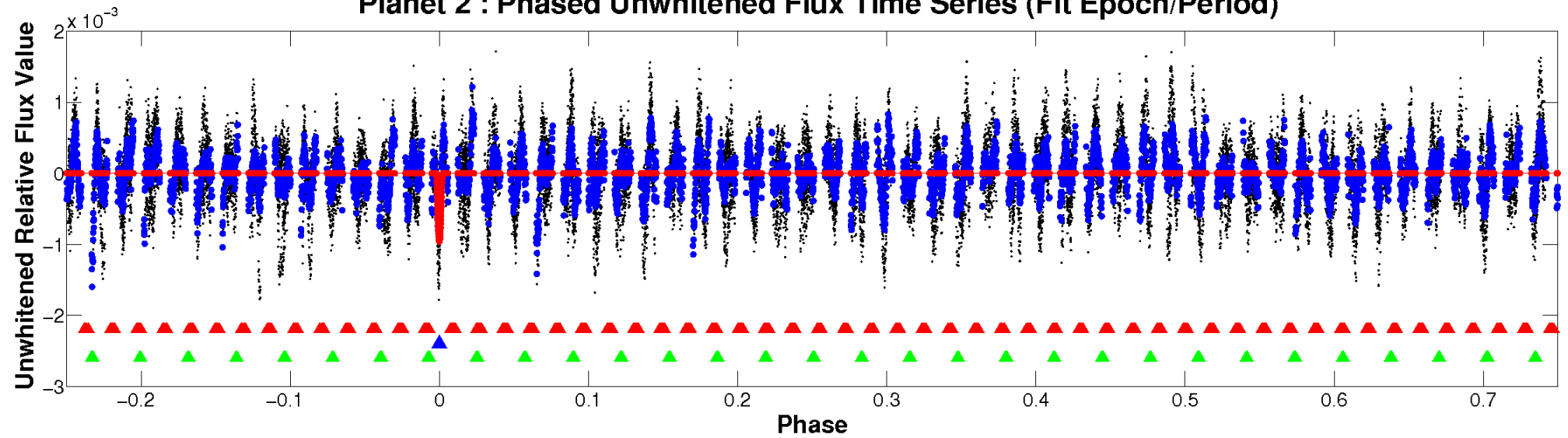
ALT Odd/Even

TCE 008496367-02

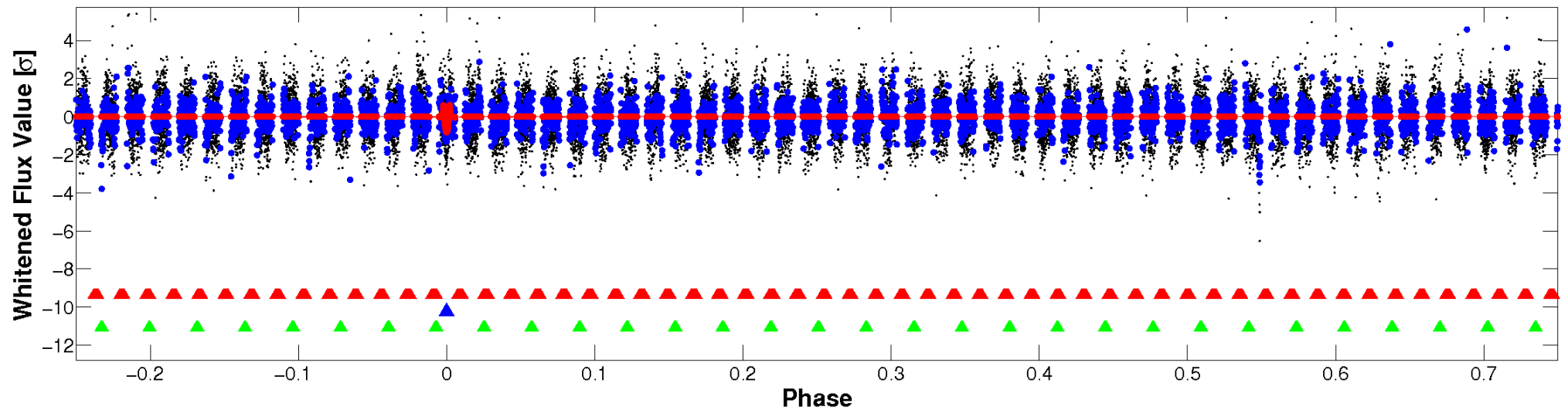


Non-Whitened Vs. Whitened Light Curve

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

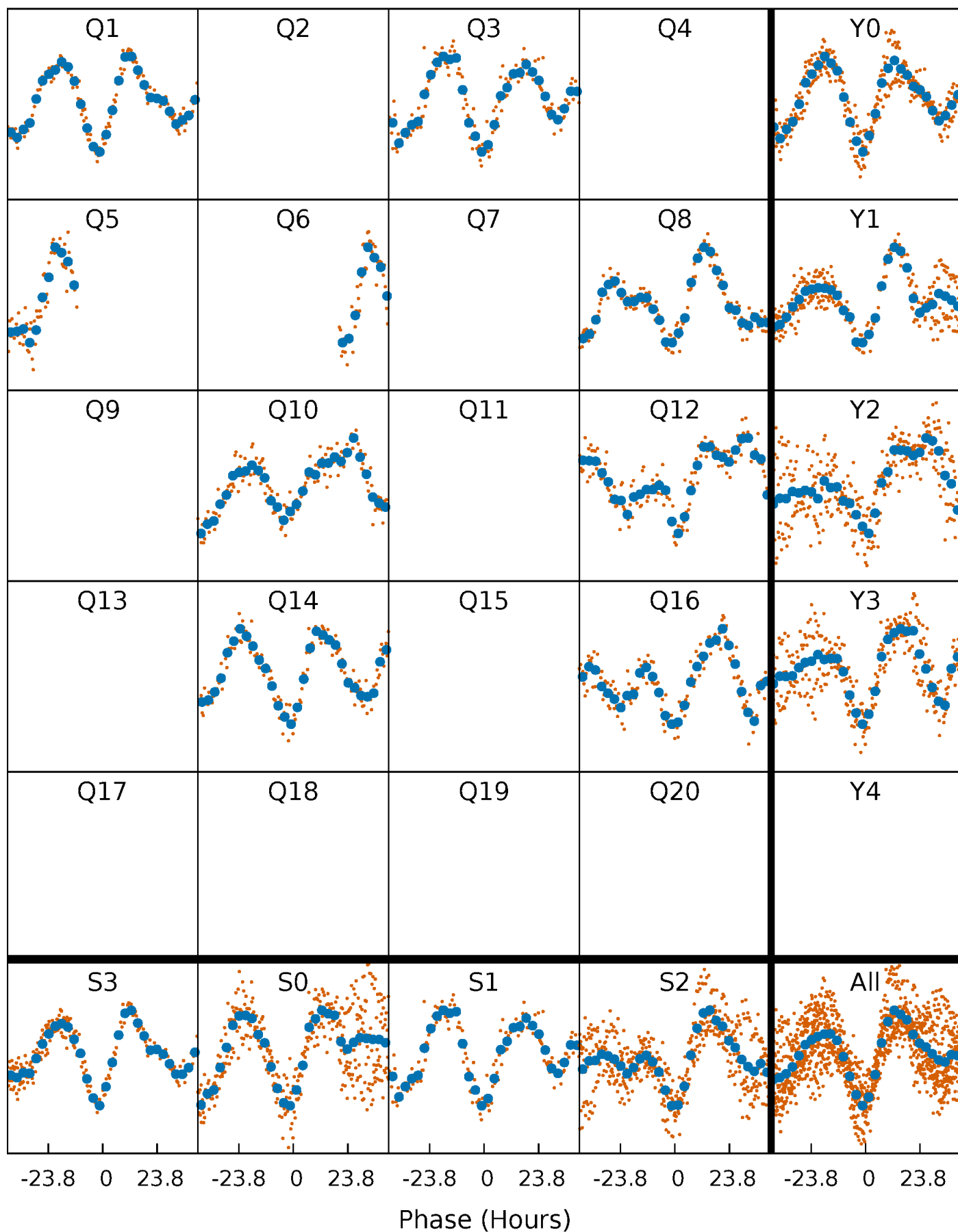


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



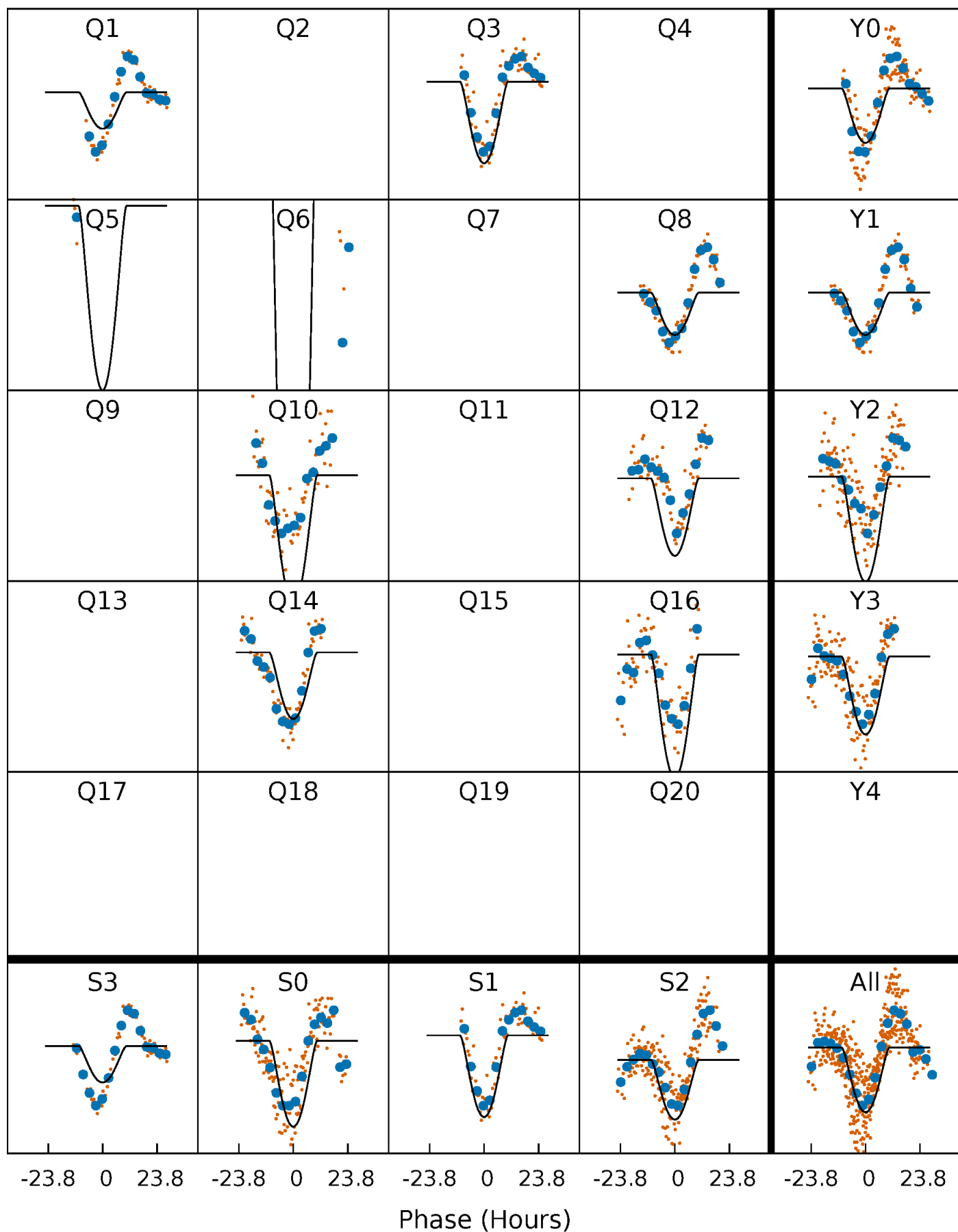
PDC Quarter-Phased Transit Curves

TCE 008496367-02 P=200.711047 Days $T_0=137.207199$ (BKJD)



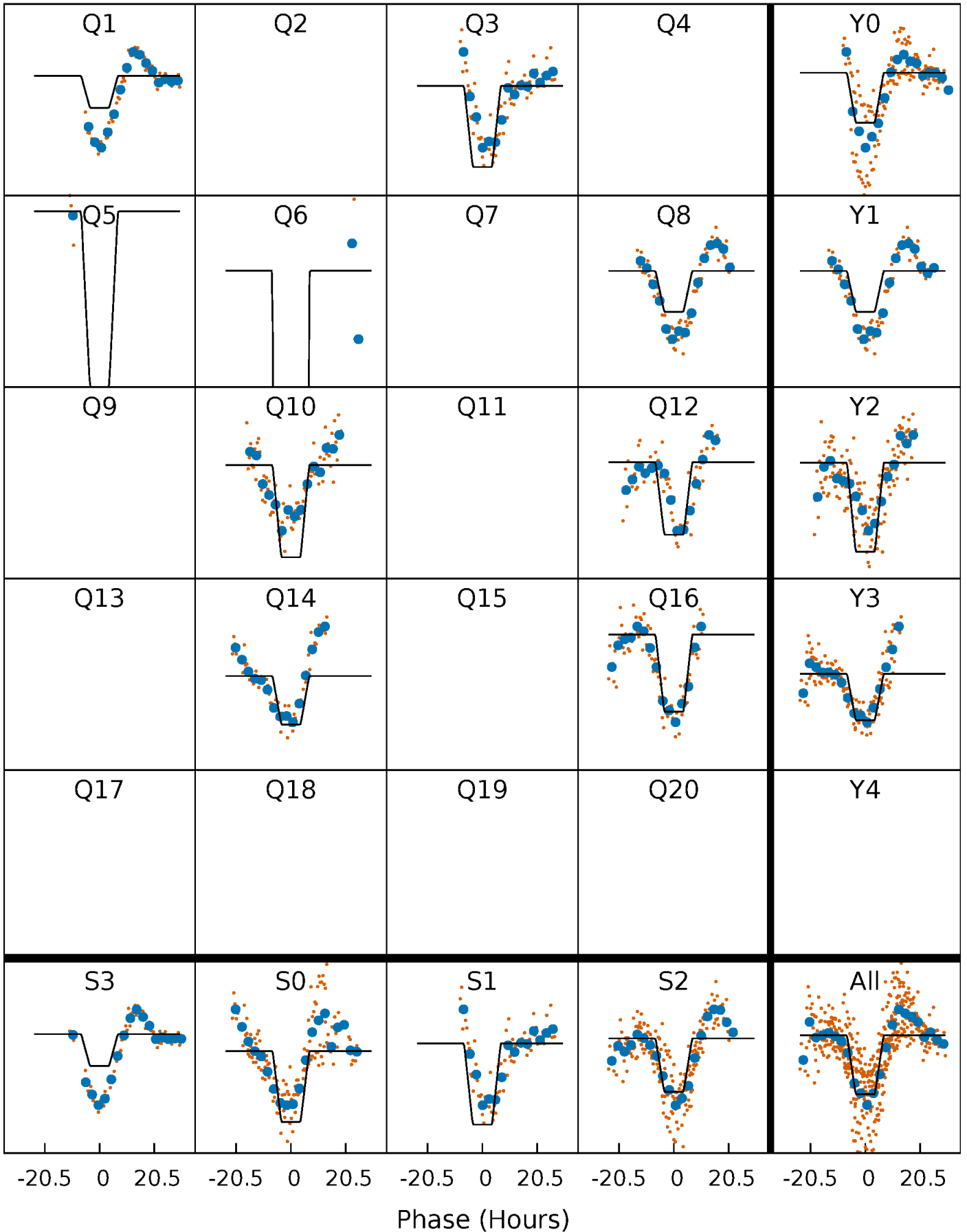
DV Quarter-Phased Transit Curves

TCE 008496367-02 P=200.711047 Days $T_0=137.207199$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

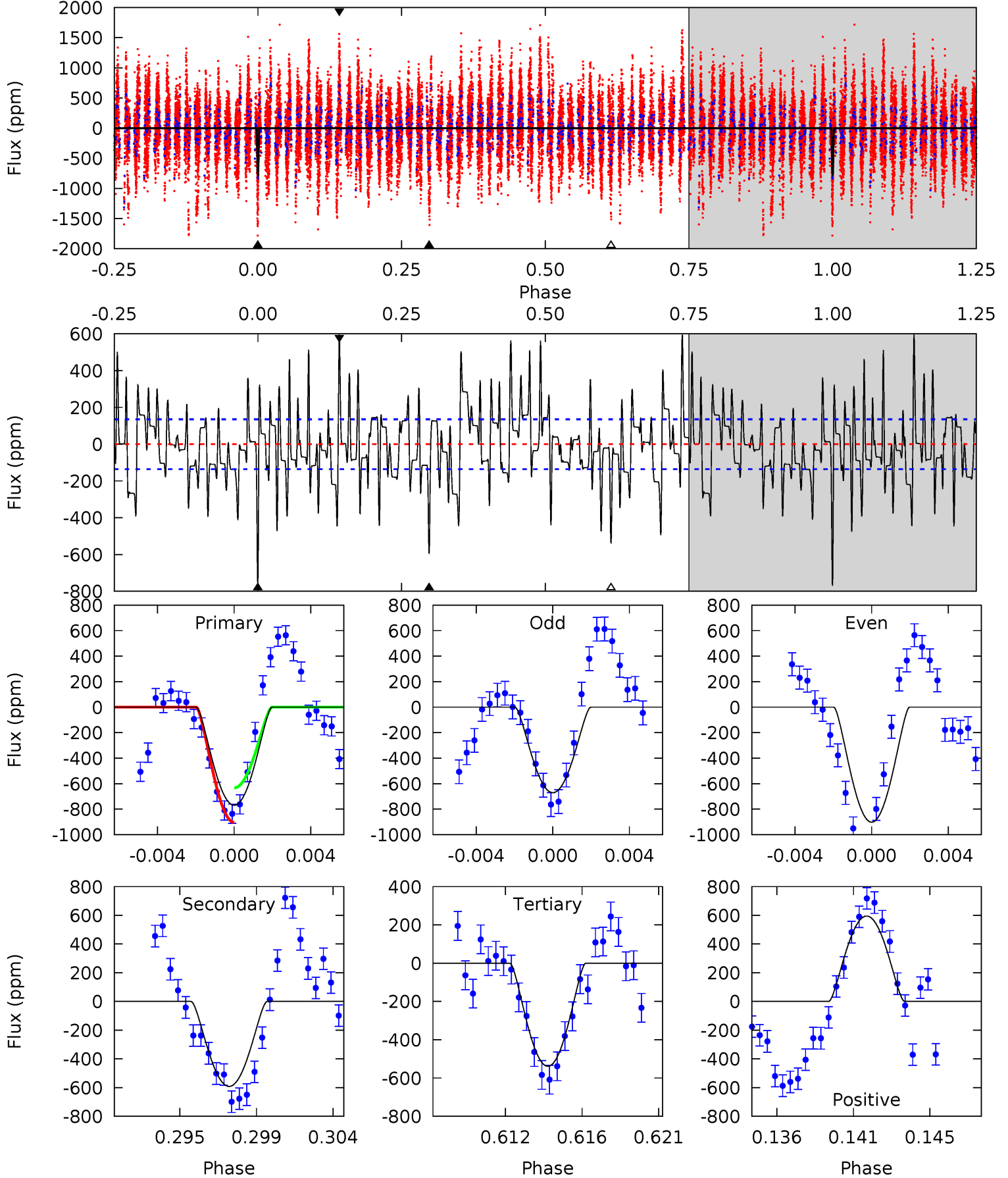
TCE 008496367-02 P=200.718860 Days $T_0=137.127622$ (BKJD)



DV Model-Shift Uniqueness Test

008496367-02, P = 200.711047 Days, E = 137.207199 Days

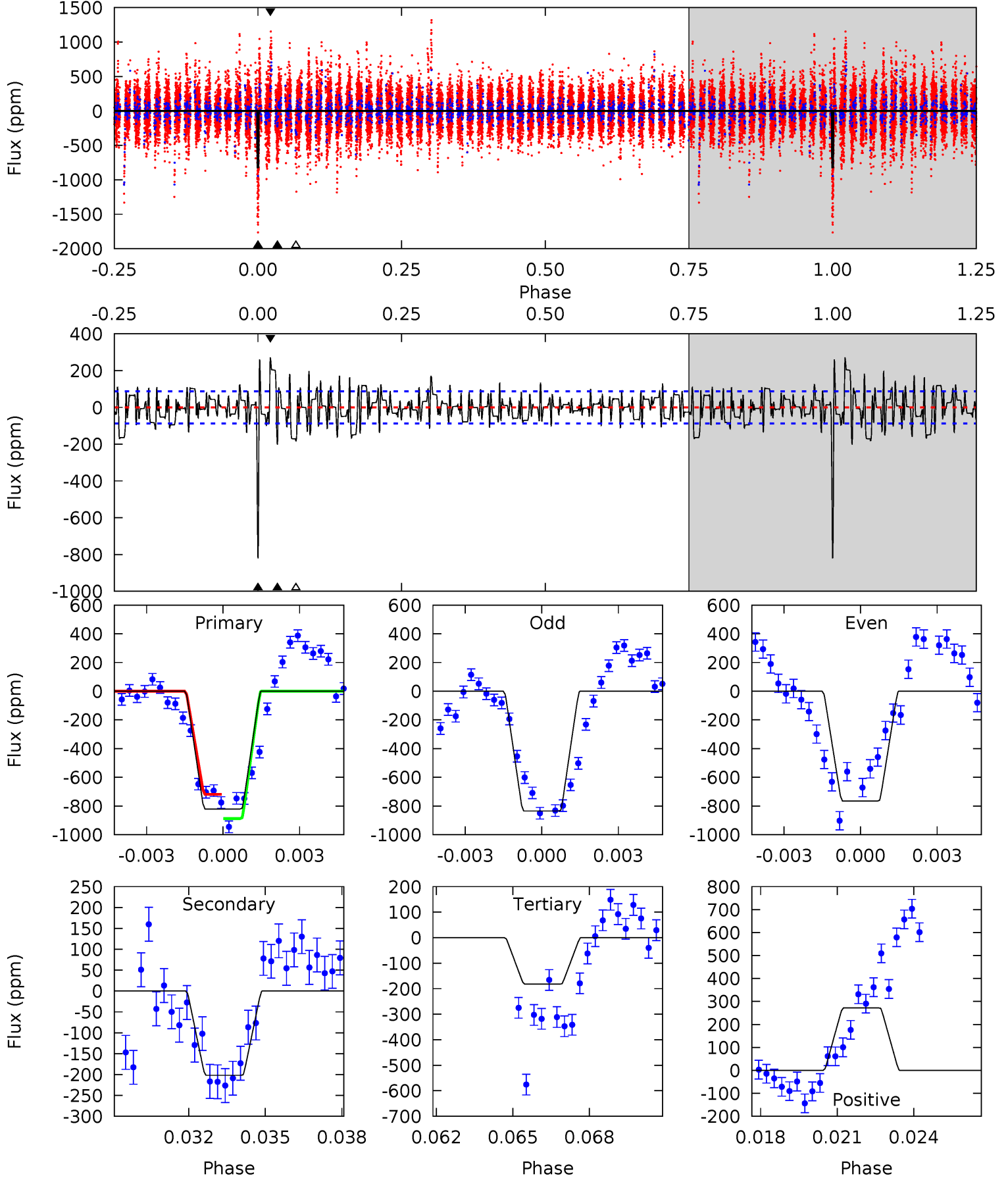
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.4	22.6	20.6	22.8	5.18	2.85	8.28	8.82	6.67	2.04	-0.12	4.41	1.04	0.44	5.17



Alt Model-Shift Uniqueness Test

008496367-02, P = 200.718860 Days, E = 137.127622 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
49.3	12.1	10.9	16.3	5.26	2.97	3.77	38.3	32.9	1.18	-4.22	2.01	1.30	0.25	5.05



Stellar Parameters For KIC 008496367

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6952^{+192}_{-264}	$4.138^{+0.180}_{-0.180}$	$-0.220^{+0.250}_{-0.350}$	$1.647^{+0.487}_{-0.398}$	$1.364^{+0.202}_{-0.224}$	$0.430^{+0.407}_{-0.206}$
	+3%/-4%	+4%/-4%	+114%/-159%	+30%/-24%	+15%/-16%	+94%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 008496367-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-592 ± 26	$10.95^{+7.69}_{-6.75}$	638^{+50}_{-50}	4549^{+2630}_{-799}	1585^{+8629}_{-1067}
Alt.	-202 ± 17	$8.26^{+6.76}_{-5.60}$	637^{+50}_{-45}	4118^{+2579}_{-717}	900^{+7785}_{-639}

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 $A_{obs} \gg 1.0$

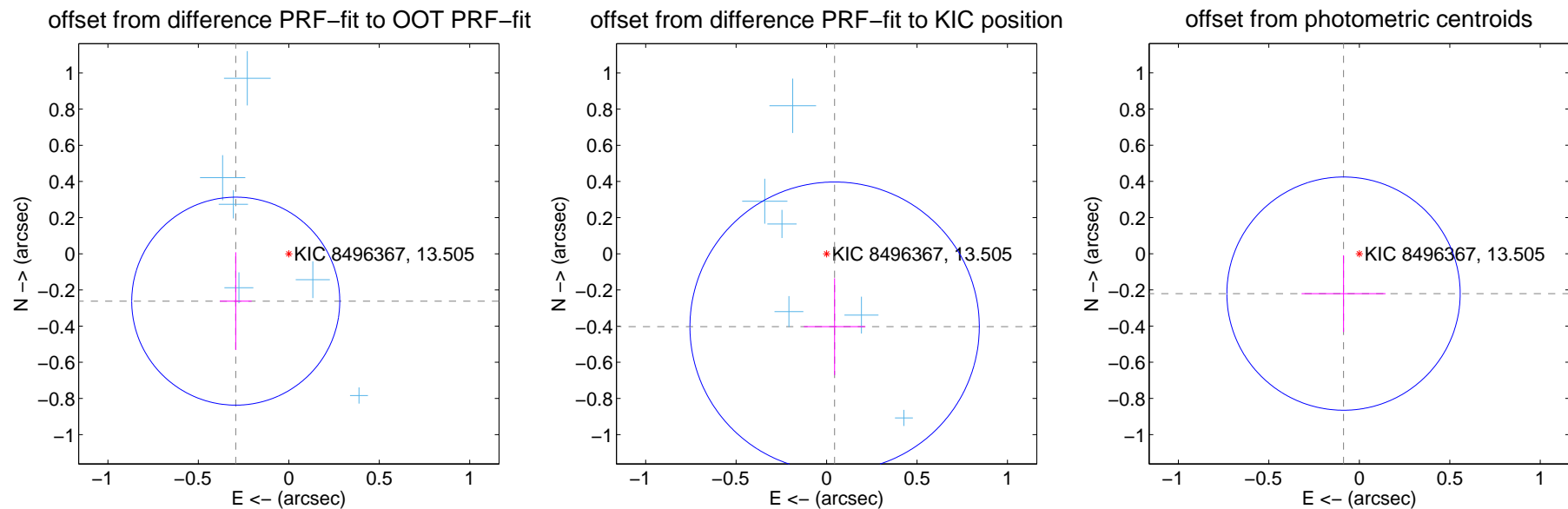
DV Centroid Data

Supplemental centroid analysis for 008496367-02. Kepler magnitude: 13.51. Transit SNR 9.61

There are 6 quarters with good PRF difference image offsets

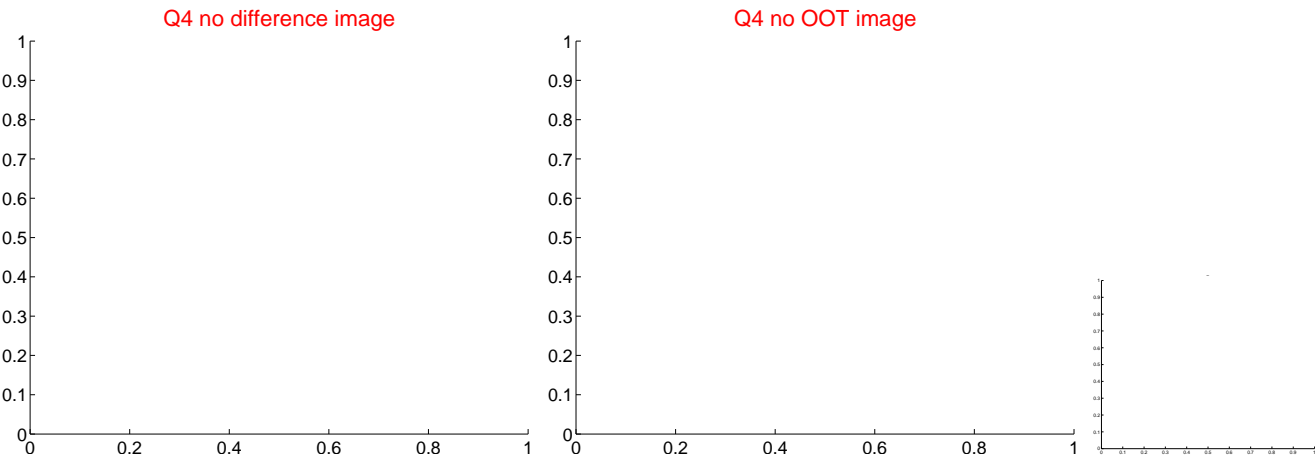
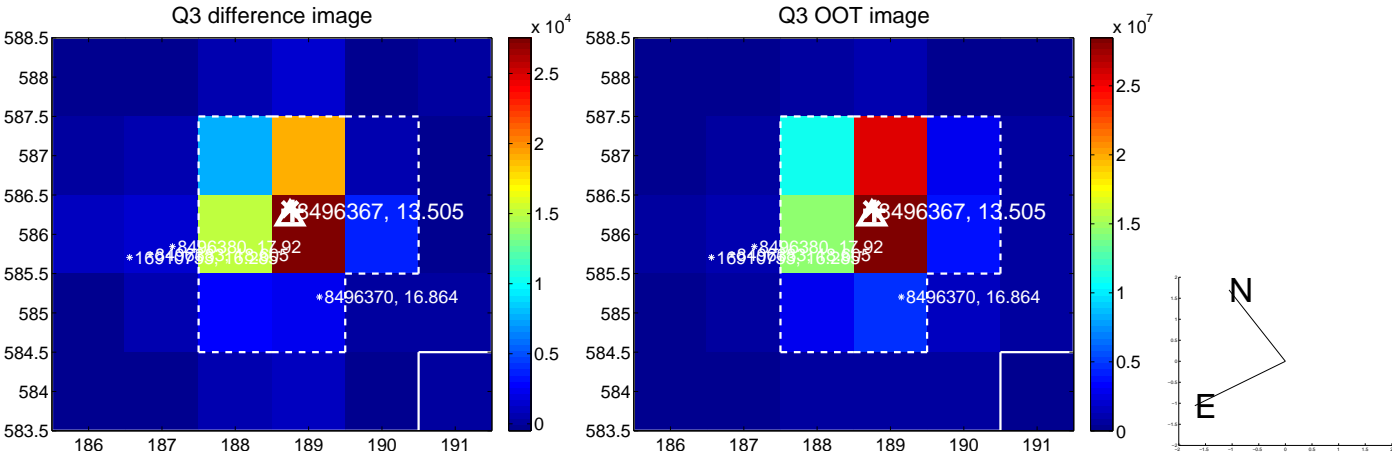
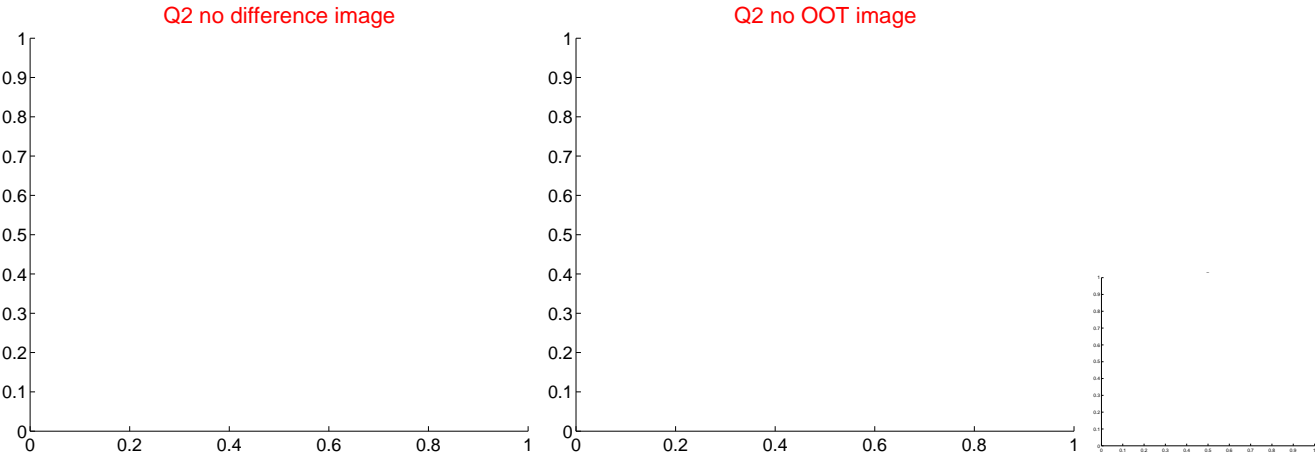
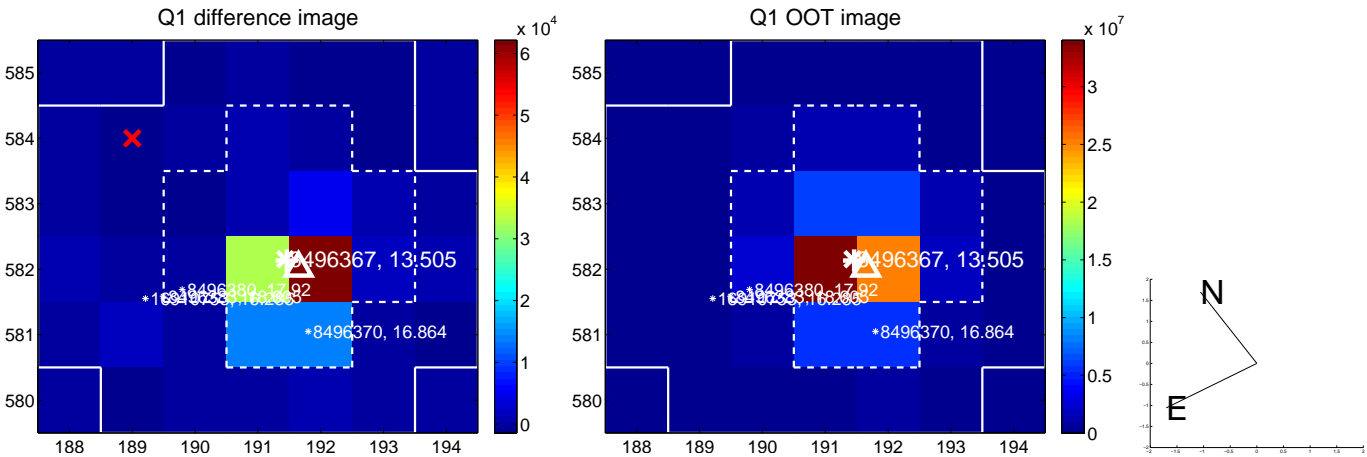
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.393 ± 0.192	2.05	0.293 ± 0.088	-0.262 ± 0.270
PRF-fit source offset from KIC position	0.405 ± 0.267	1.52	-0.044 ± 0.170	-0.403 ± 0.268
photometric centroid source offset	0.24 ± 0.21	1.10	0.09 ± 0.23	-0.22 ± 0.21



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.

Q5 no difference image



Q5 no OOT image



Q6 no difference image



Q6 no OOT image



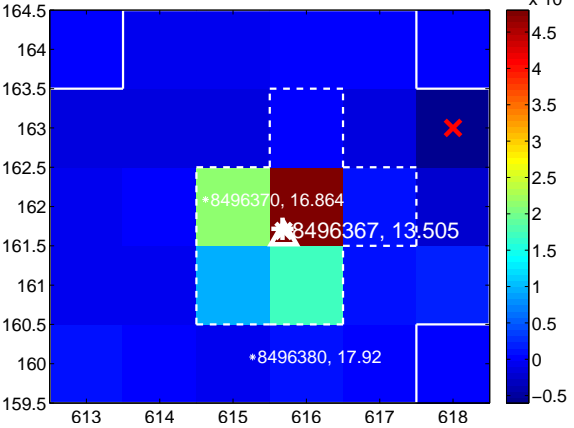
Q7 no difference image



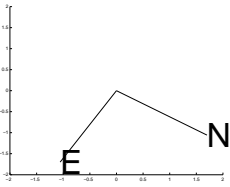
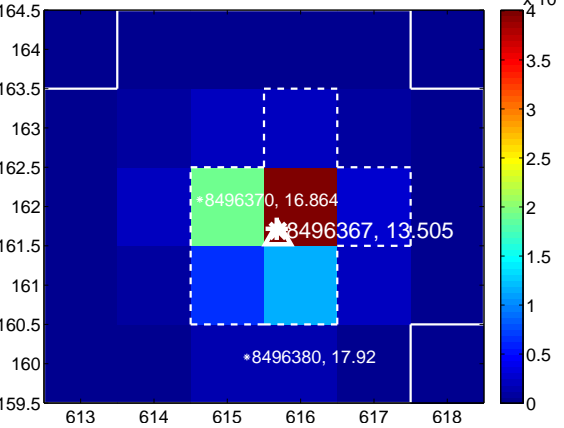
Q7 no OOT image



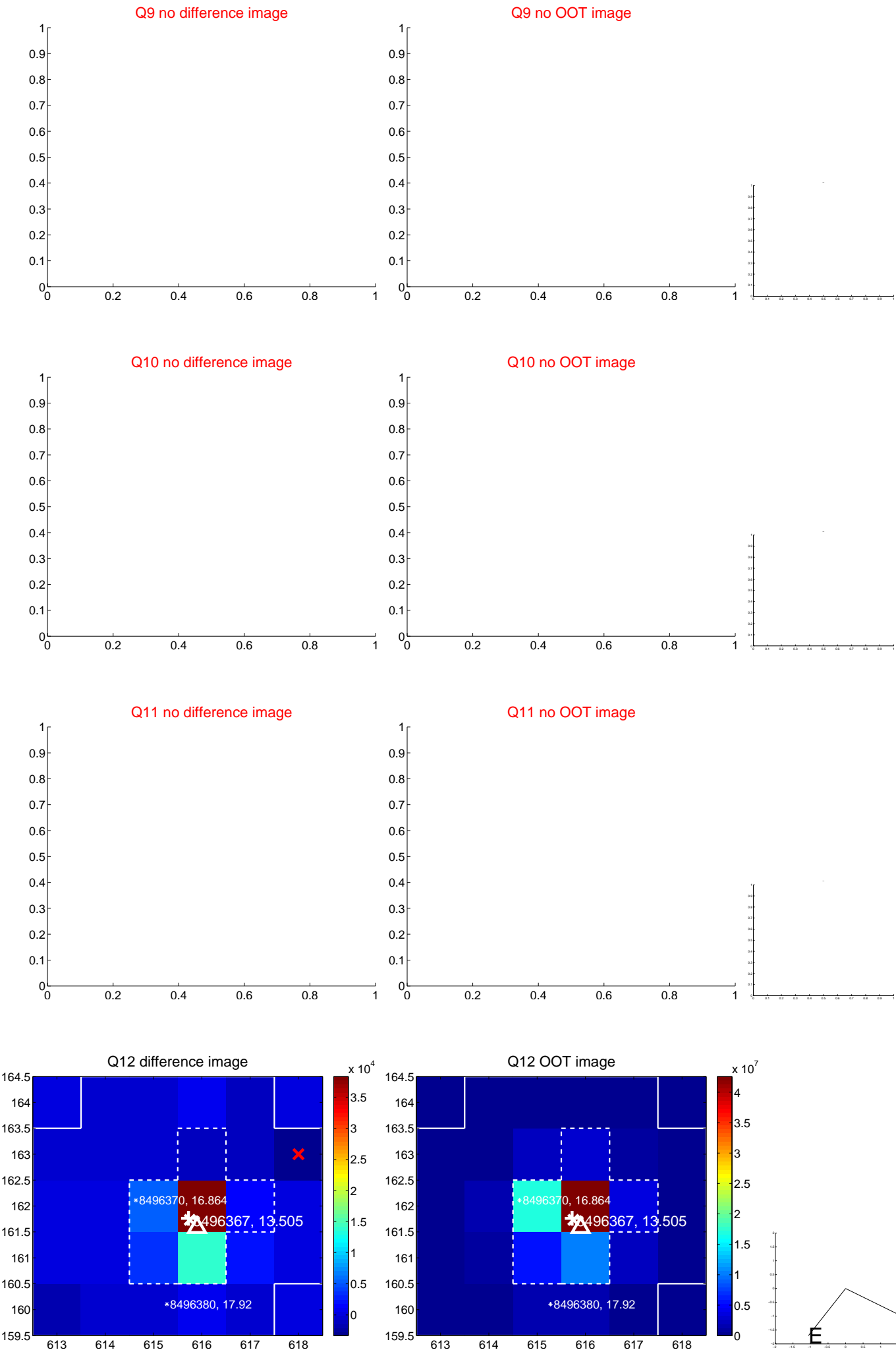
Q8 difference image



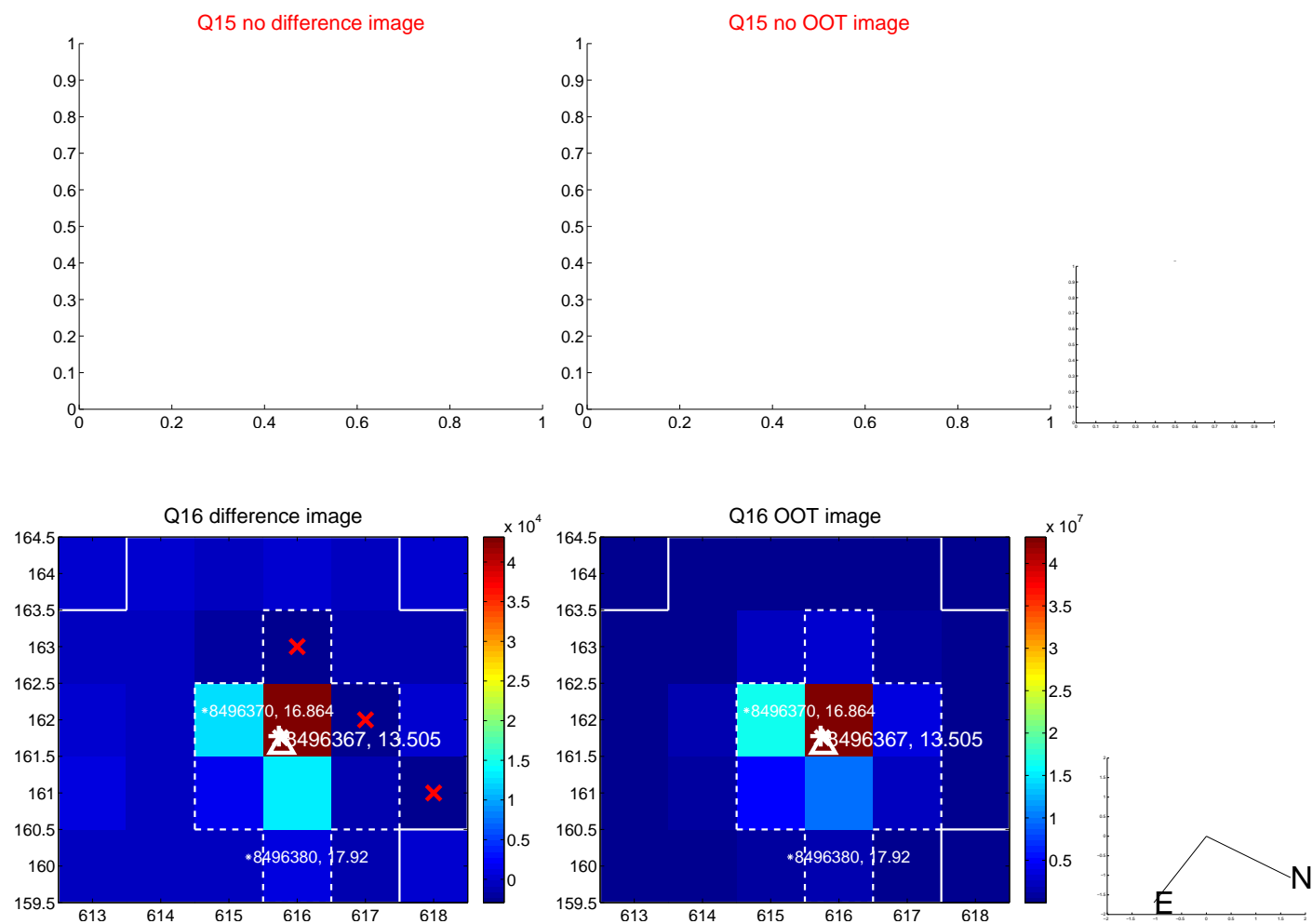
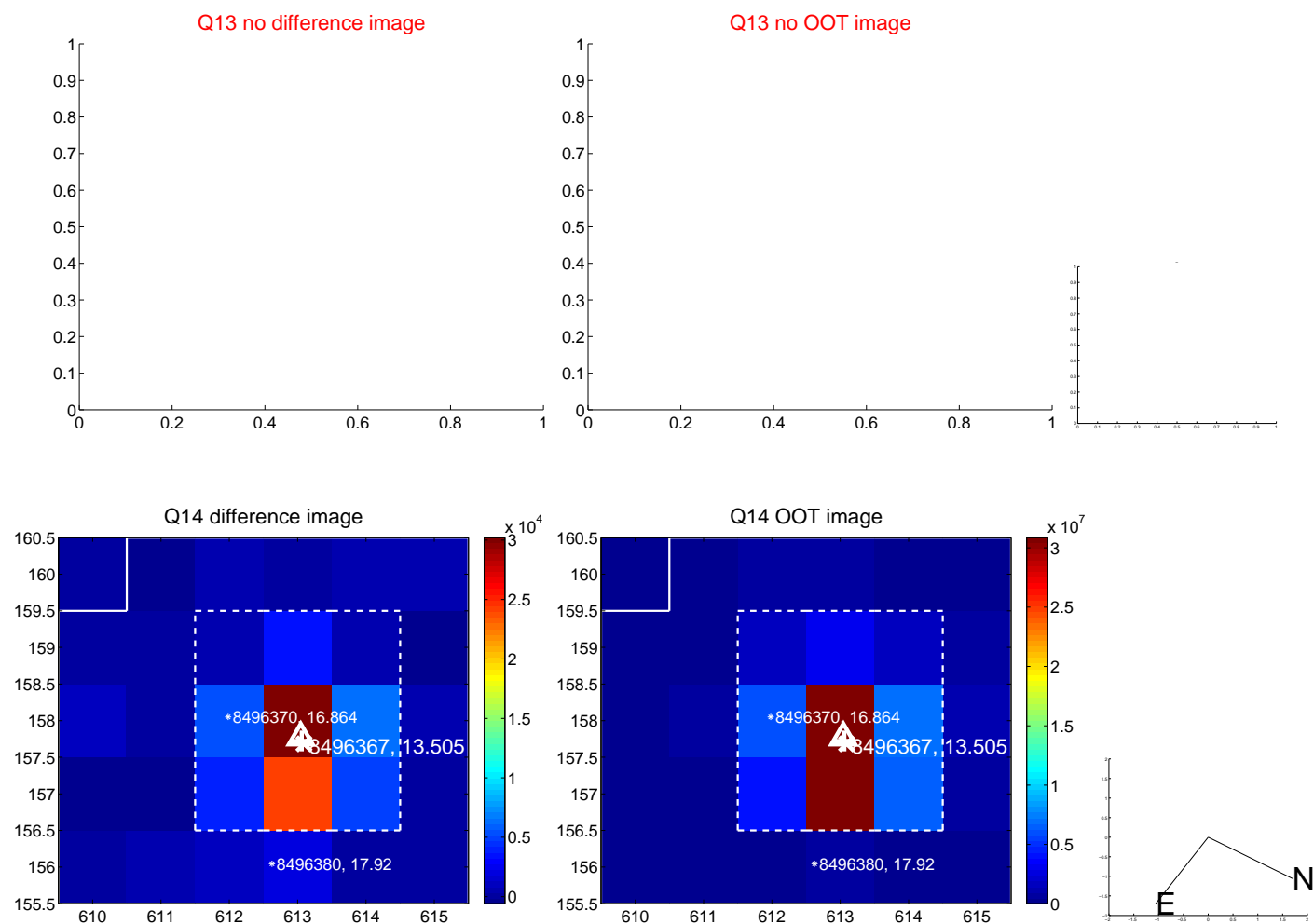
Q8 OOT image



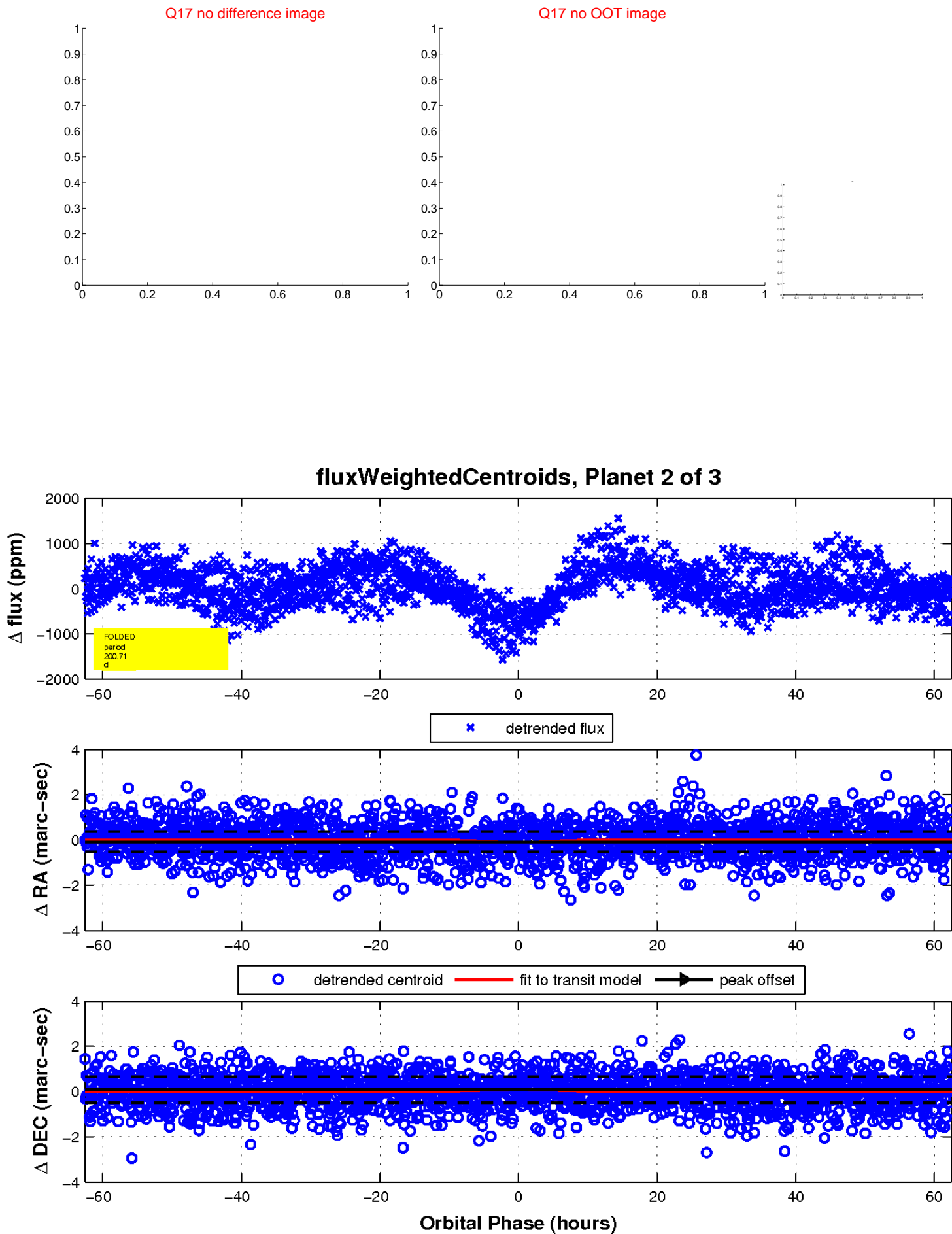
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

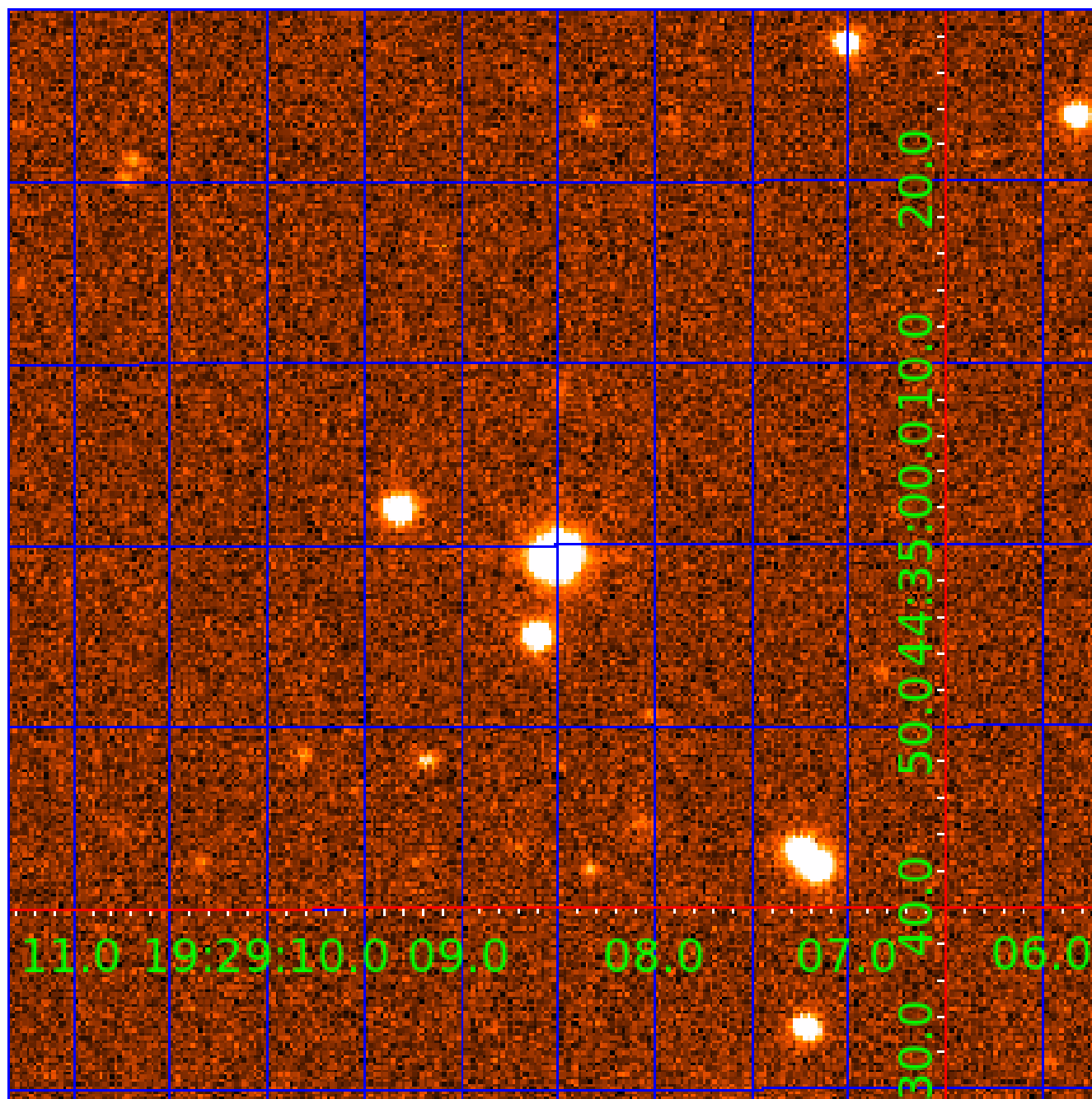


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008496367

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})
008496367-01	OBS	No	3.519395	132.356612	71.0	16.030	10.5	10.1	1.65	6952	1.62	2255.13
008496367-02	OBS	No	200.711047	137.207199	962.2	20.856	9.0	9.6	1.65	6952	9.54	10.27
008496367-03	OBS	No	12.951233	135.677430	373.8	23.938	8.3	9.3	1.65	6952	6.06	396.93

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008496367-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV
008496367-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—MOD_NONUNIQ_DV
008496367-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV

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

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

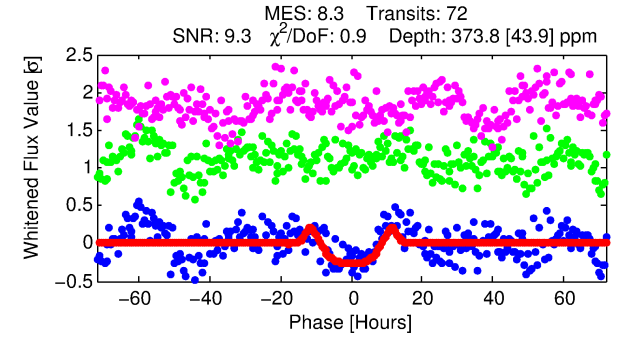
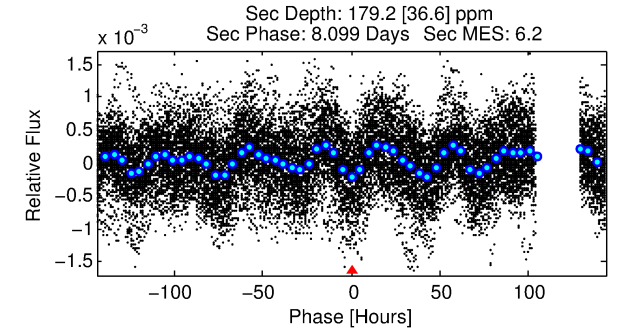
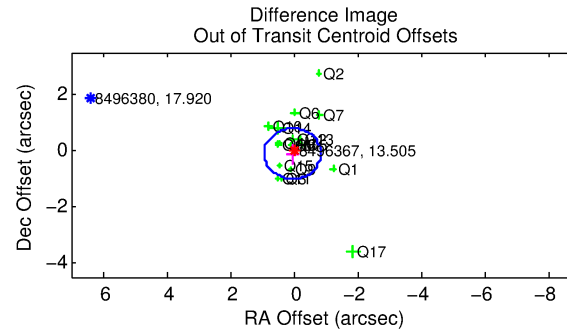
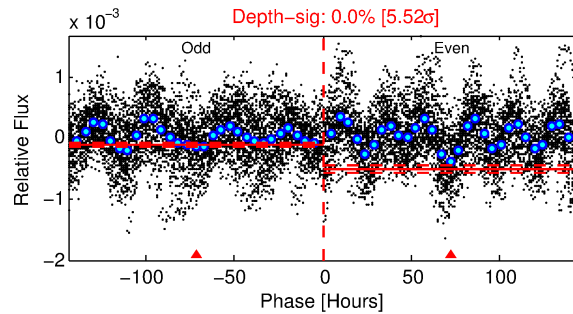
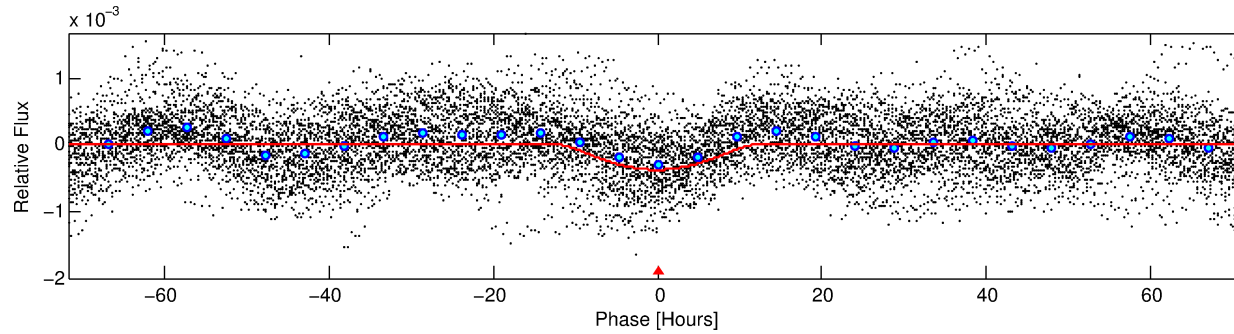
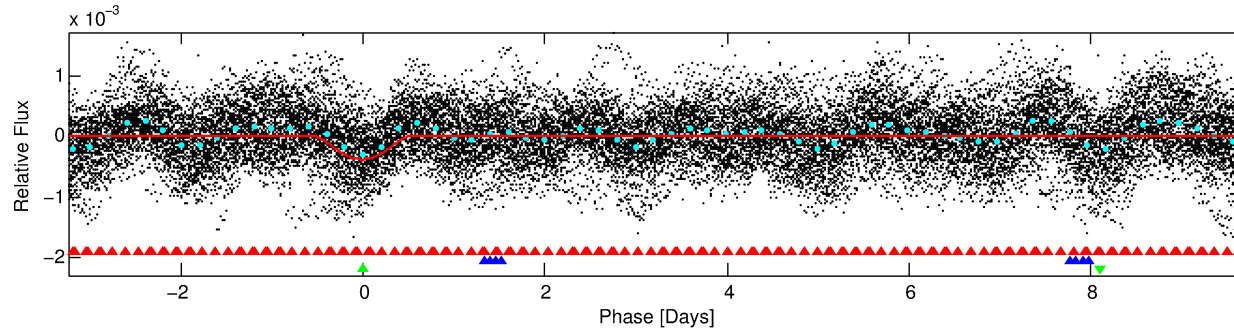
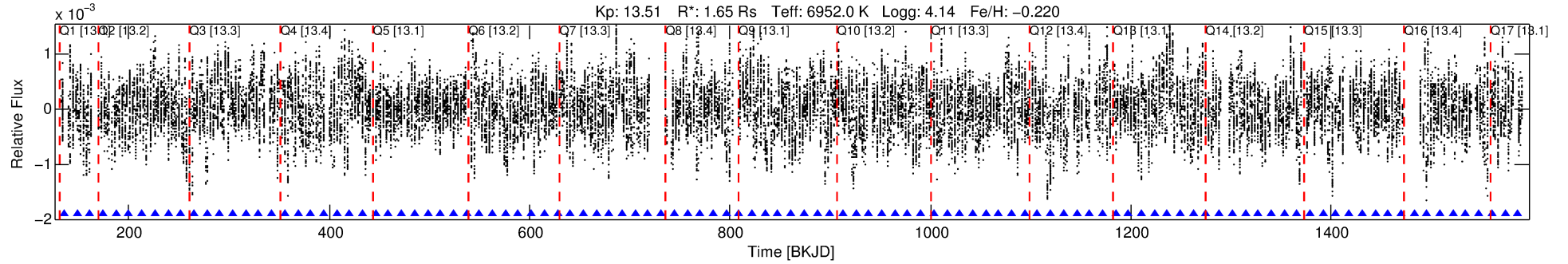
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008496367-03

No Significant Match Found

DV One-Page Summary

KIC: 8496367 Candidate: 3 of 3 Period: 12.951 d



DV Fit Results:

Period = 12.95123 [0.00050] d
Epoch = 135.6774 [0.0313] BKJD
Rp/R* = 0.0337 [0.0262]
a/R* = 1.49 [0.13]
b = 1.00 [0.04]
Seff = 396.93 [147.60]
Teq = 1138 [106] K
Rp = 6.06 [5.03] Re
a = 0.1196 [0.0288] AU
Ag = 38.42 [61.55] [0.61 σ]
Teffp = 4381 [1723] K [1.88 σ]

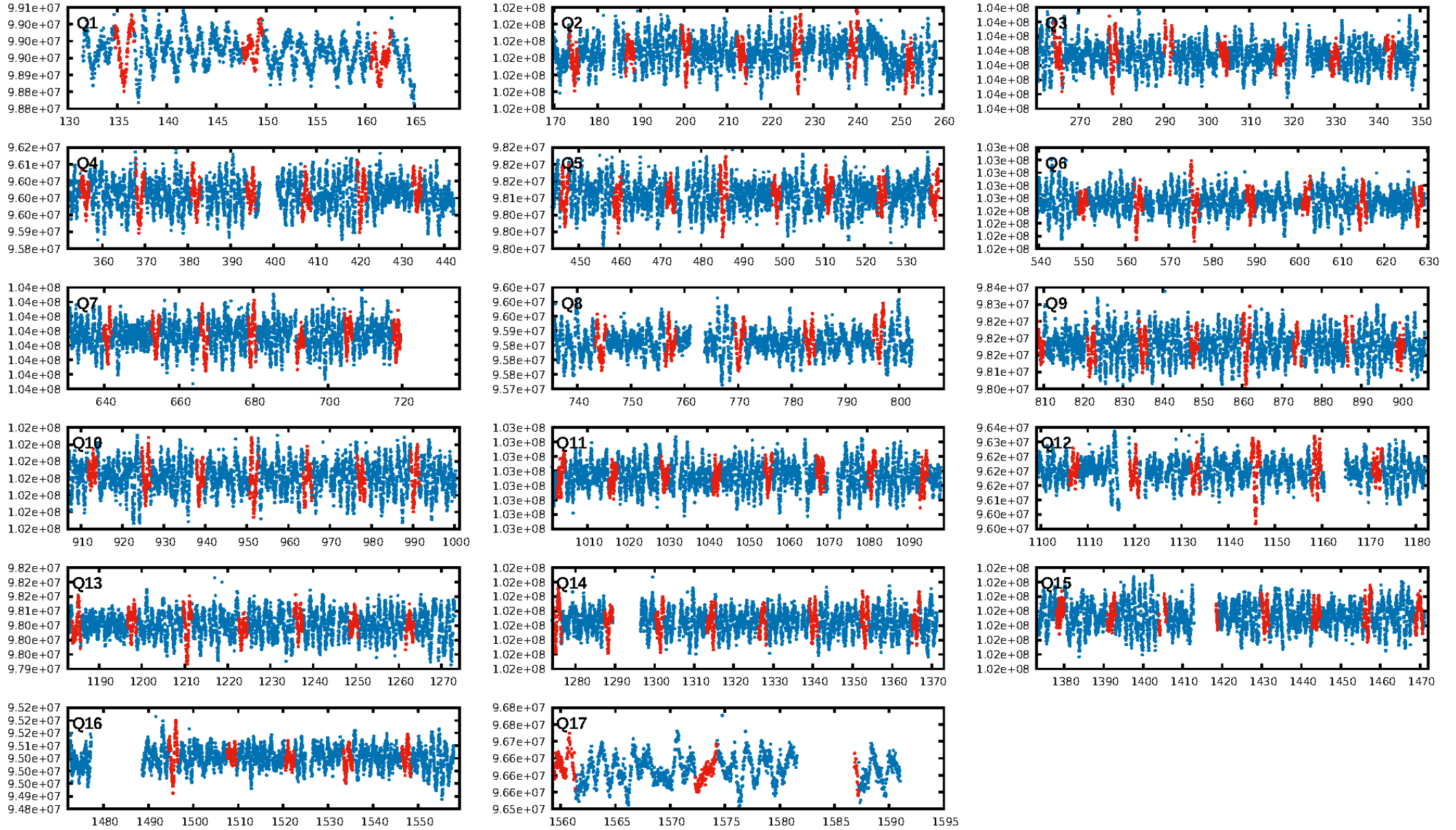
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [7.86 σ]
LongPeriod-sig: 100.0% [141.93 σ]
ModelChiSquare2-sig: 4.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.83e-10
RollingBand-fgt: 1.00 [68/68]
GhostDiagnostic-chr: 1.877
Centroid-sig: 59.7%
Centroid-so: 0.075 arcsec [0.62 σ]
OotOffset-rm: 0.117 arcsec [0.39 σ]
KicOffset-rm: 0.245 arcsec [0.76 σ]
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]

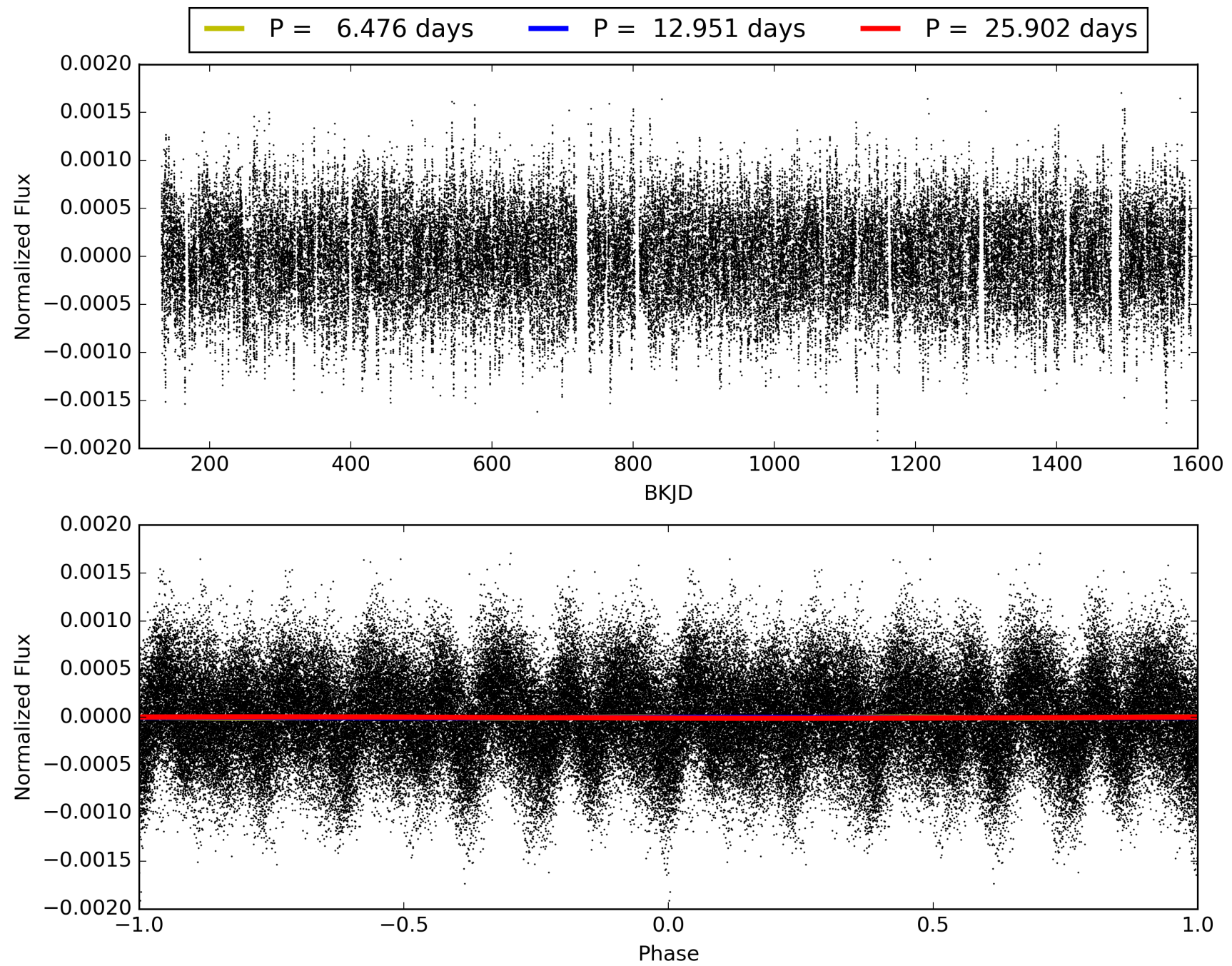
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:04:51 Z

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

TCE 008496367-03, PDC Light Curves

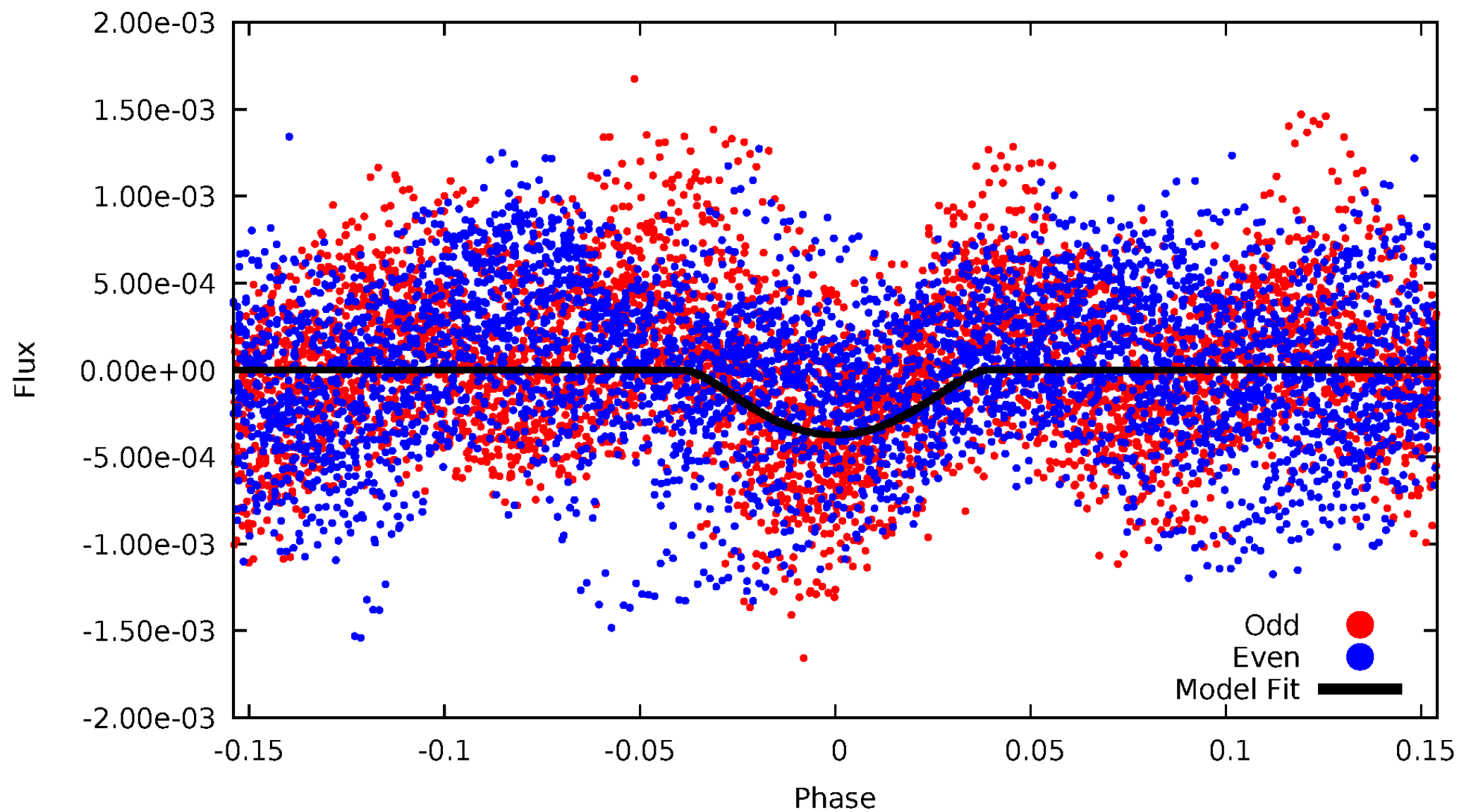


TCE 008496367-03



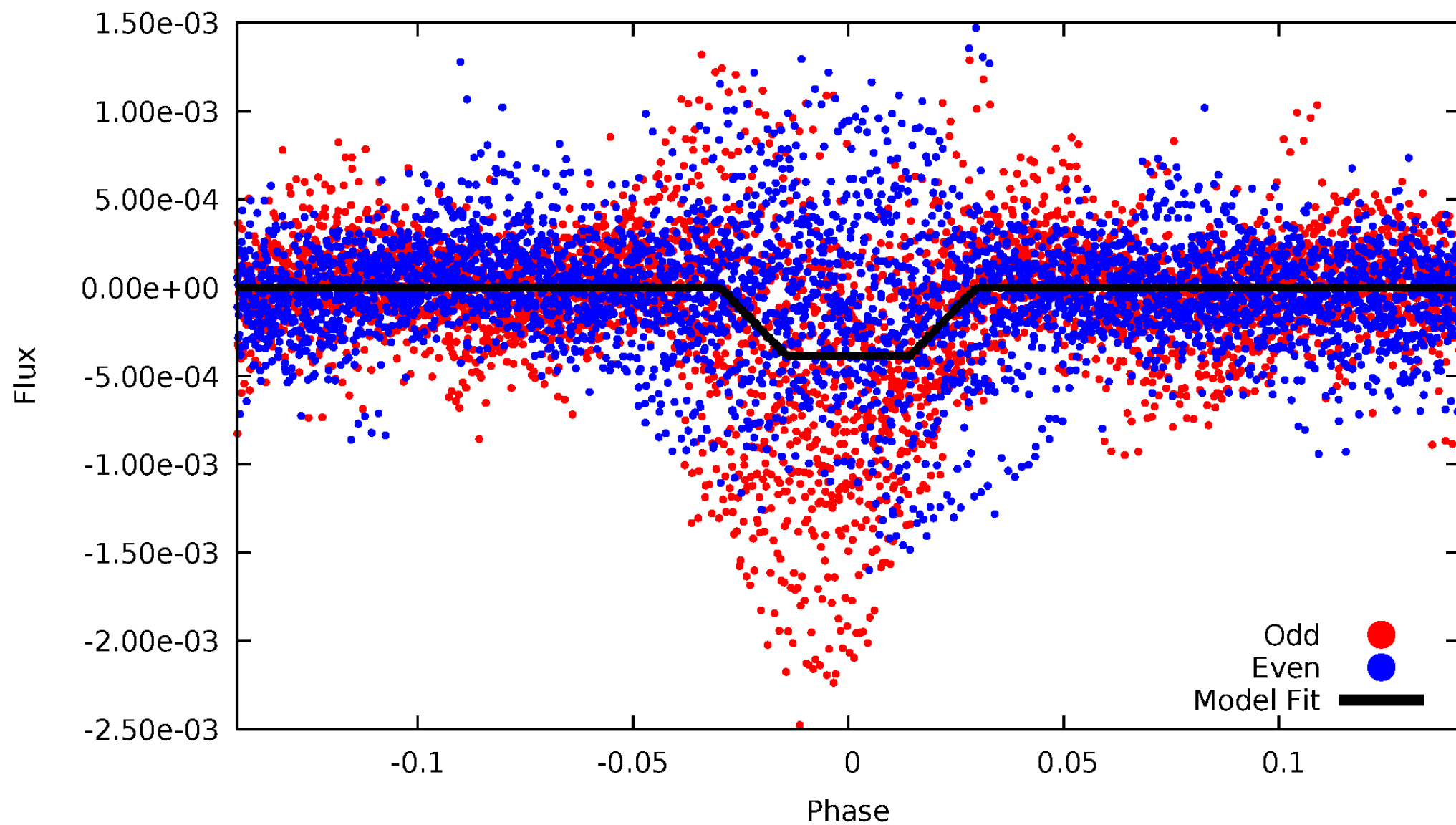
DV Odd/Even

TCE 008496367-03



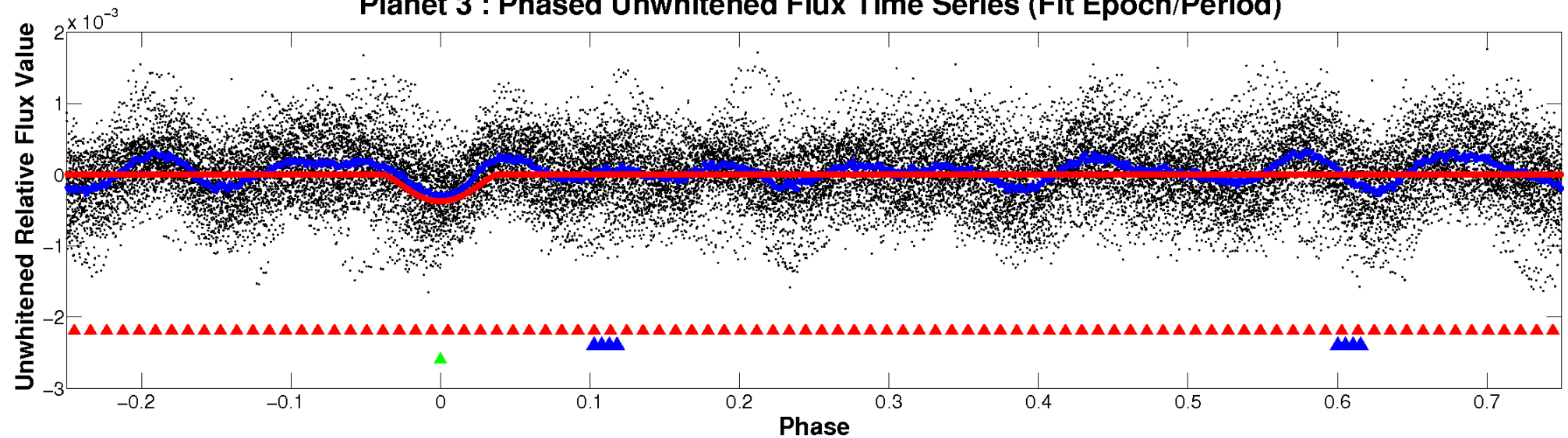
ALT Odd/Even

TCE 008496367-03

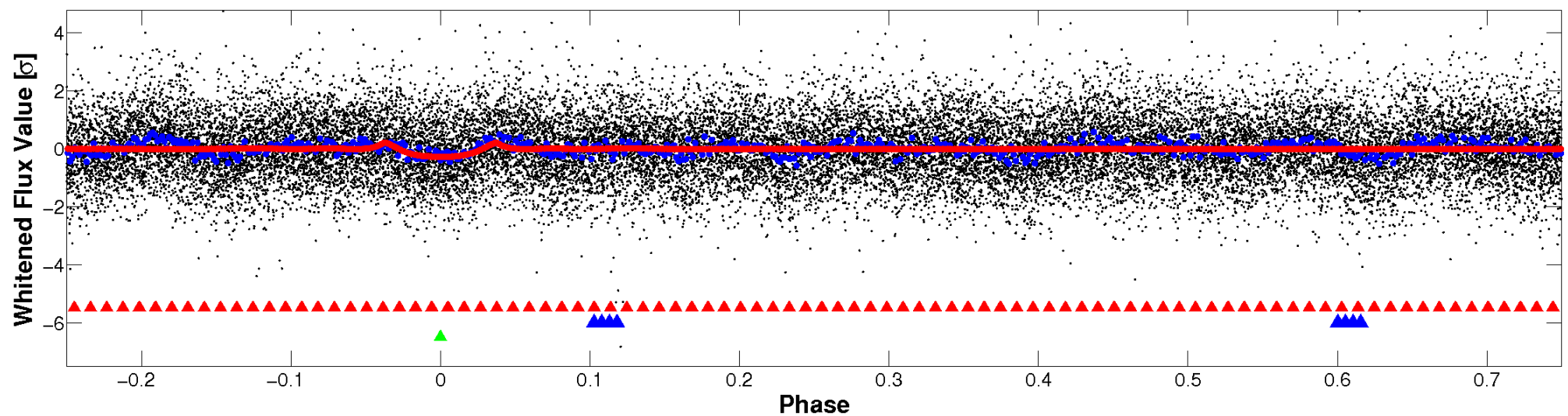


Non-Whitened Vs. Whitened Light Curve

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

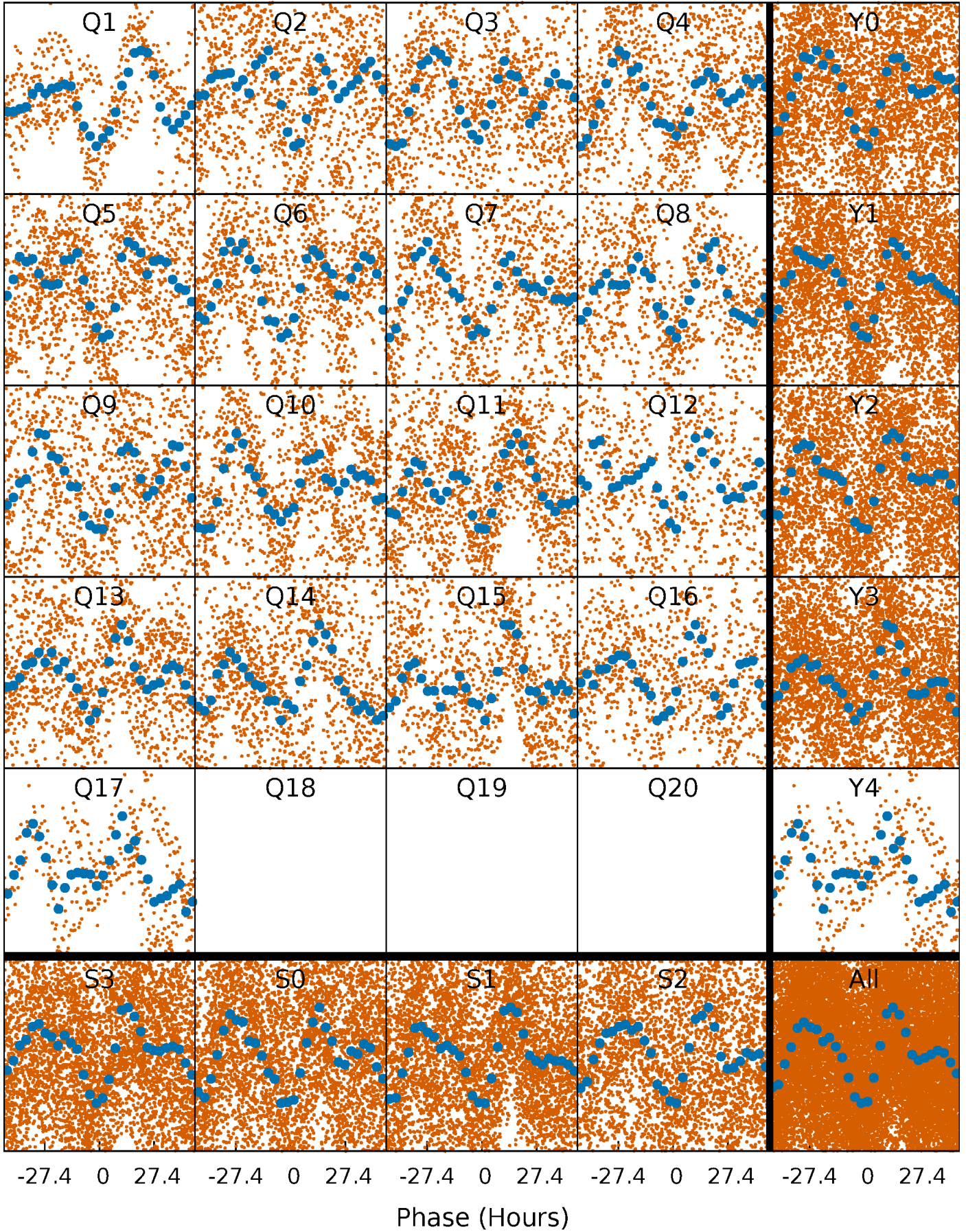


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



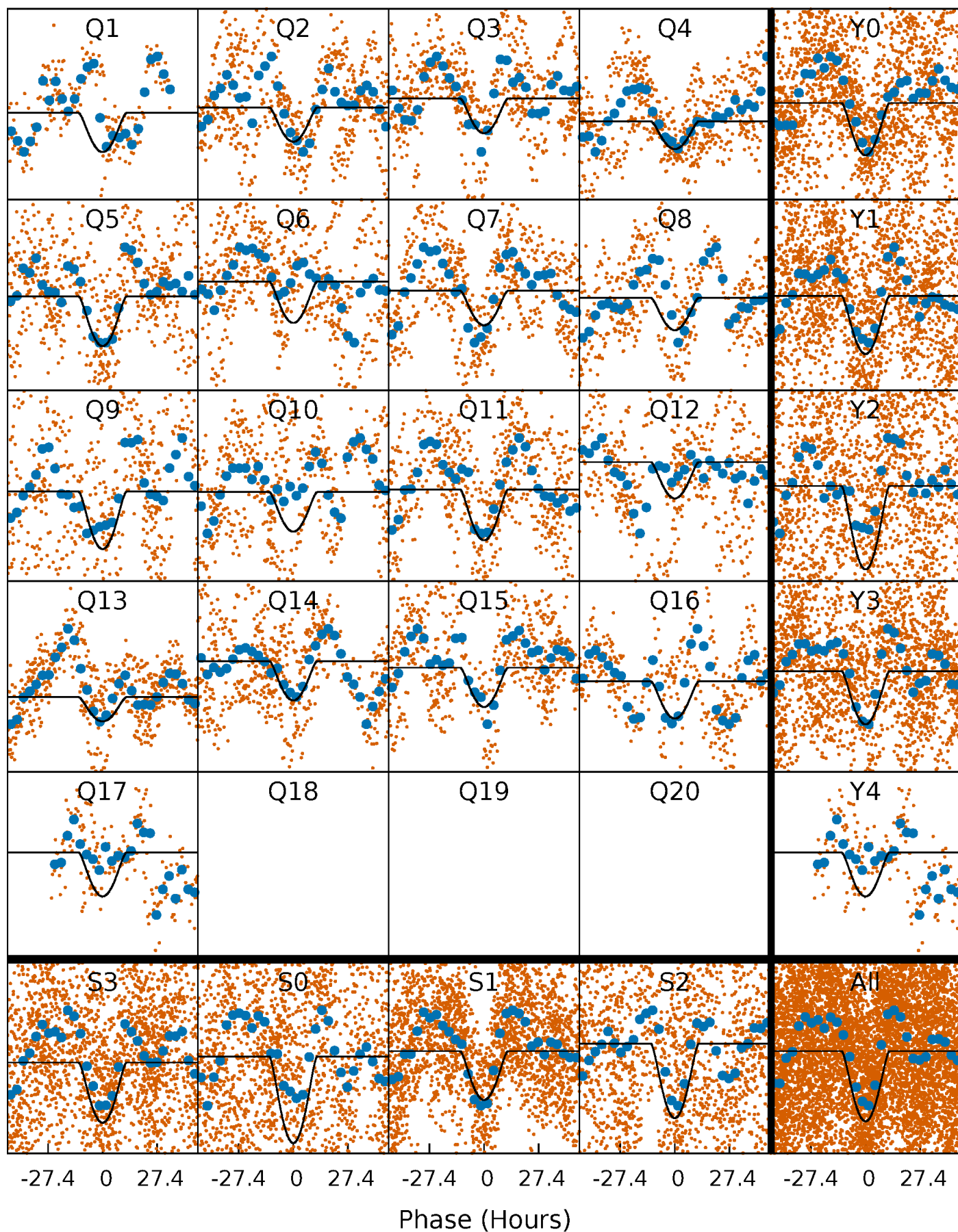
PDC Quarter-Phased Transit Curves

TCE 008496367-03 P= 12.951233 Days $T_0=135.677430$ (BKJD)



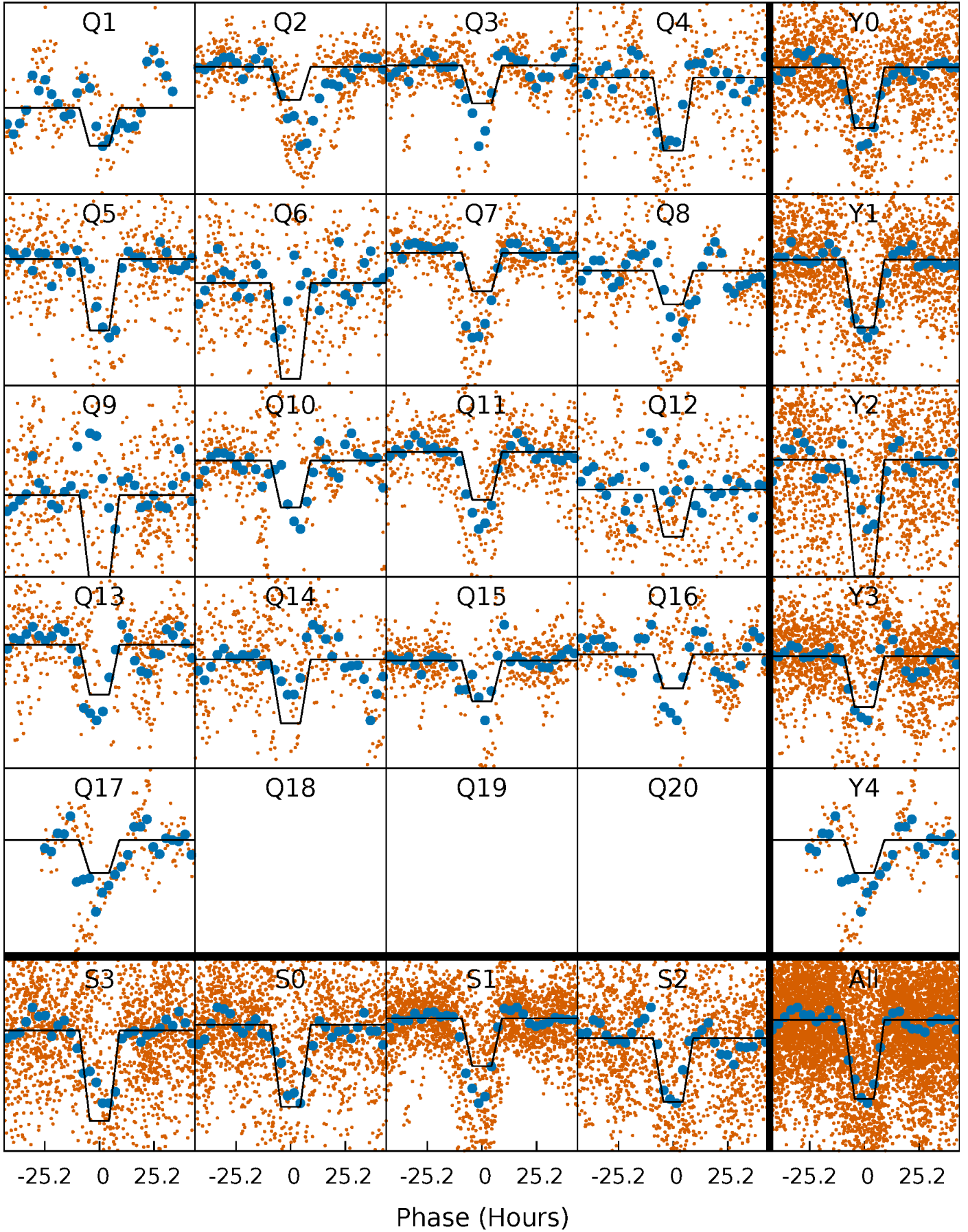
DV Quarter-Phased Transit Curves

TCE 008496367-03 P= 12.951233 Days $T_0=135.677430$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

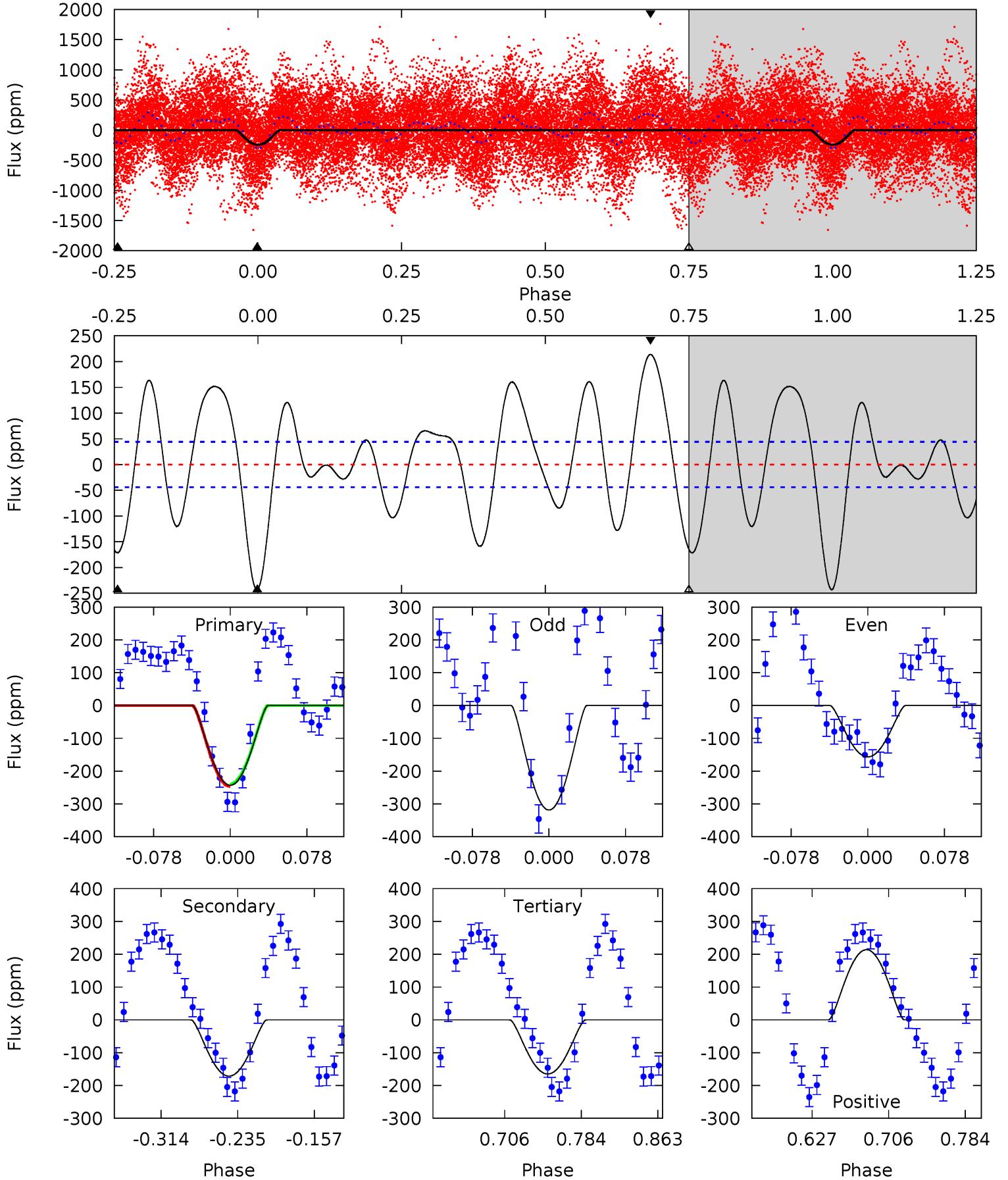
TCE 008496367-03 P= 12.951418 Days $T_0=135.699604$ (BKJD)



DV Model-Shift Uniqueness Test

008496367-03, P = 12.951233 Days, E = 122.726197 Days

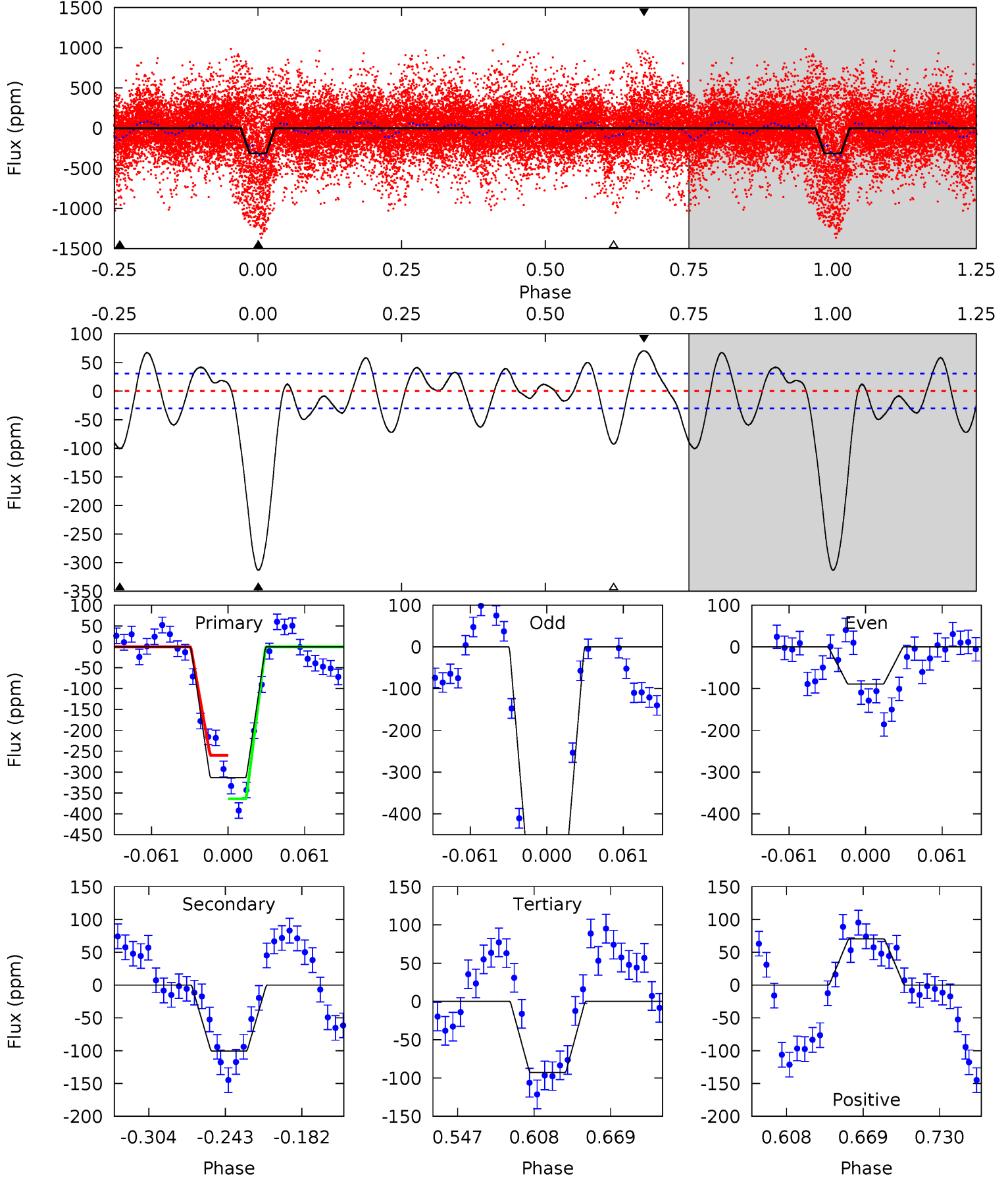
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.5	18.0	17.3	22.4	4.62	1.76	9.48	8.22	3.09	0.69	-4.44	8.56	0.79	0.47	0.34



Alt Model-Shift Uniqueness Test

008496367-03, P = 12.951418 Days, E = 122.748186 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
47.9	15.4	14.2	10.7	4.67	1.87	5.58	33.7	37.2	1.16	4.62	37.2	0.72	0.18	0



Stellar Parameters For KIC 008496367

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6952^{+192}_{-264}	$4.138^{+0.180}_{-0.180}$	$-0.220^{+0.250}_{-0.350}$	$1.647^{+0.487}_{-0.398}$	$1.364^{+0.202}_{-0.224}$	$0.430^{+0.407}_{-0.206}$
	+3%/-4%	+4%/-4%	+114%/-159%	+30%/-24%	+15%/-16%	+94%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 008496367-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-171 ± 10	$6.58^{+4.98}_{-3.69}$	1581^{+117}_{-101}	4334^{+1675}_{-742}	30^{+122}_{-20}
Alt.	-100 ± 7	$4.72^{+4.09}_{-2.97}$	1585^{+120}_{-119}	4431^{+2482}_{-849}	36^{+227}_{-25}

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 $A_{obs} \gg 1.0$

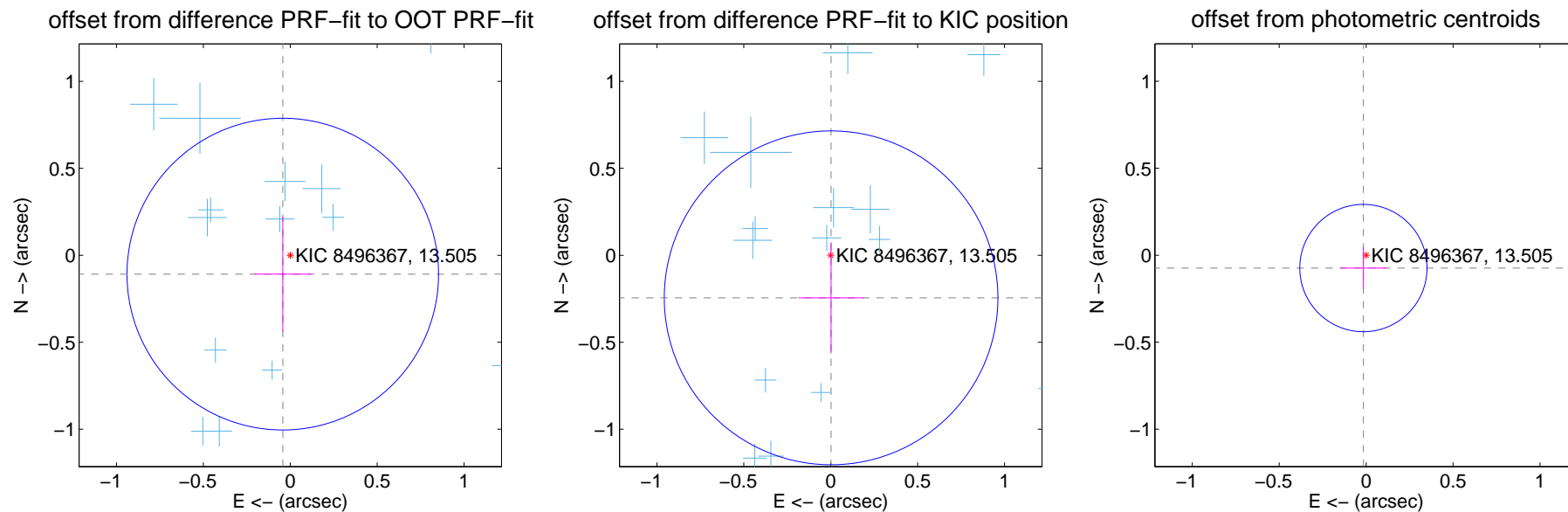
DV Centroid Data

Supplemental centroid analysis for 008496367-03. Kepler magnitude: 13.51. Transit SNR 9.26

There are 16 quarters with good PRF difference image offsets

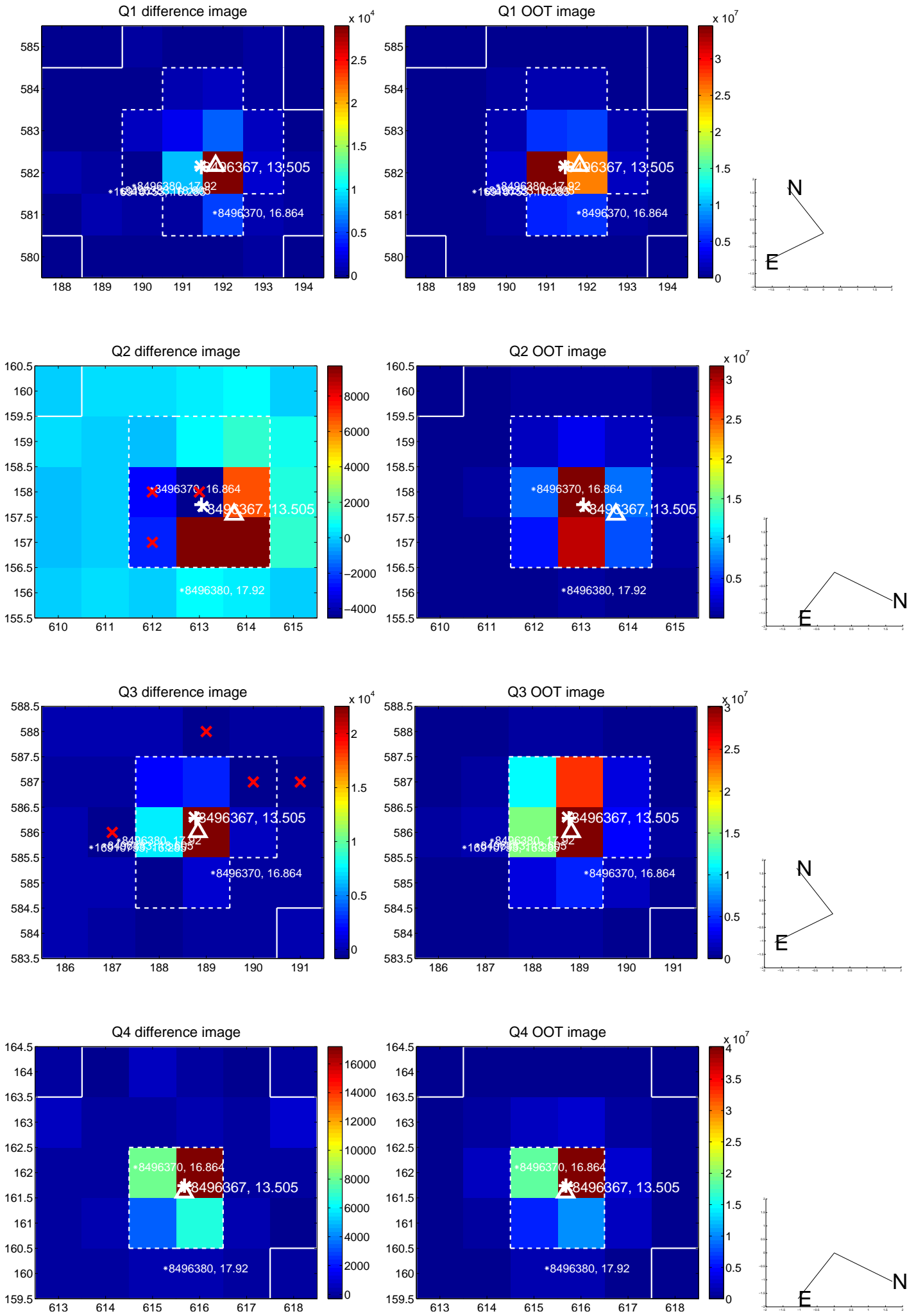
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.117 ± 0.299	0.39	0.043 ± 0.165	-0.108 ± 0.331
PRF-fit source offset from KIC position	0.245 ± 0.320	0.76	-0.002 ± 0.189	-0.245 ± 0.319
photometric centroid source offset	0.08 ± 0.12	0.62	0.02 ± 0.13	-0.07 ± 0.12

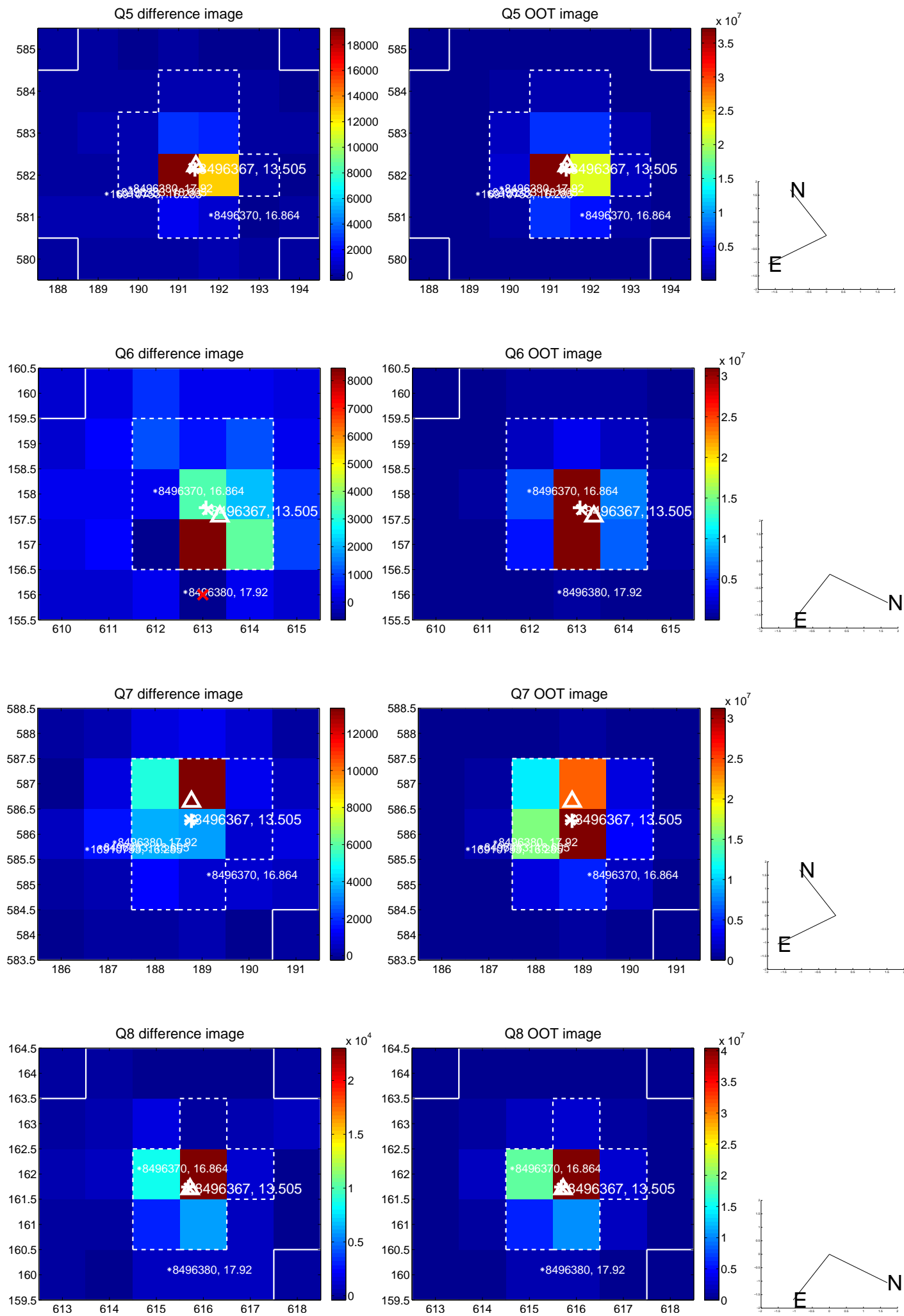


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

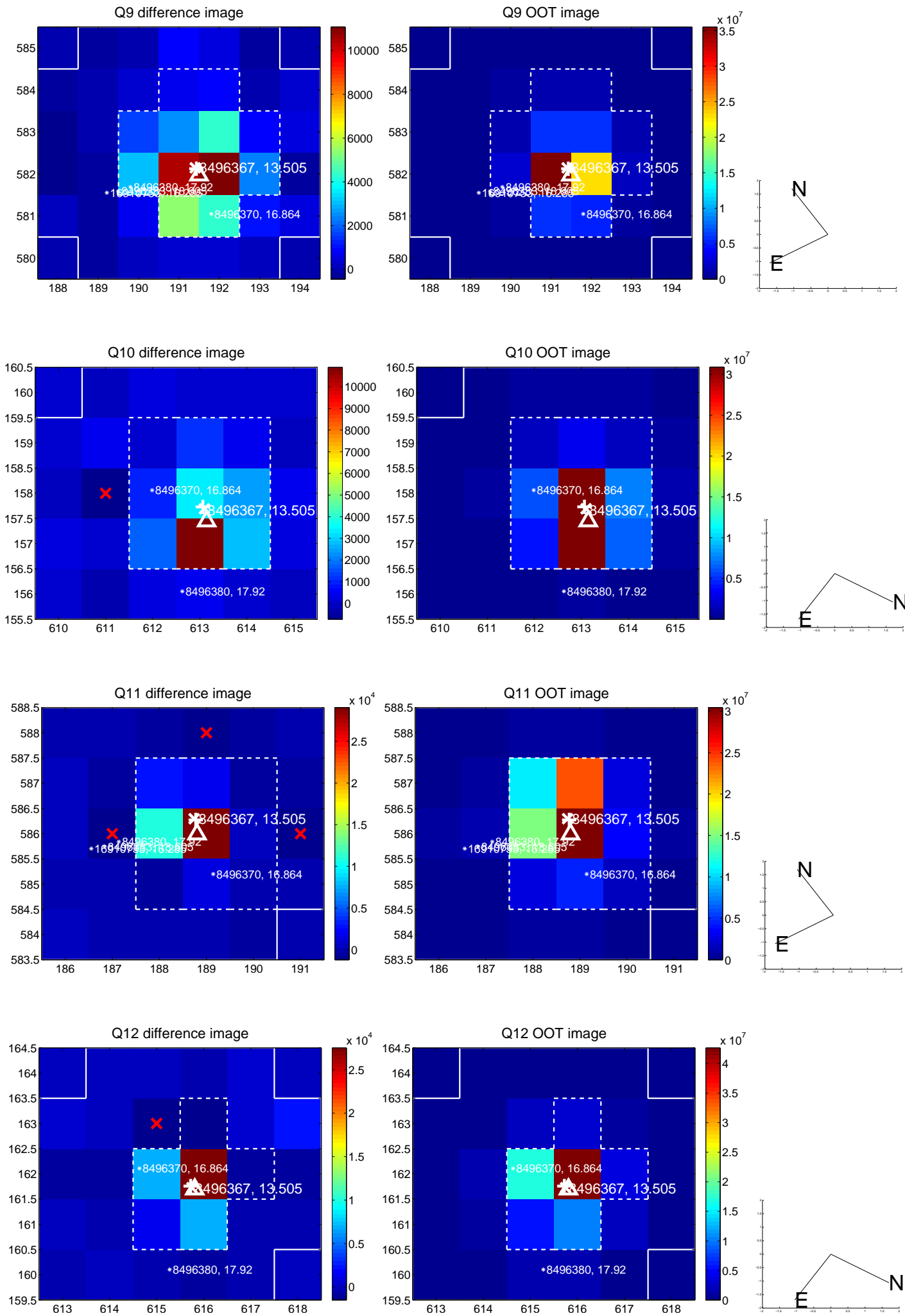
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



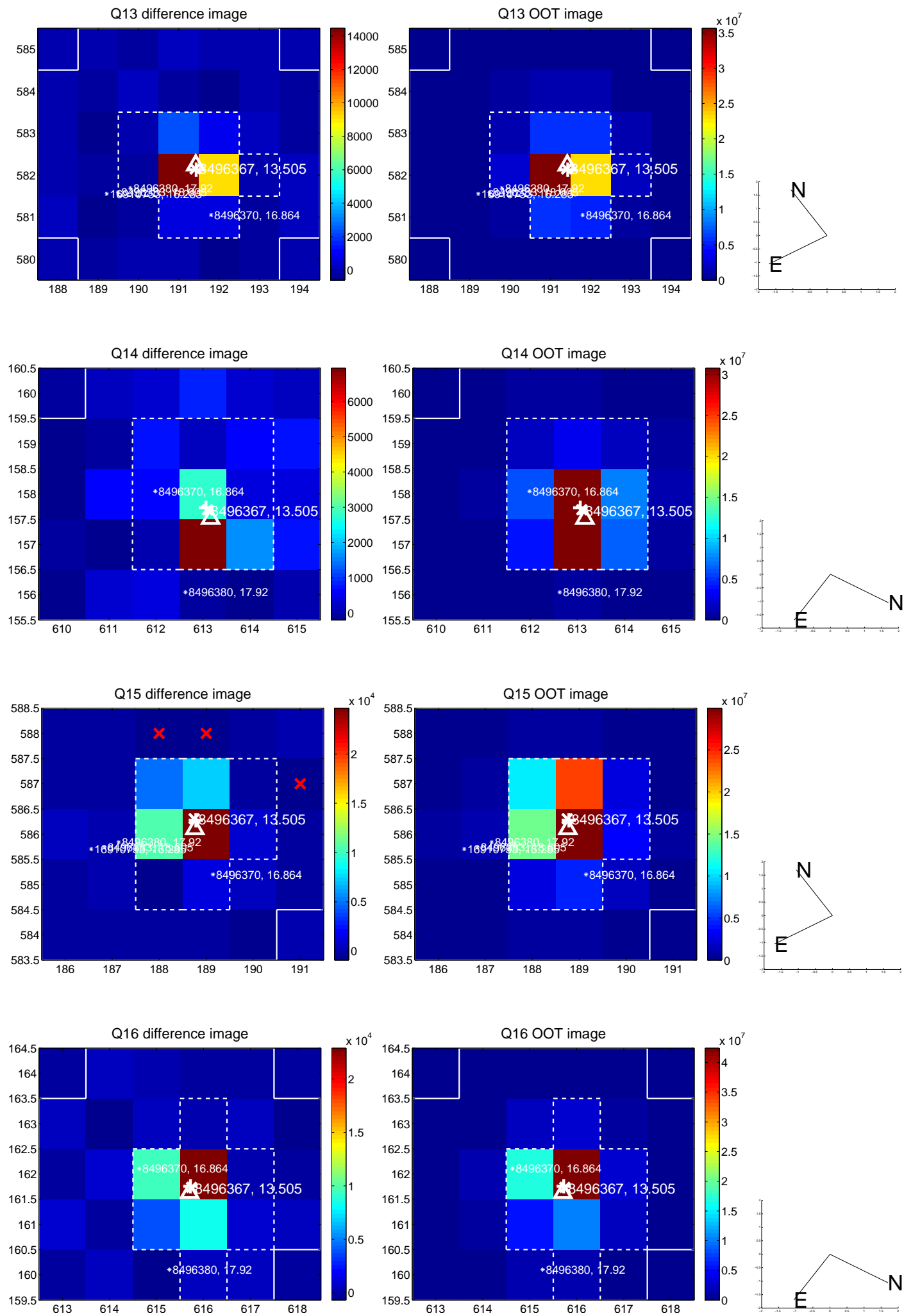
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



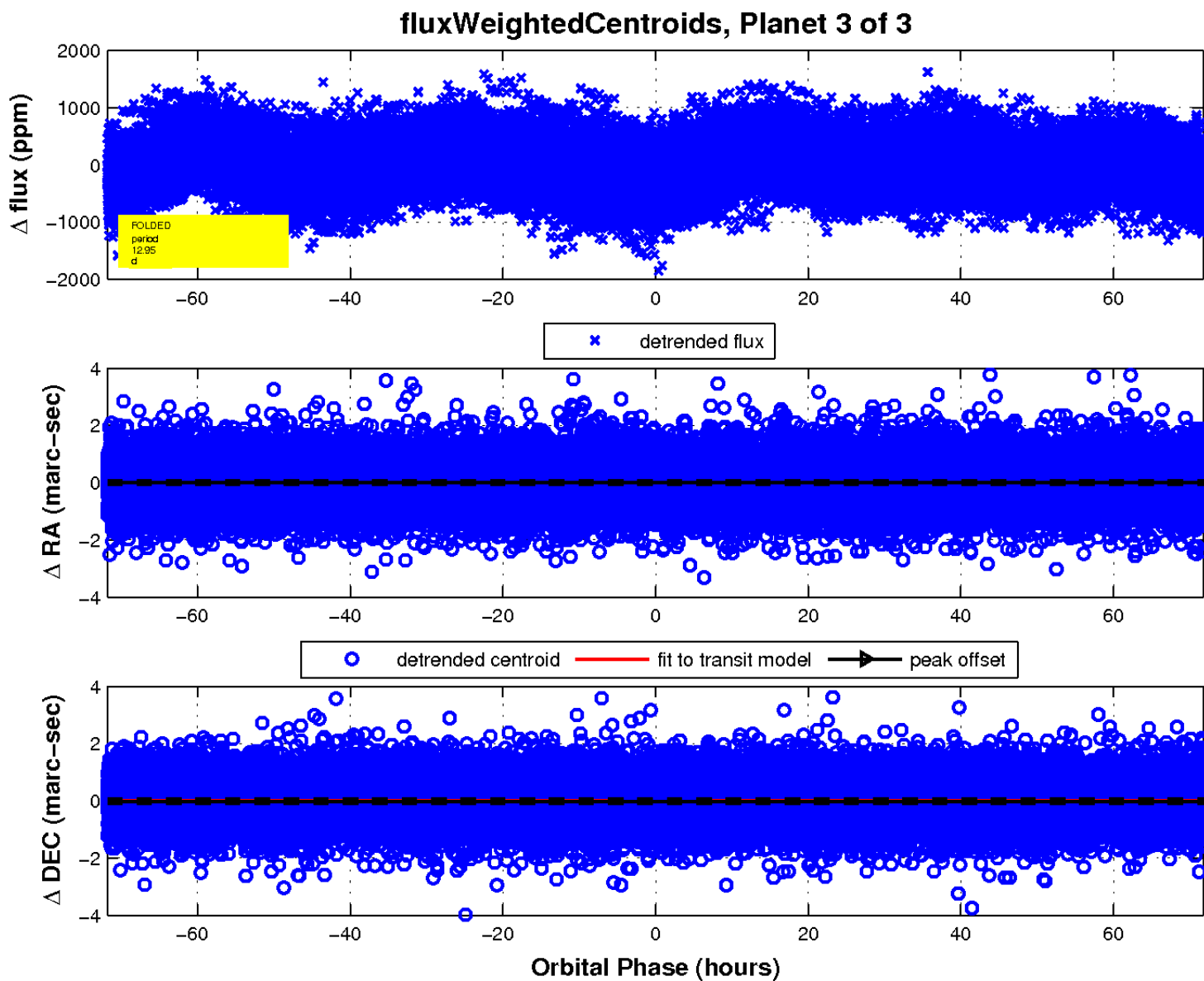
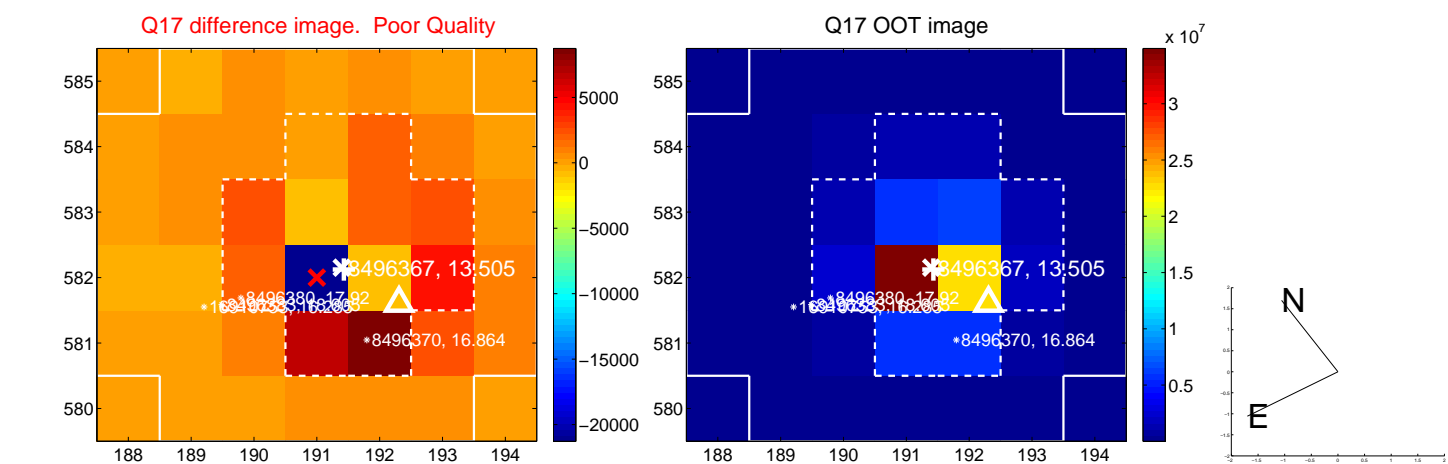
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

