

KIC 008801343

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})
008801343-01	OBS	1247.01	2.739875	131.810313	19957.8	4.023	3950.9	3650.3	2.26	6520	34.22	4724.07
008801343-02	OBS	No	1.369930	131.814201	298.2	3.707	48.7	56.8	2.26	6520	4.56	11904.00
008801343-03	OBS	No	567.113663	361.689149	835.8	7.943	8.8	7.7	2.26	6520	12.34	3.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008801343-01	OBS	FP	0.48	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—HAS_SEC_TCE
008801343-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
008801343-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_SKYE—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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 008801343-01

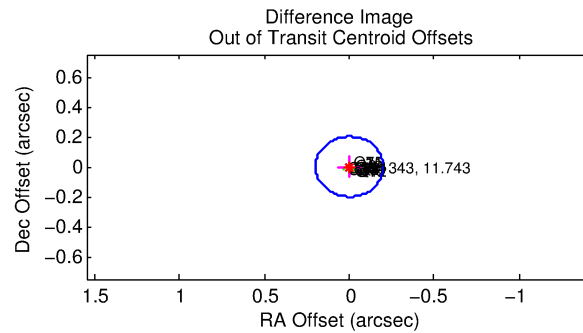
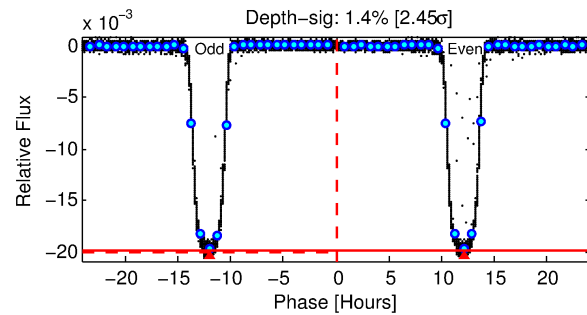
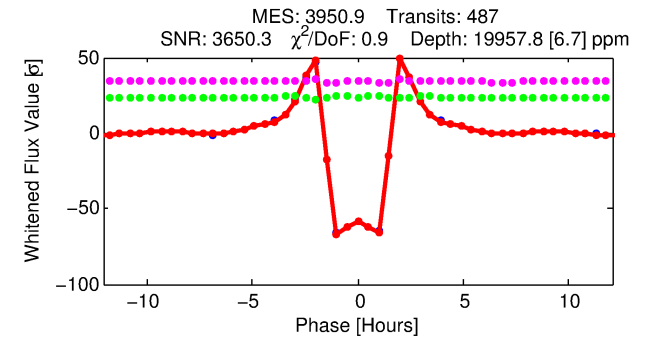
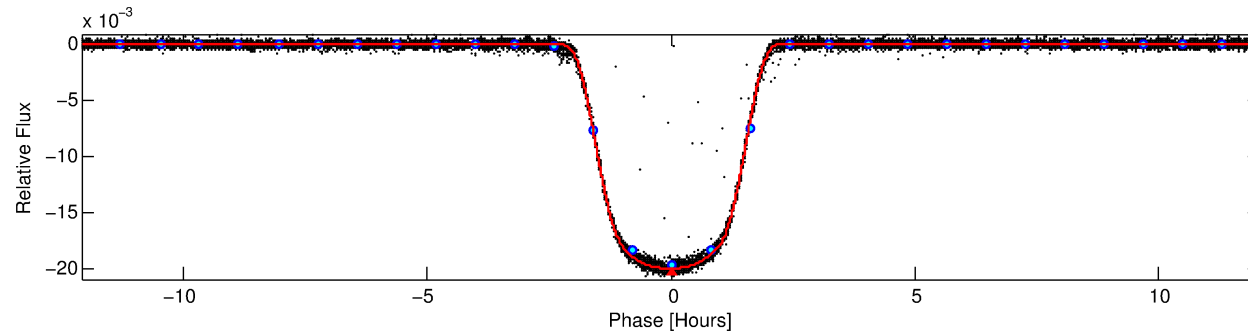
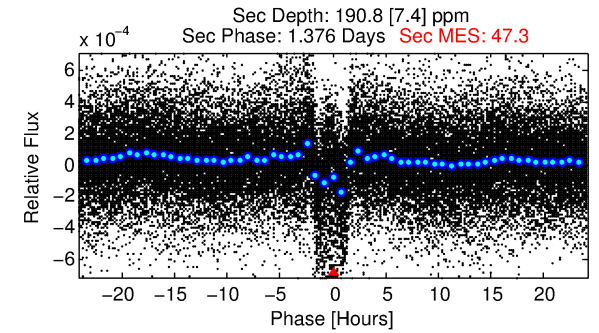
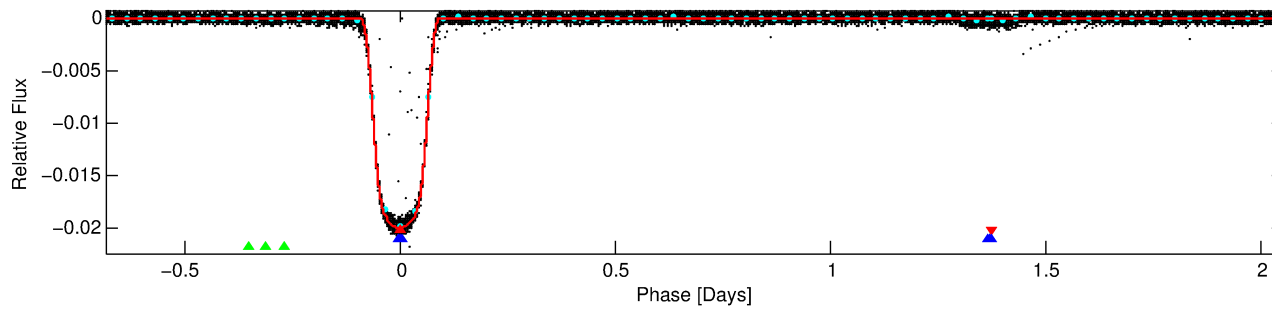
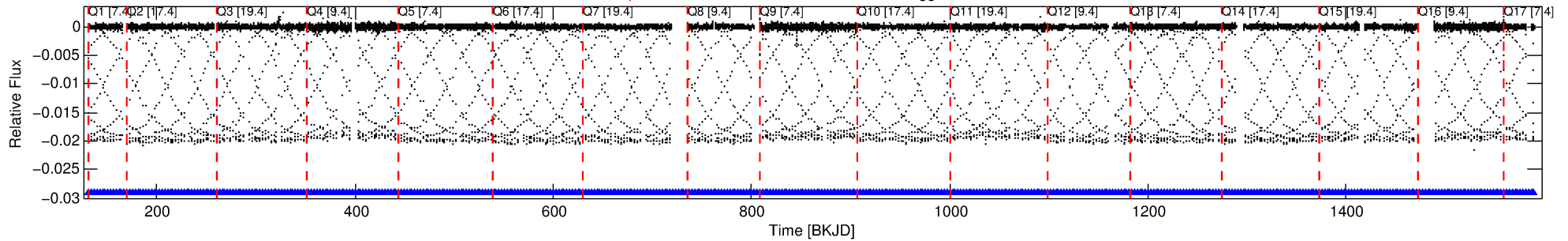
No Significant Match Found

DV One-Page Summary

KIC: 8801343 Candidate: 1 of 3 Period: 2.740 d

KOI: K01247.01 Corr: 0.990

Kp: 11.74 R*: 2.26 Rs Teff: 6520.0 K Logg: 3.84 Fe/H: -0.320



DV Fit Results:

Period = 2.73987 [0.00000] d
Epoch = 131.8103 [0.0000] BKJD
Rp/R* = 0.1388 [0.0000]
a/R* = 4.79 [0.00]
b = 0.69 [0.00]
Seff = 4724.07 [2455.27]
Teq = 2114 [275] K
Rp = 34.22 [11.01] Re
a = 0.0418 [0.0132] AU
Ag = 0.16 [0.08] [-10.55σ]
Teffp = 2057 [60] K [-0.20σ]

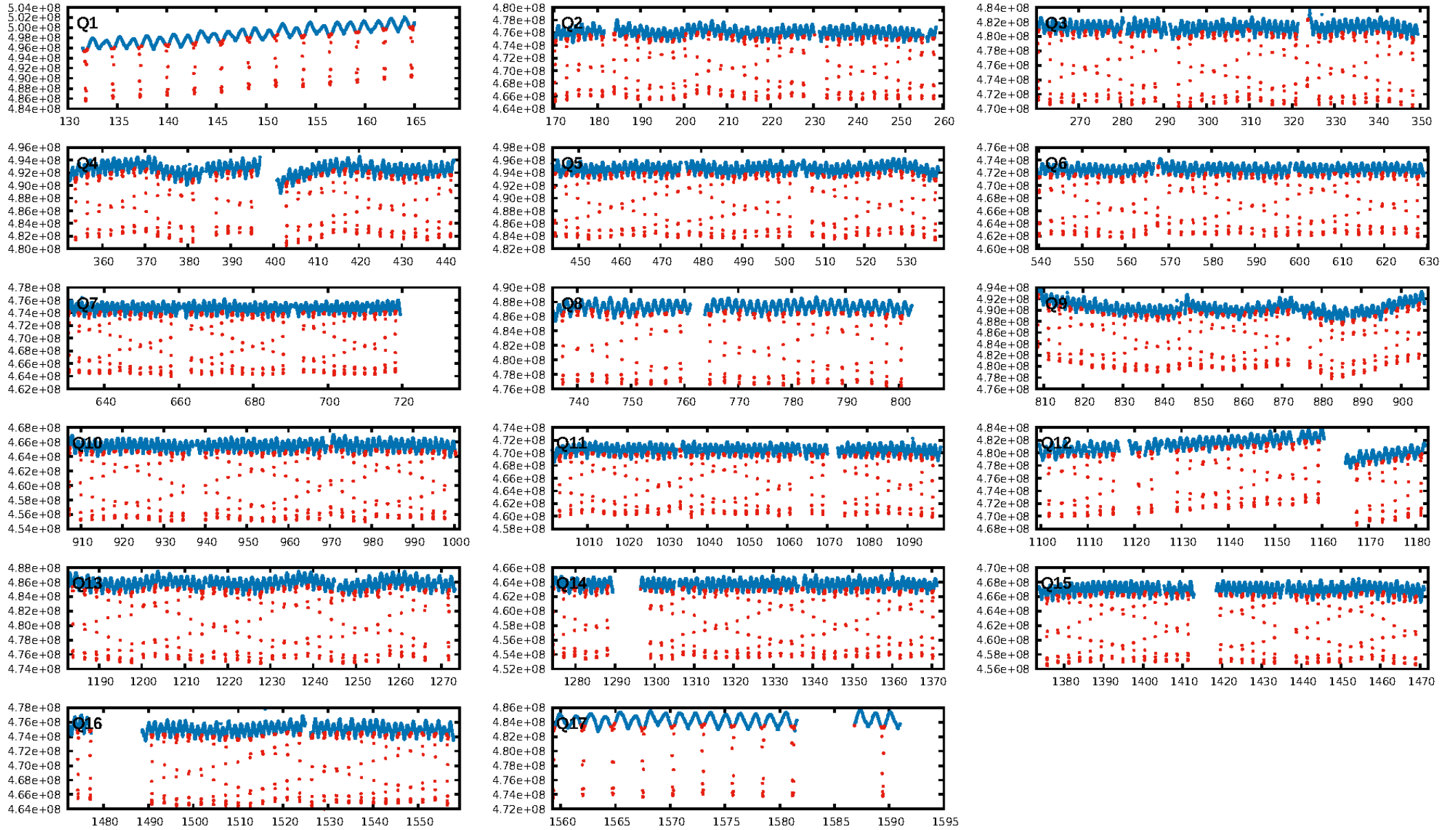
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [6.01σ]
LongPeriod-sig: 100.0% [1521.31σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [464/464]
GhostDiagnostic-chr: 3.193
Centroid-sig: 0.0%
Centroid-so: 0.195 arcsec [152.82σ]
OotOffset-rm: 0.002 arcsec [0.02σ]
KicOffset-rm: 0.128 arcsec [1.84σ]
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]

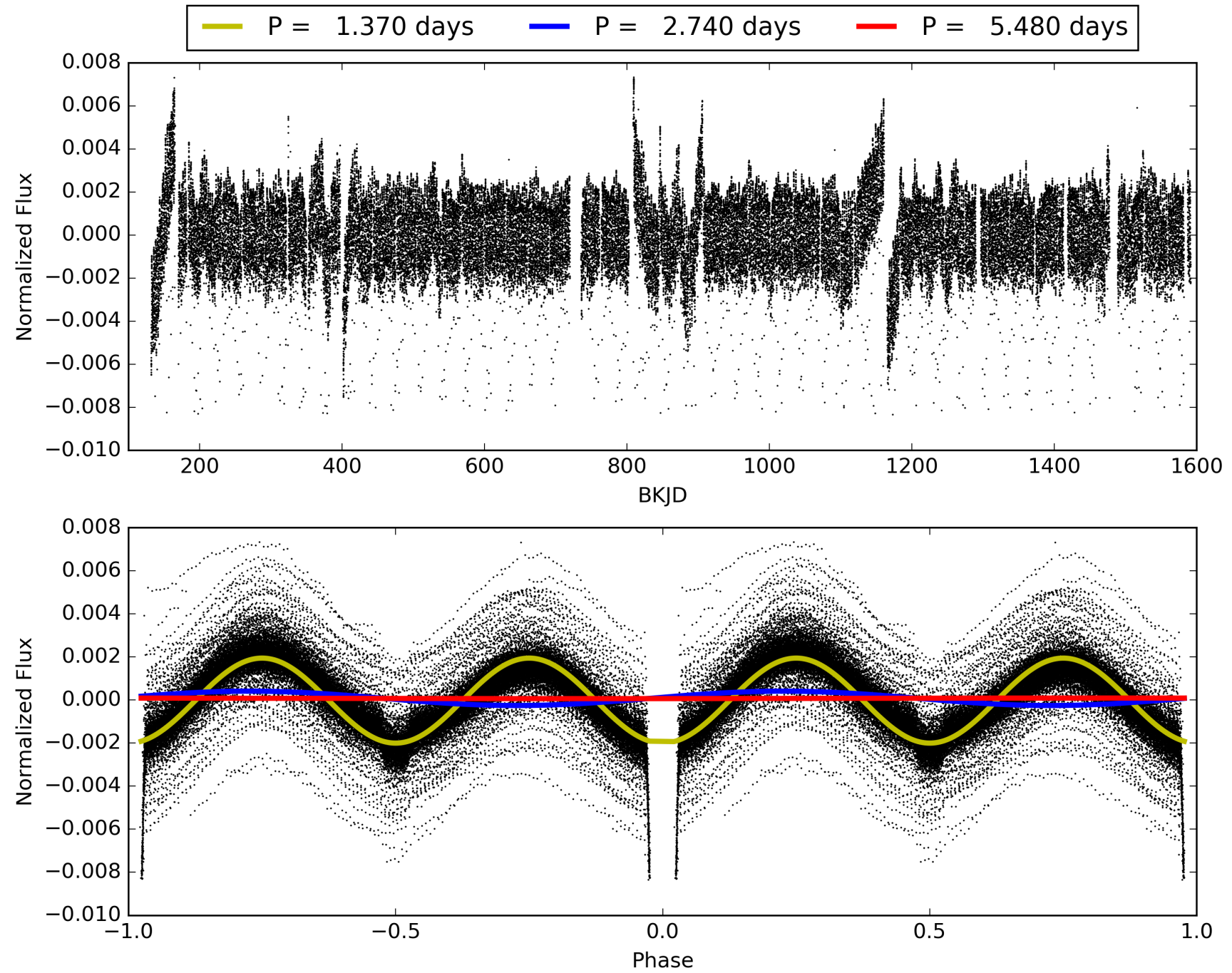
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 23:17:55 Z

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

TCE 008801343-01, PDC Light Curves

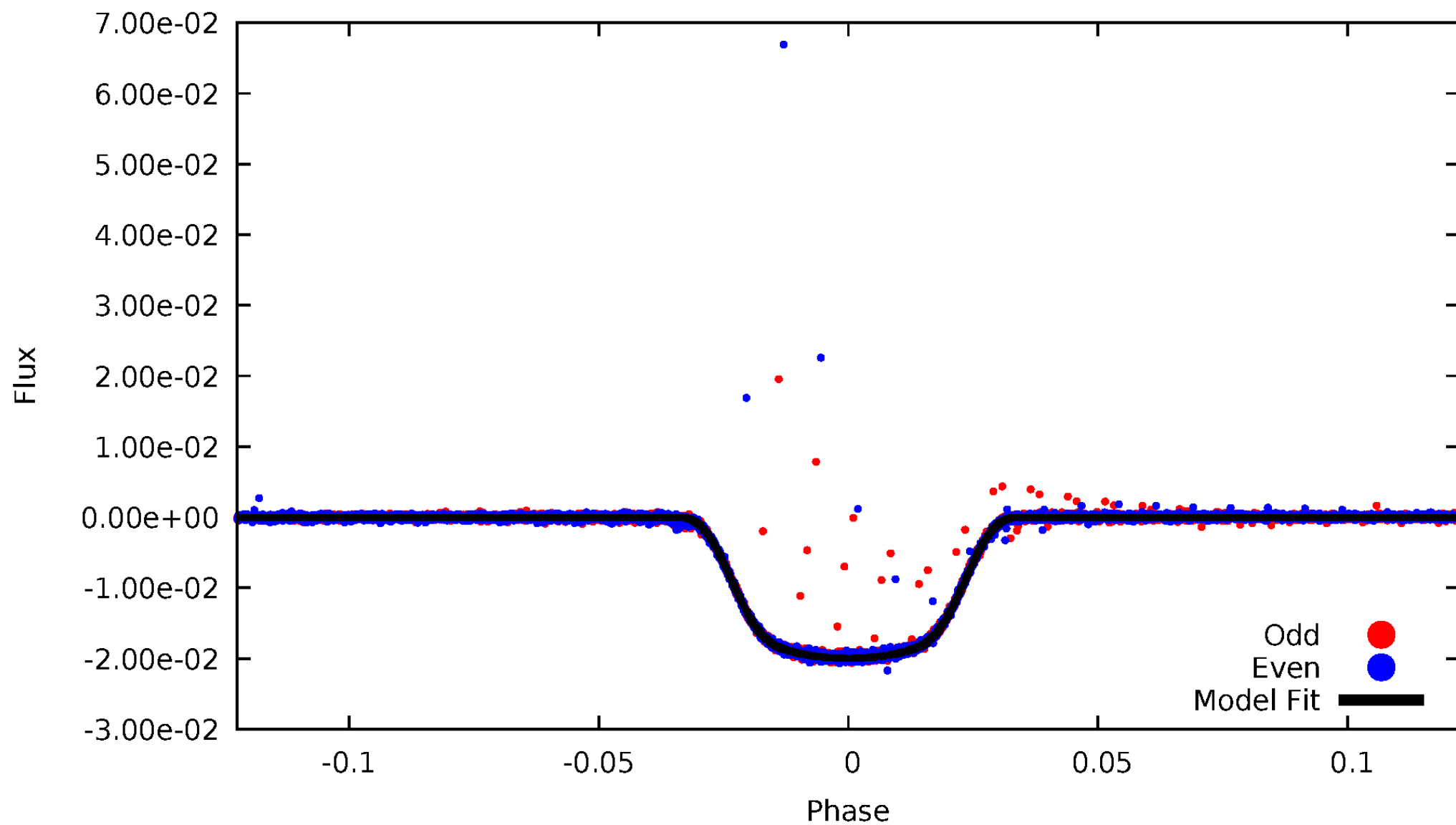


TCE 008801343-01



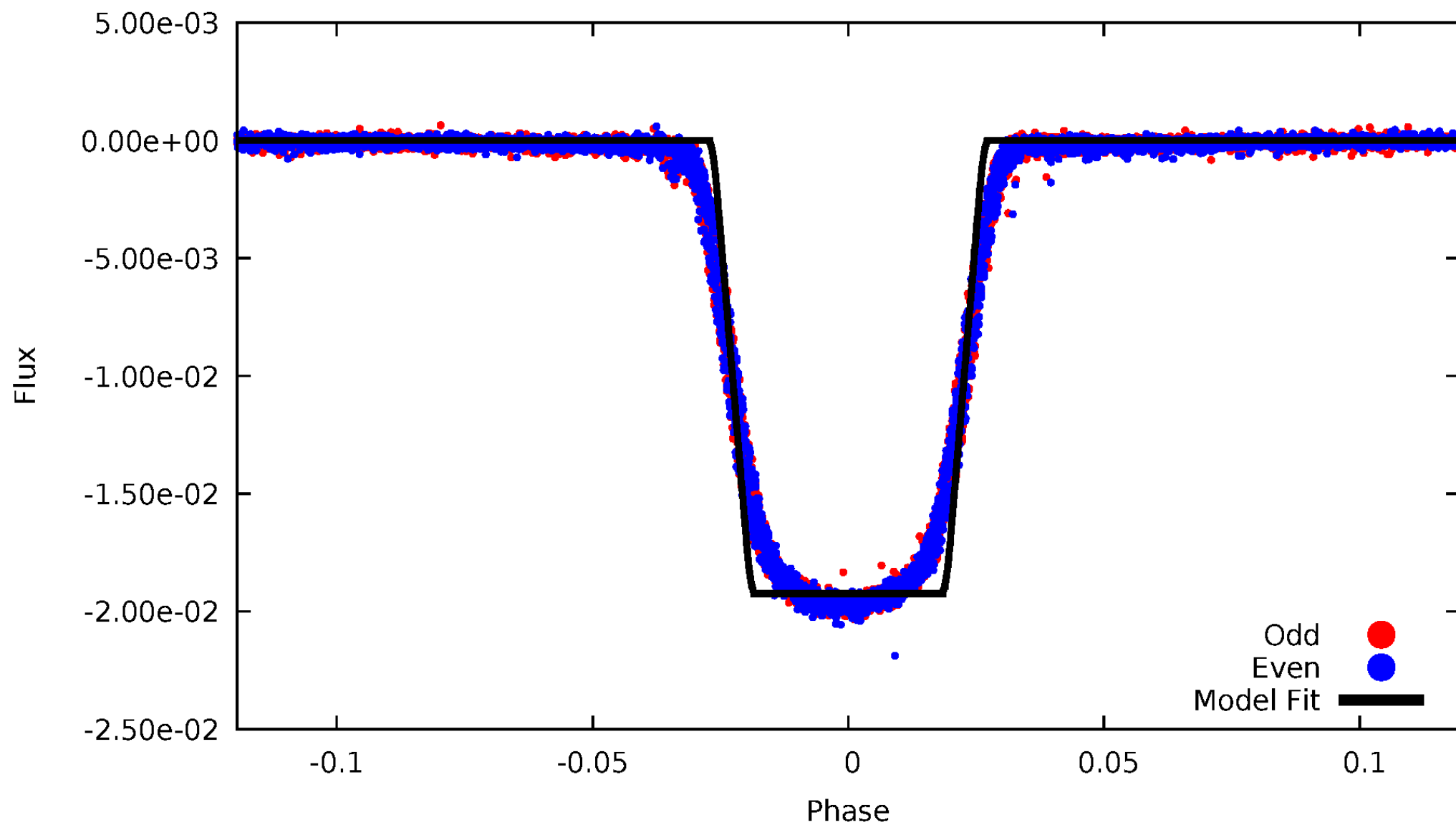
DV Odd/Even

TCE 008801343-01



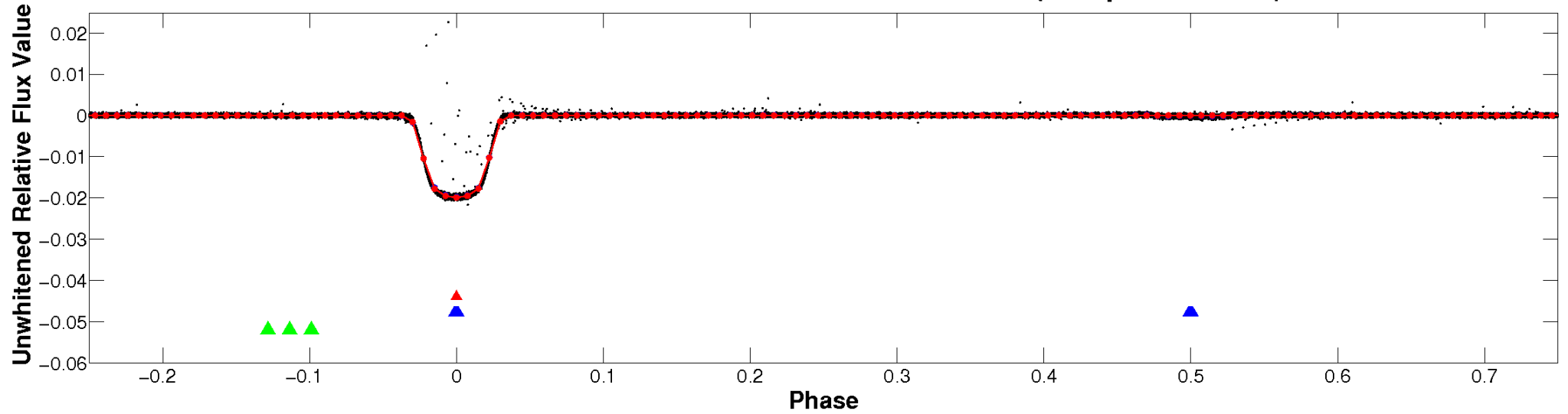
ALT Odd/Even

TCE 008801343-01

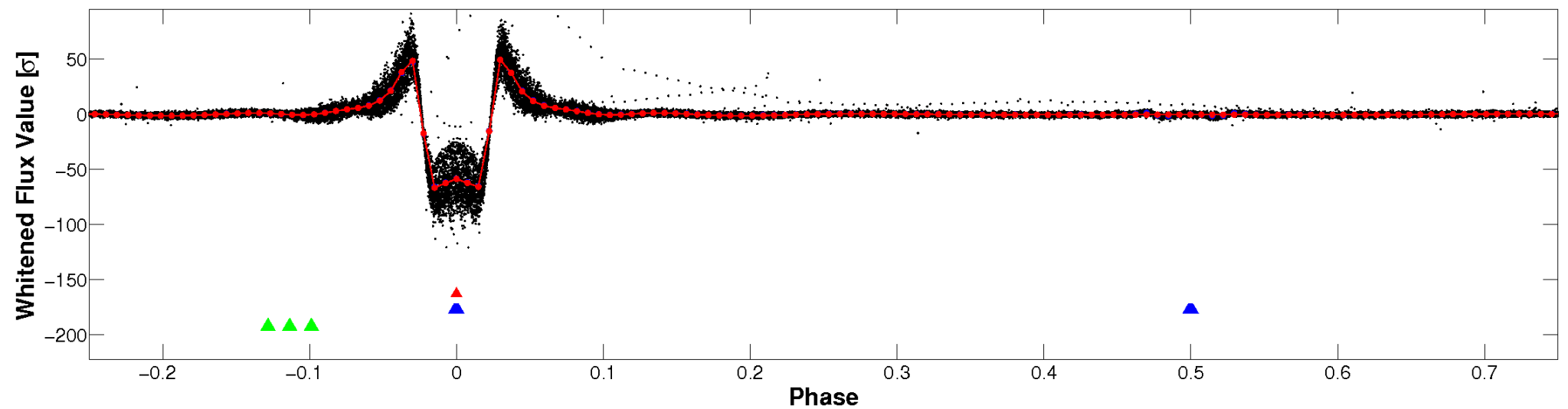


Non-Whitened Vs. Whitened Light Curve

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

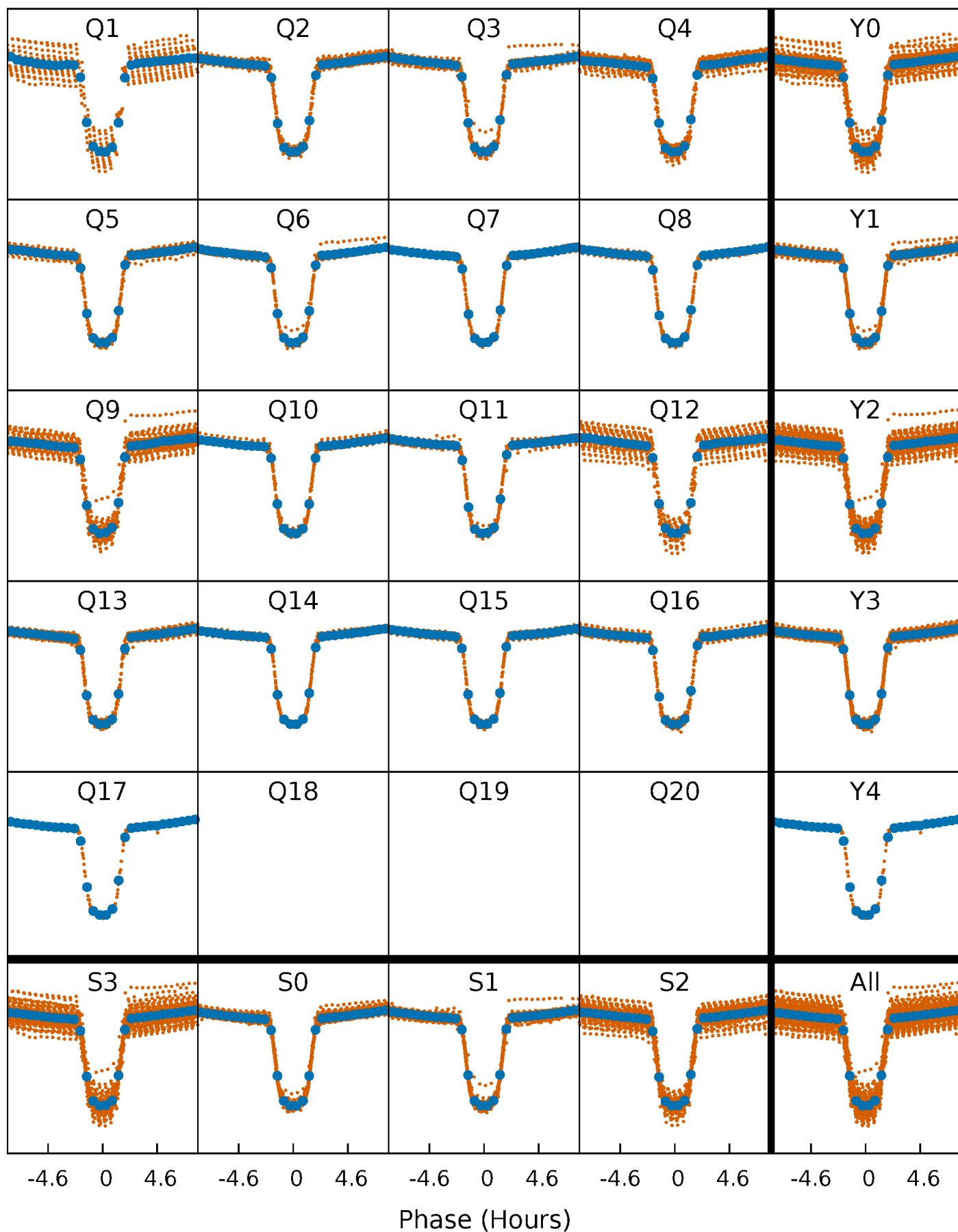


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



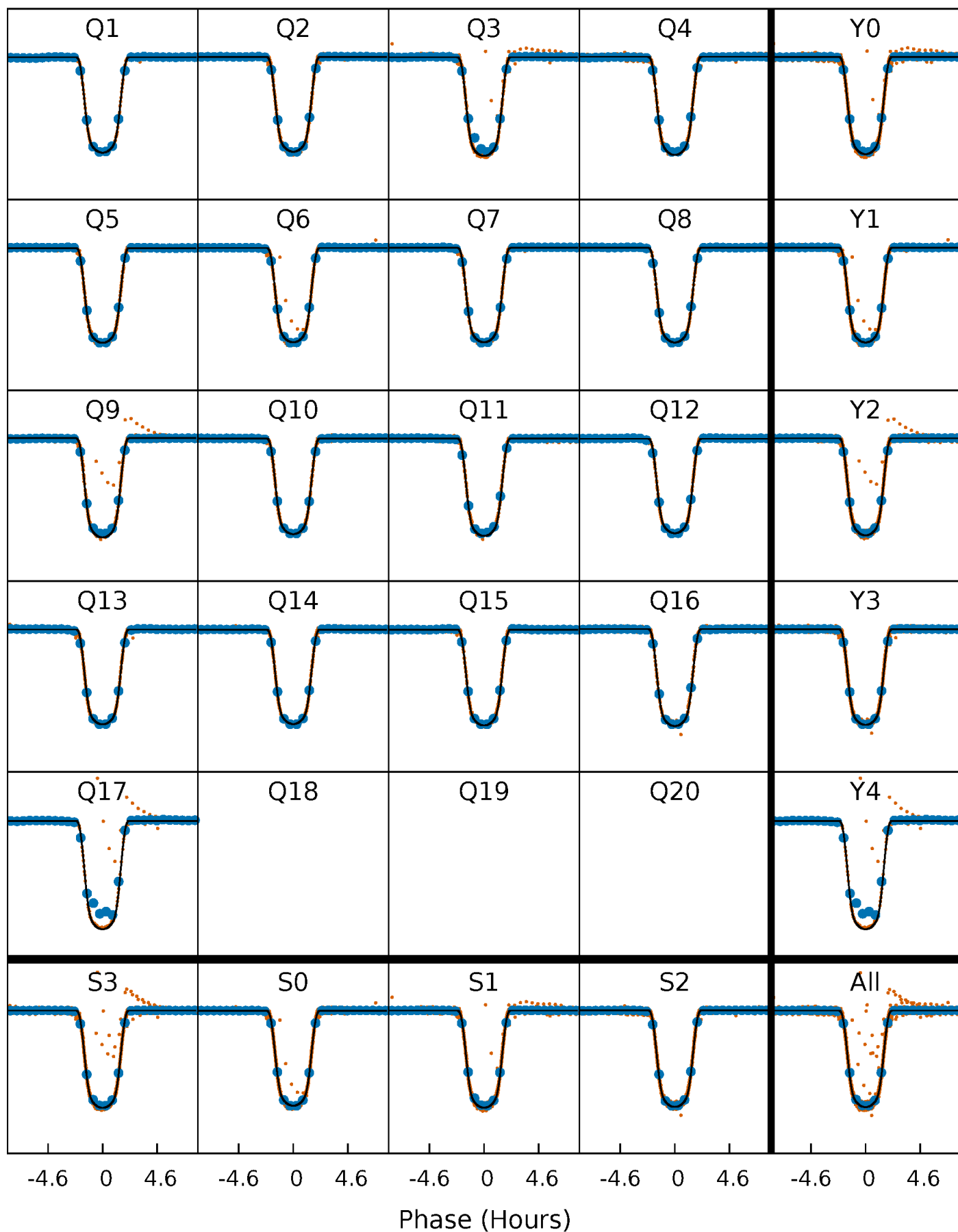
PDC Quarter-Phased Transit Curves

TCE 008801343-01 P= 2.739875 Days $T_0=131.810313$ (BKJD)



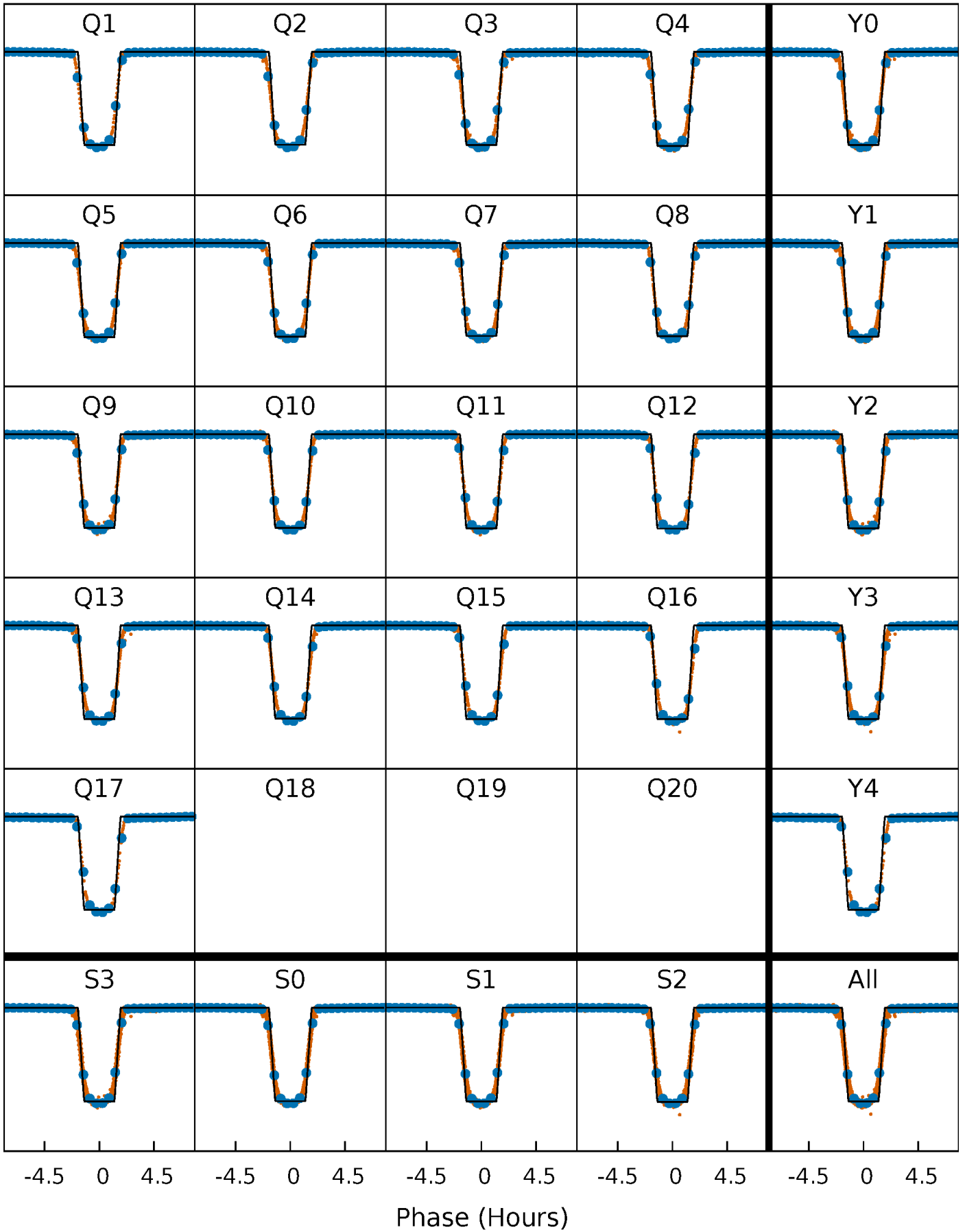
DV Quarter-Phased Transit Curves

TCE 008801343-01 P= 2.739875 Days $T_0=131.810313$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

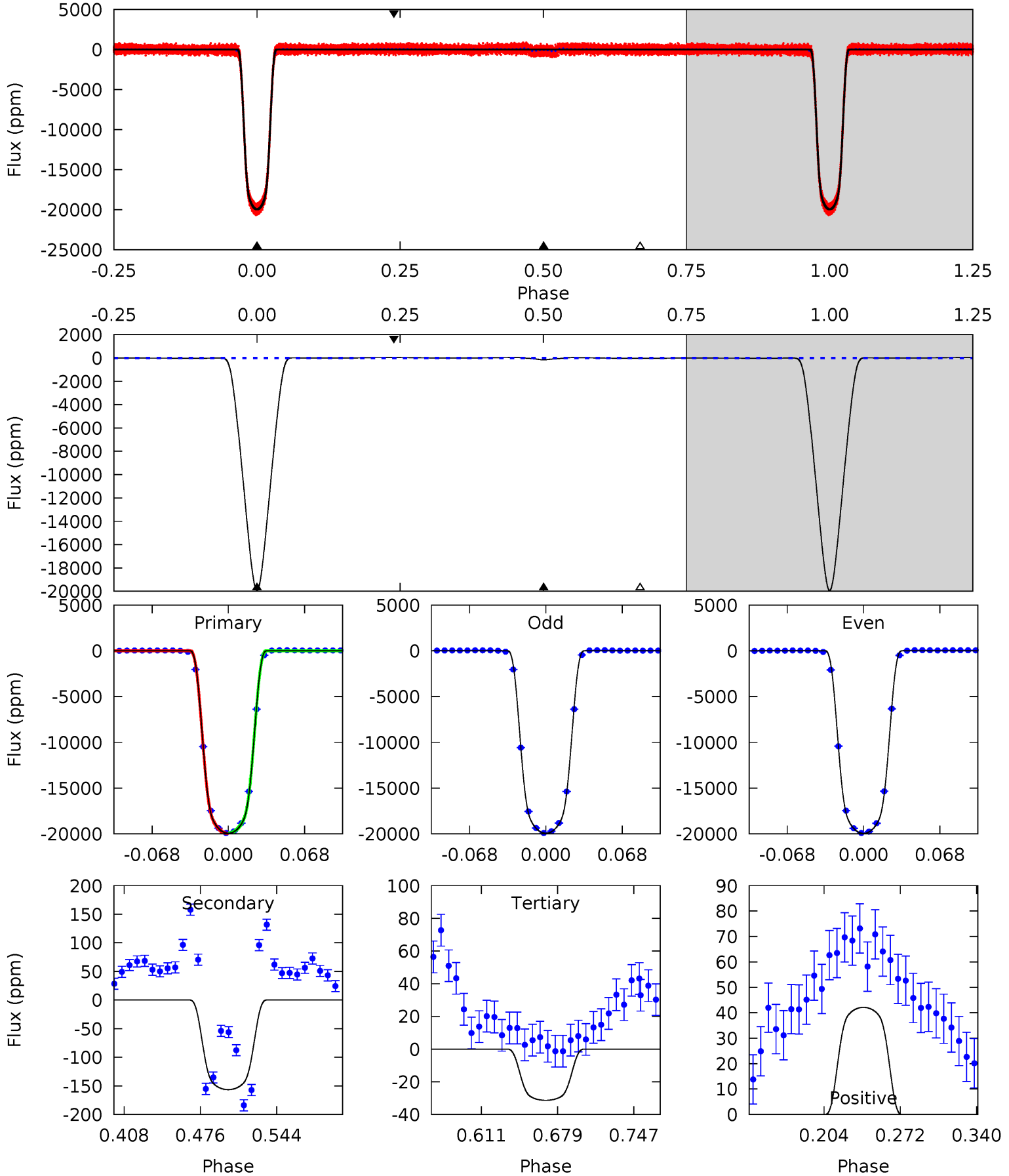
TCE 008801343-01 P= 2.739859 Days $T_0=131.814771$ (BKJD)



DV Model-Shift Uniqueness Test

008801343-01, P = 2.739875 Days, E = 129.070438 Days

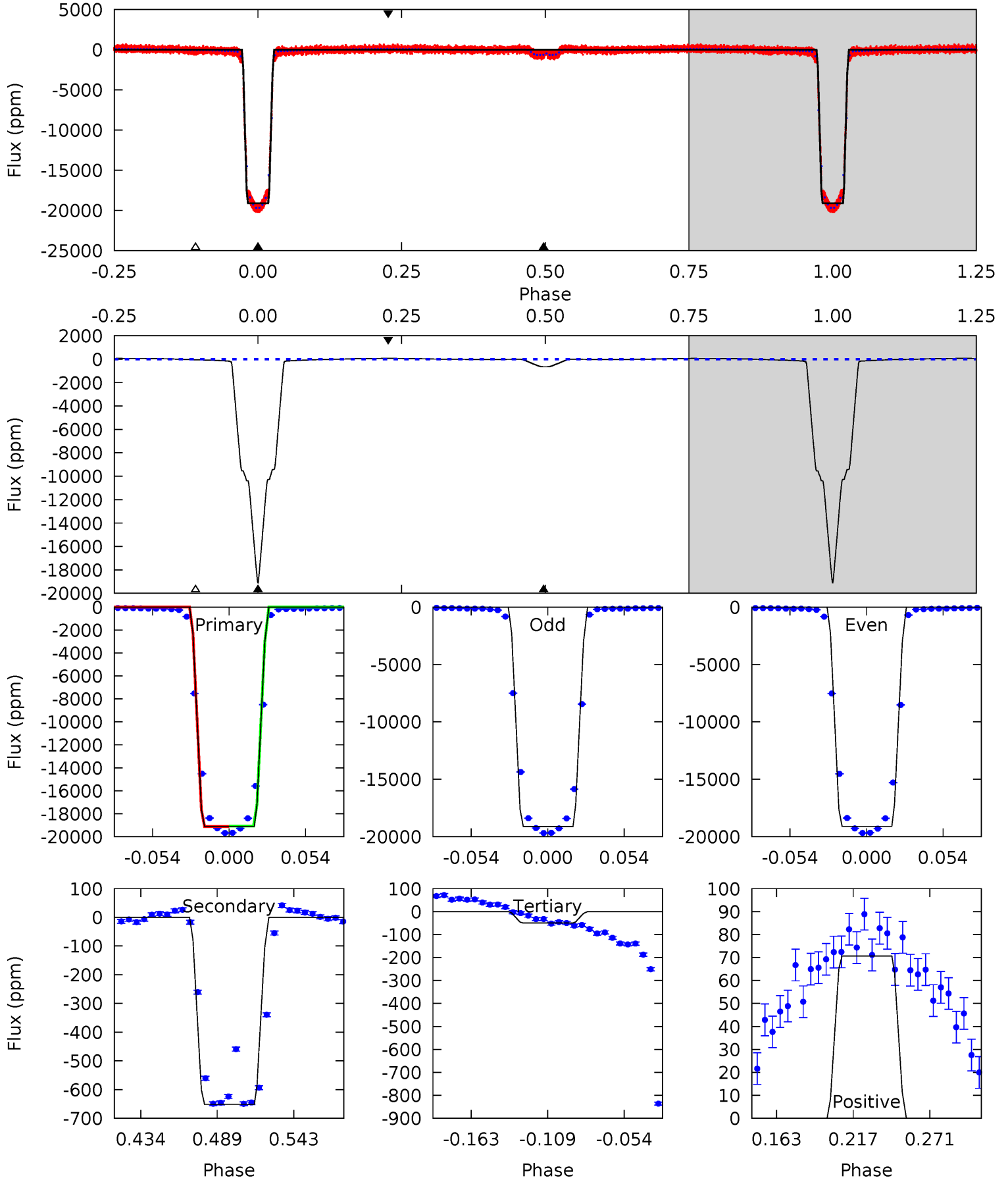
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6554	51.5	10.3	13.9	4.65	1.83	6.62	6544	6540	41.2	37.6	2.94	0.99	0.00	10.6



Alt Model-Shift Uniqueness Test

008801343-01, P = 2.739859 Days, E = 129.074912 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6805	232.1	17.7	25.2	4.69	1.92	18.0	6788	6780	214.4	207.0	0.92	1.00	0.00	5.04



Stellar Parameters For KIC 008801343

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6520^{+162}_{-179}	$3.844^{+0.300}_{-0.100}$	$-0.320^{+0.300}_{-0.250}$	$2.260^{+0.424}_{-0.727}$	$1.300^{+0.220}_{-0.220}$	$0.159^{+0.313}_{-0.048}$
	+2%/-3%	+8%/-3%	+94%/-78%	+19%/-32%	+17%/-17%	+197%/-30%
Source	PHO1	FLK73	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 008801343-01 / KOI 1247.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-157 ± 3	$33.45^{+4.31}_{-6.11}$	2897^{+175}_{-257}	-2788^{+278}_{-144}	$0.136^{+0.062}_{-0.024}$
Alt.	-652 ± 3	$33.26^{+4.42}_{-6.30}$	2897^{+187}_{-261}	3000^{+127}_{-134}	$0.573^{+0.256}_{-0.106}$

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 $A_{\text{obs}} \gg 1.0$

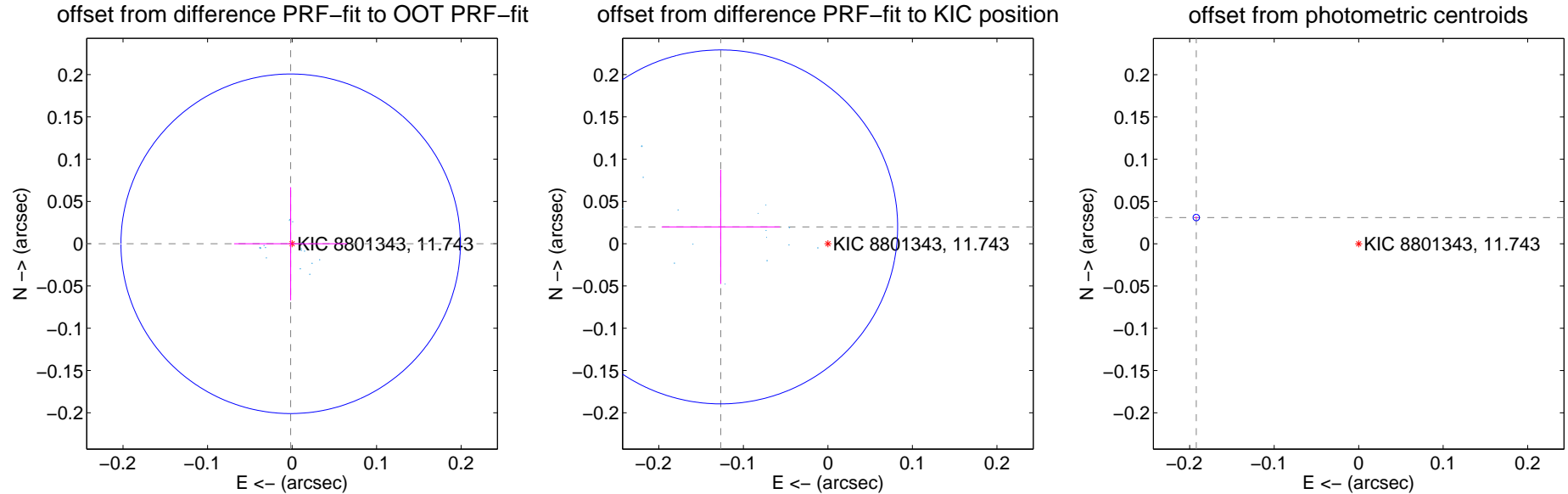
DV Centroid Data

Supplemental centroid analysis for 008801343-01. **Kepler magnitude: 11.74.** Transit SNR 3650.33

There are 17 quarters with good PRF difference image offsets

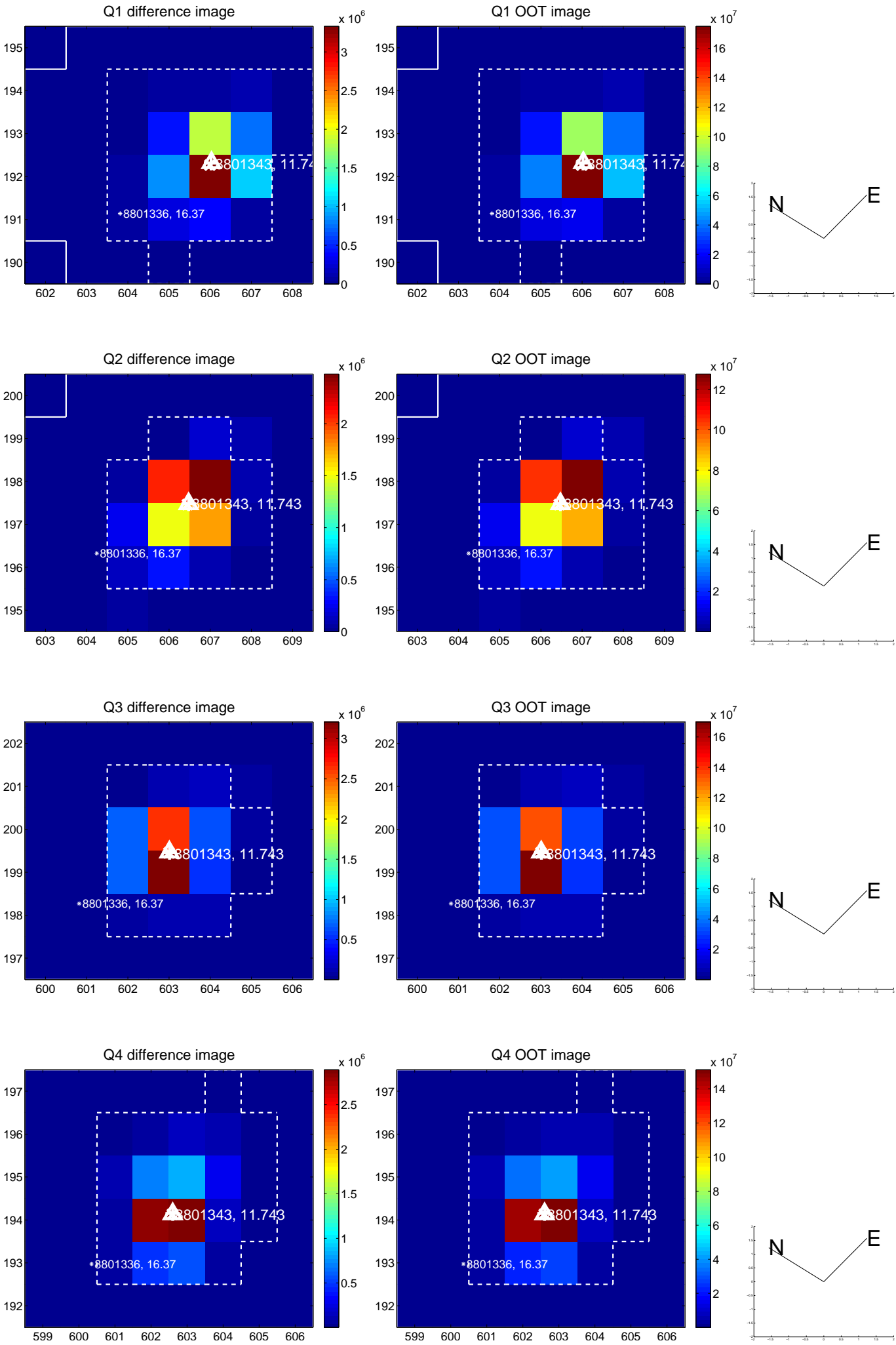
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.002 ± 0.067	0.02	0.002 ± 0.067	-0.000 ± 0.067
PRF-fit source offset from KIC position	0.128 ± 0.070	1.84	0.127 ± 0.070	0.020 ± 0.068
photometric centroid source offset	0.19 ± 0.00	152.82	0.19 ± 0.00	0.03 ± 0.00

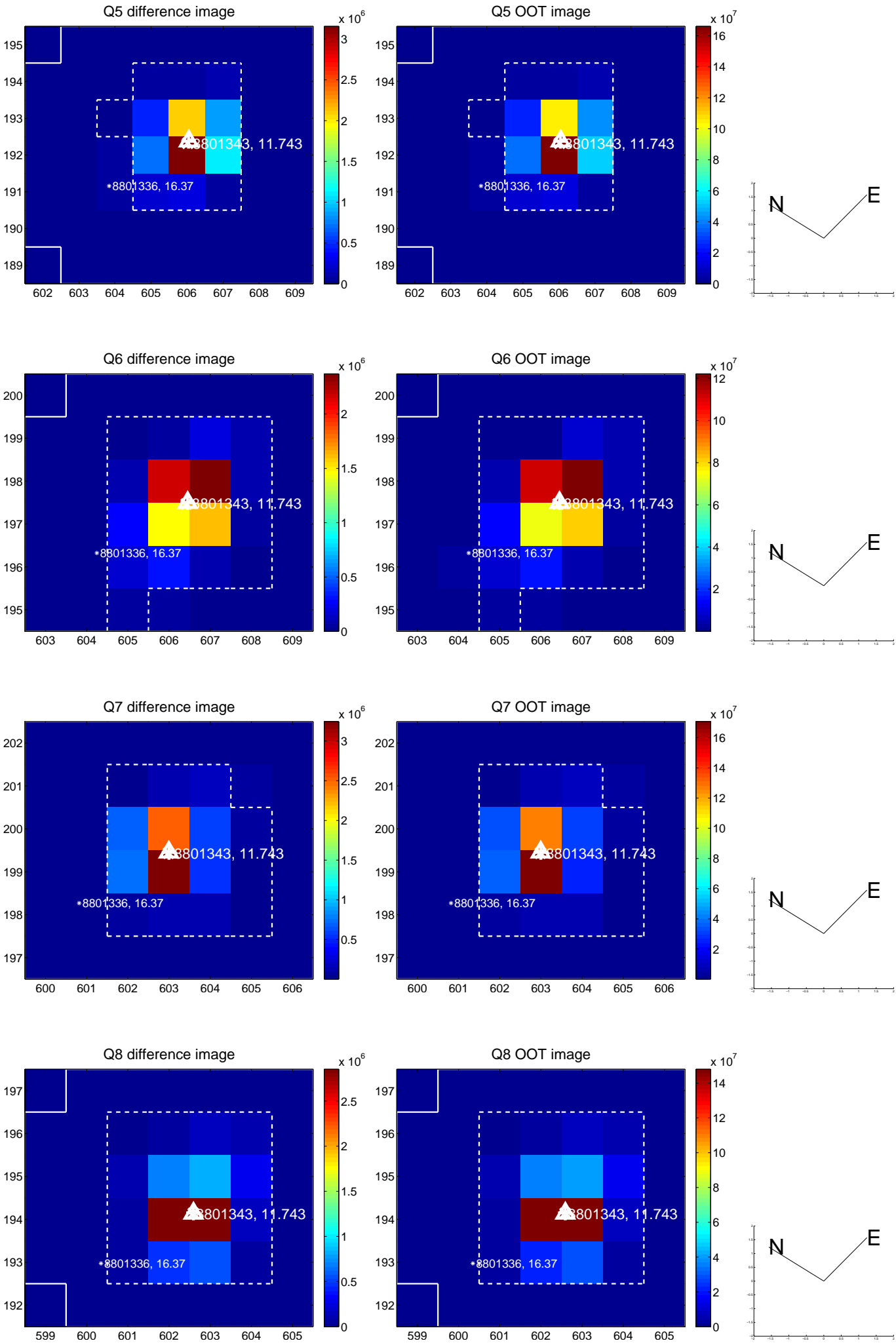


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

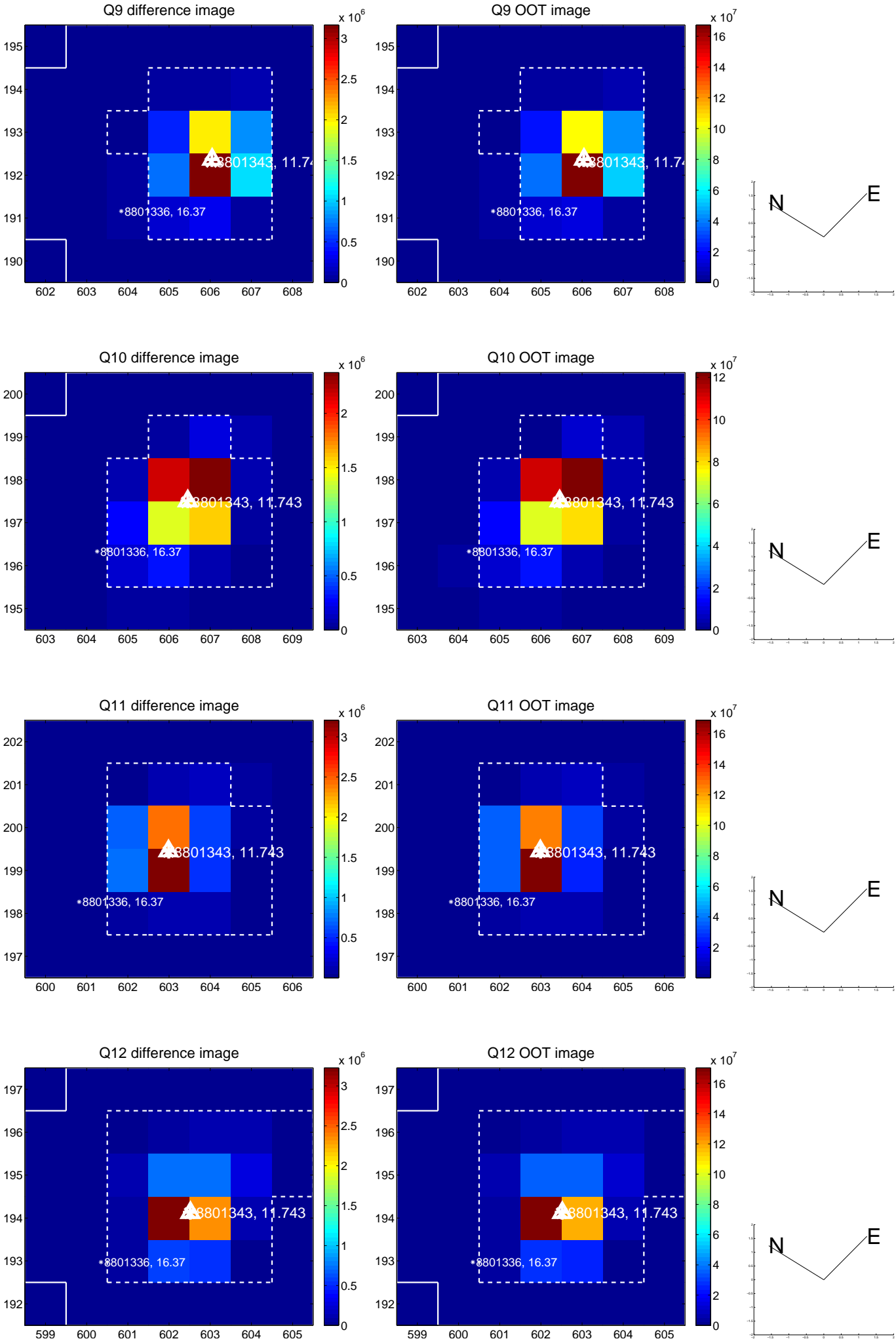
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



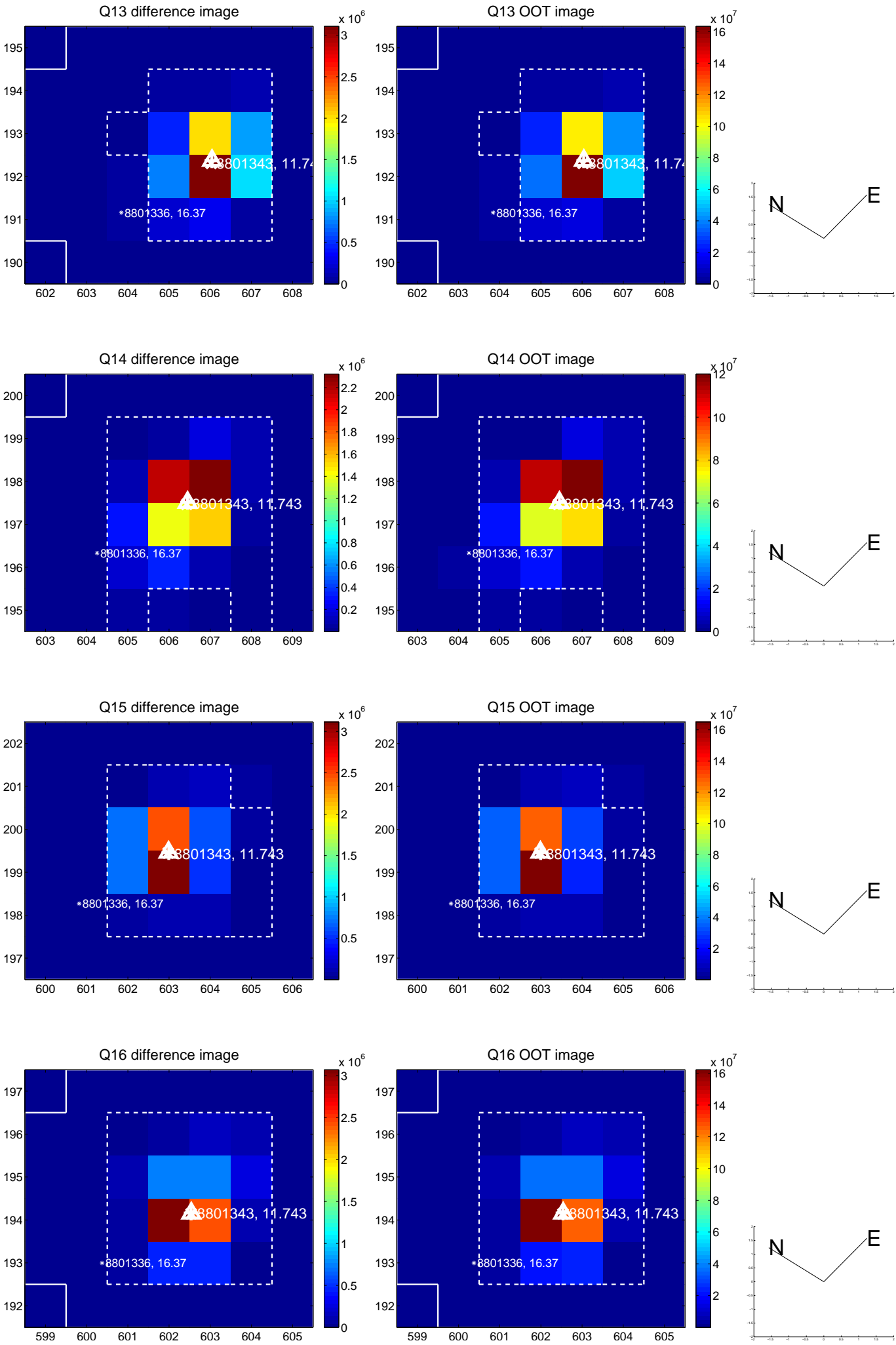
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



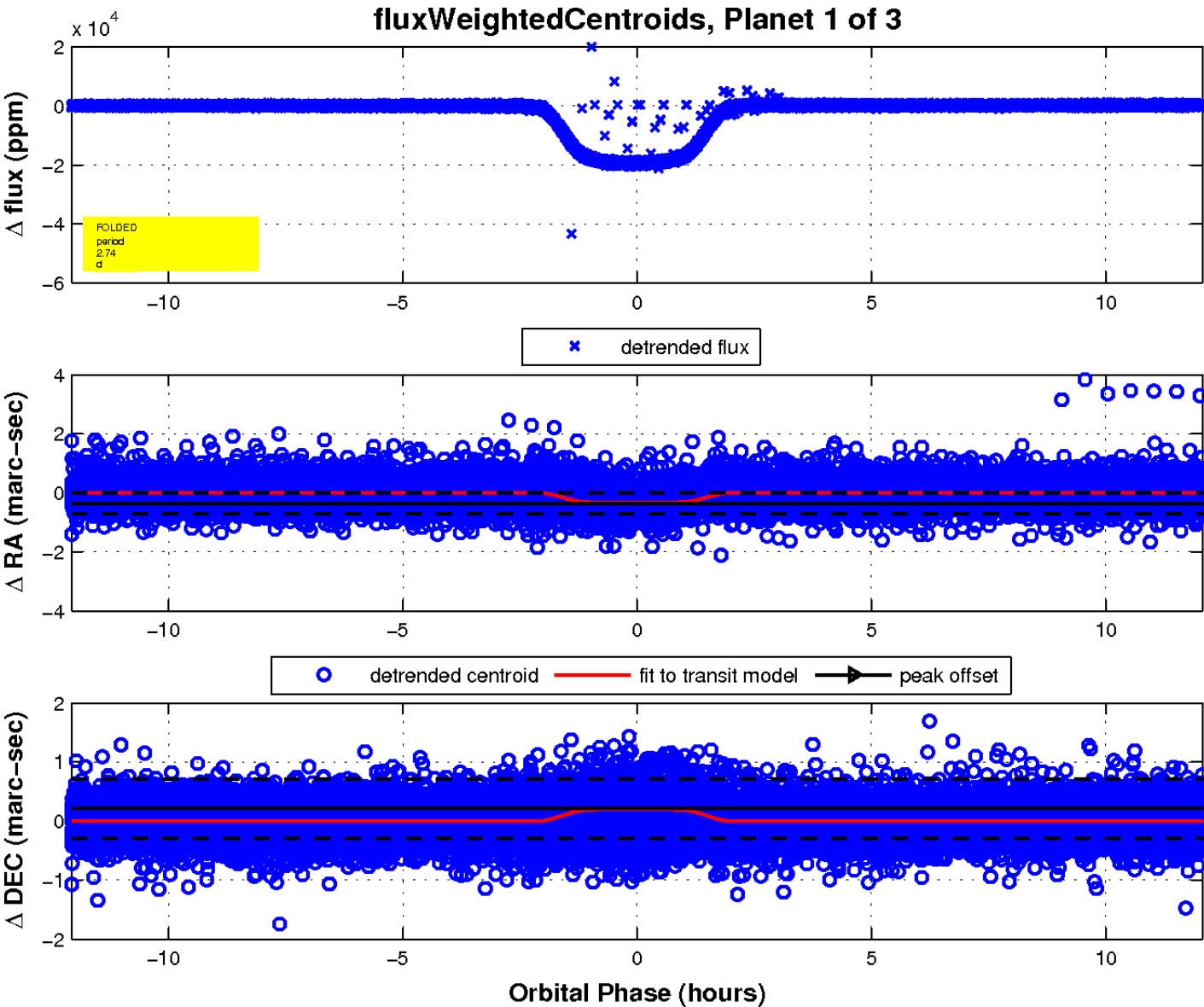
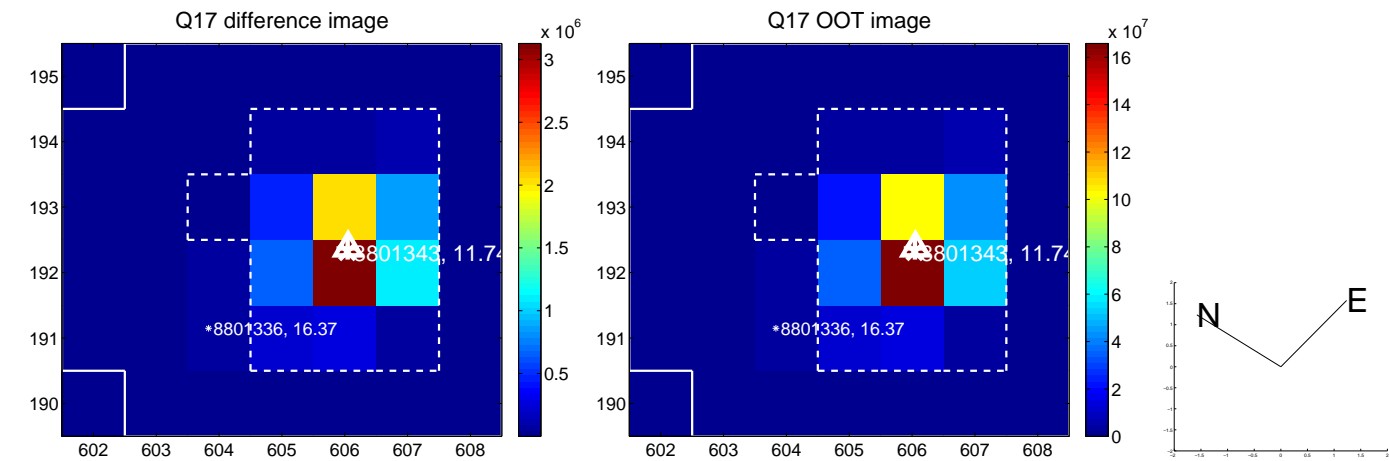
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

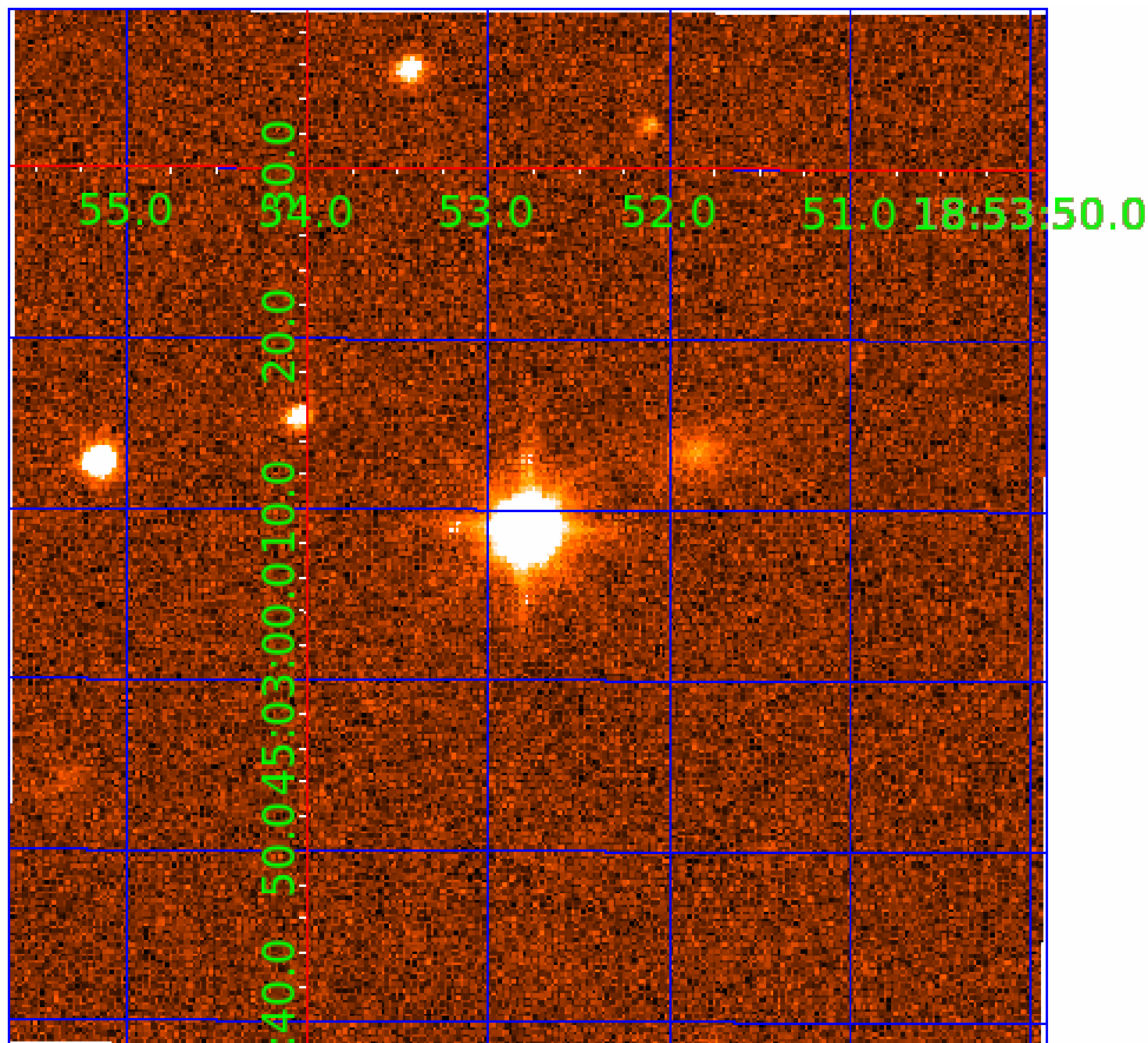


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008801343

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})
008801343-01	OBS	1247.01	2.739875	131.810313	19957.8	4.023	3950.9	3650.3	2.26	6520	34.22	4724.07
008801343-02	OBS	No	1.369930	131.814201	298.2	3.707	48.7	56.8	2.26	6520	4.56	11904.00
008801343-03	OBS	No	567.113663	361.689149	835.8	7.943	8.8	7.7	2.26	6520	12.34	3.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008801343-01	OBS	FP	0.48	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—HAS_SEC_TCE
008801343-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
008801343-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_SKYE—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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 008801343-02

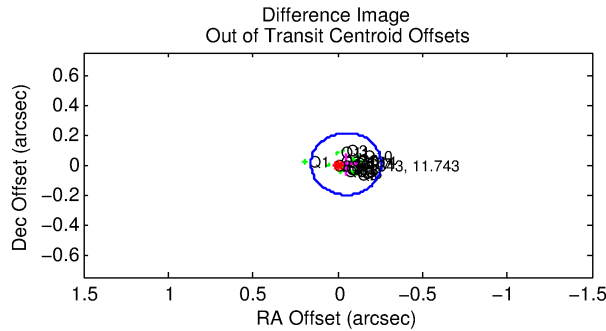
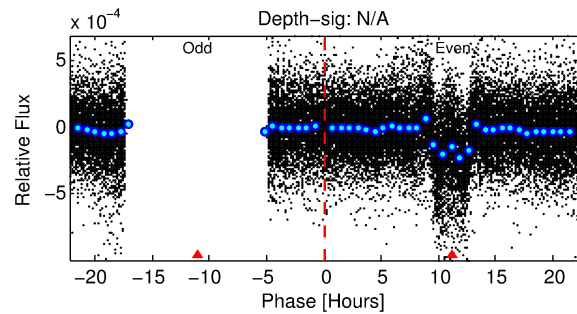
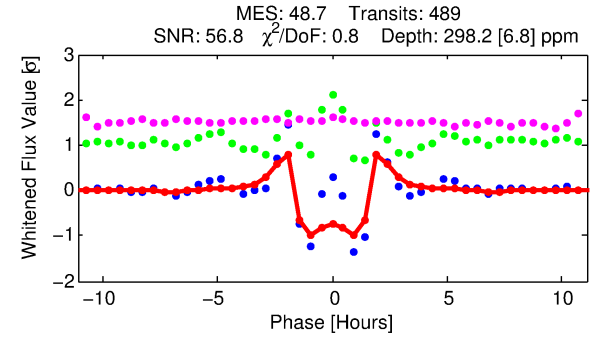
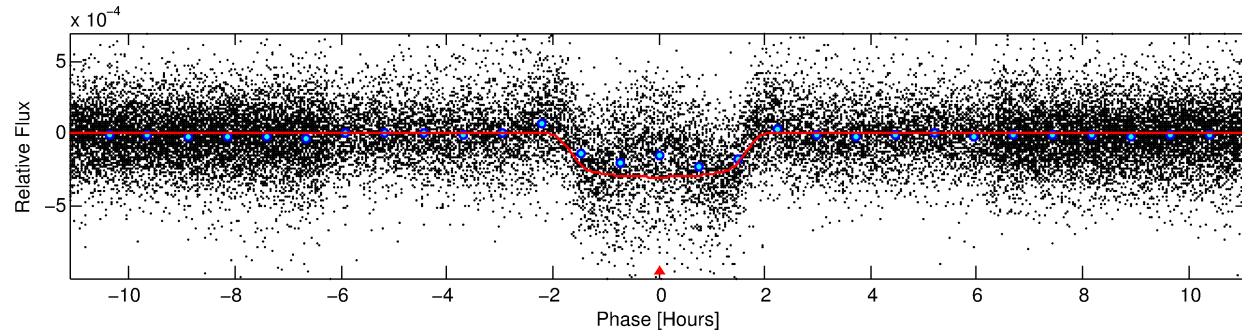
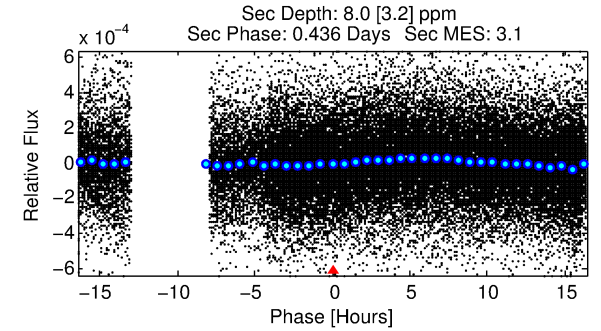
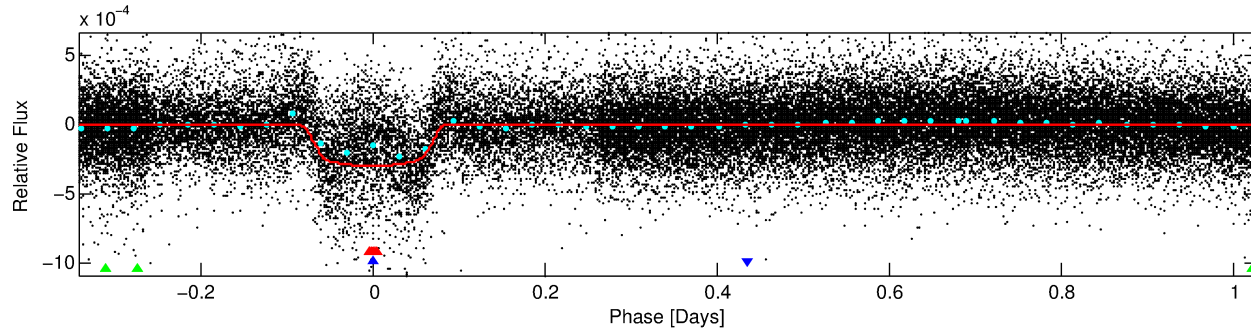
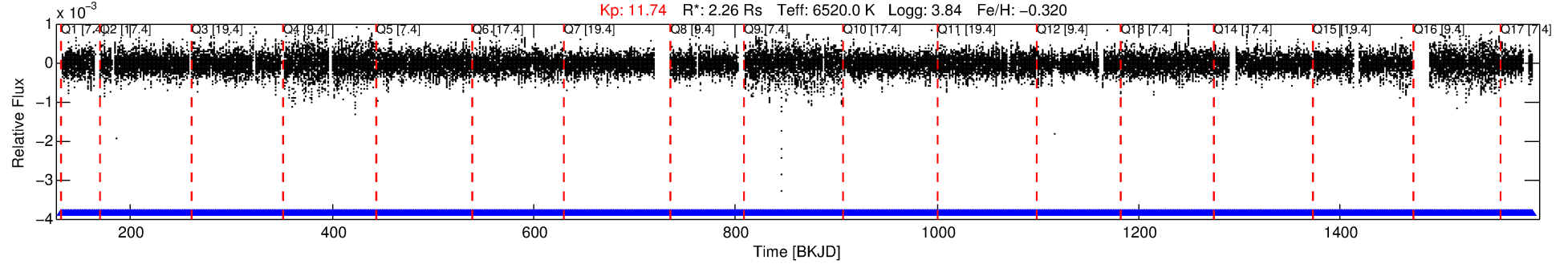
No Significant Match Found

DV One-Page Summary

KIC: 8801343 Candidate: 2 of 3 Period: 1.370 d

KOI: K01247 Corr: No Ephemeris Match

Kp: 11.74 R*: 2.26 Rs Teff: 6520.0 K Logg: 3.84 Fe/H: -0.320



DV Fit Results:

Period = 1.36993 [0.00000] d
Epoch = 131.8142 [0.0003] BKJD
Rp/R* = 0.0185 [0.0004]
a/R* = 1.64 [0.11]
b = 0.90 [0.02]
Seff = 11903.99 [6186.94]
Teff = 2663 [346] K
Rp = 4.56 [1.47] Re
a = 0.0264 [0.0083] AU
Ag = 0.15 [0.10] [-8.85σ]
Teffp = 2555 [268] K [-0.25σ]

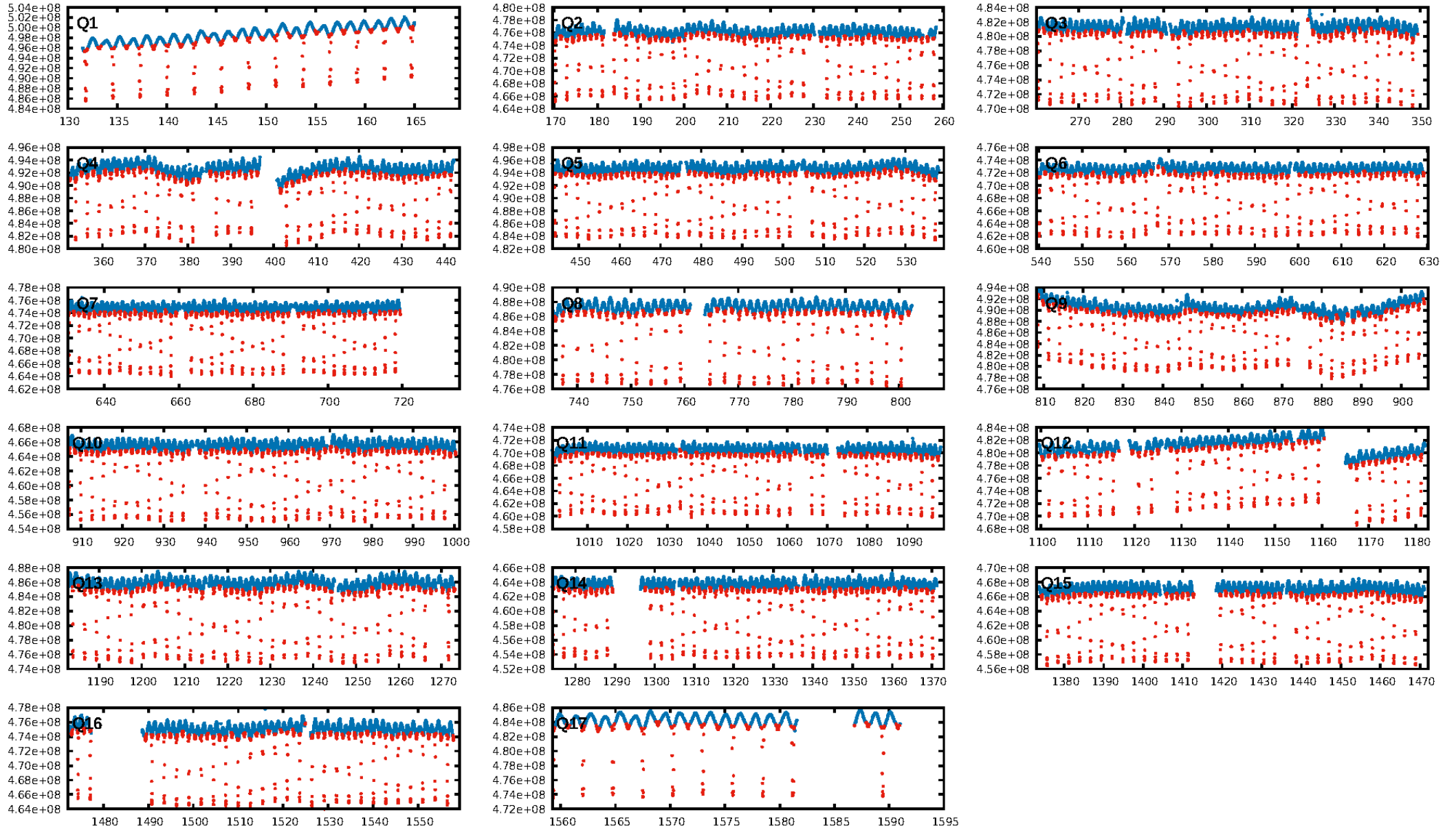
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [6.01σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [467/467]
GhostDiagnostic-chr: 3.935
Centroid-sig: 0.1%
Centroid-so: 0.138 arcsec [2.43σ]
OotOffset-rm: 0.049 arcsec [0.71σ]
KicOffset-rm: 0.080 arcsec [1.13σ]
OotOffset-st: 4/4/4/5 [17]
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DiffImageOverlap-fno: 1.00 [17/17]

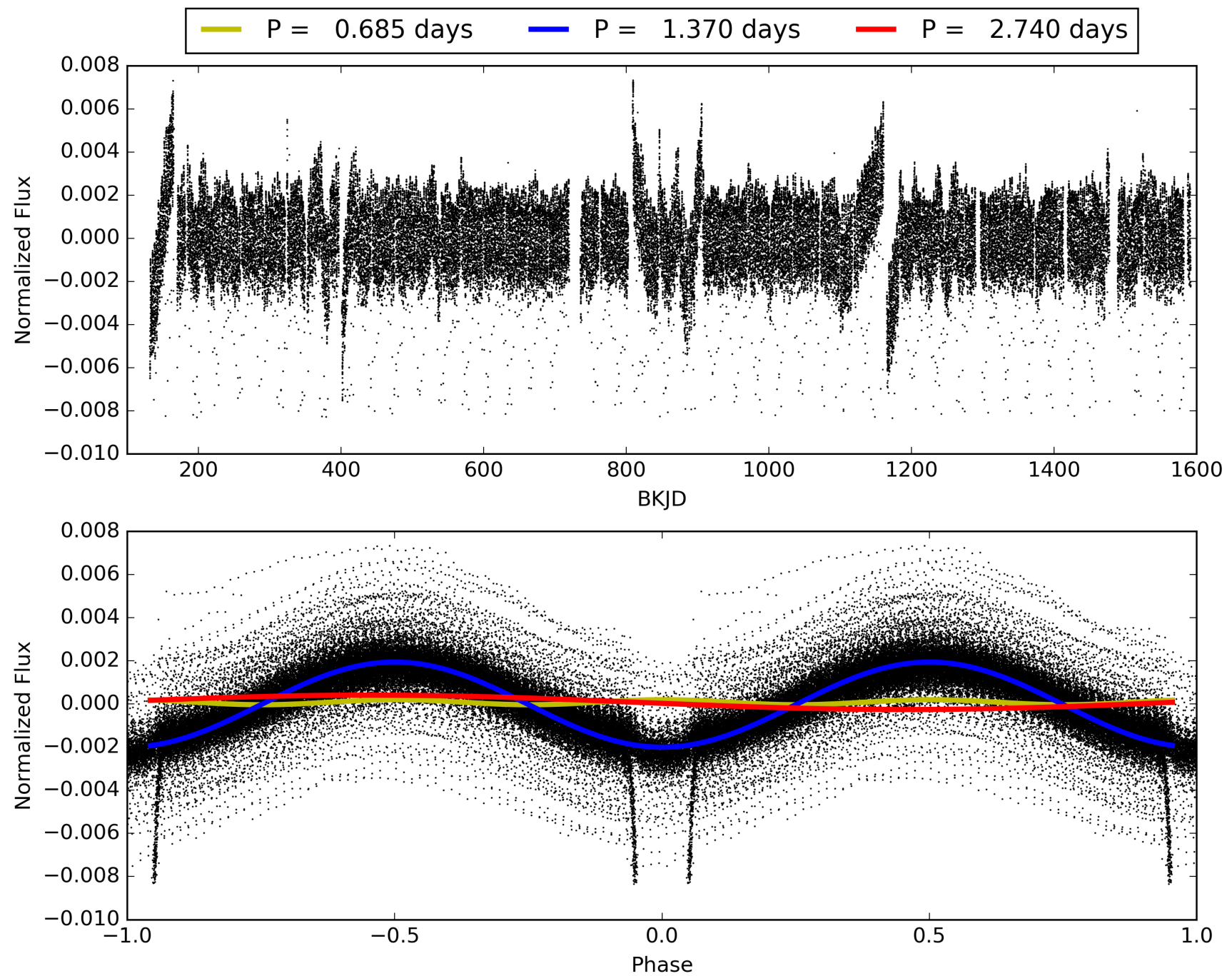
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 23:18:03 Z

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

TCE 008801343-02, PDC Light Curves

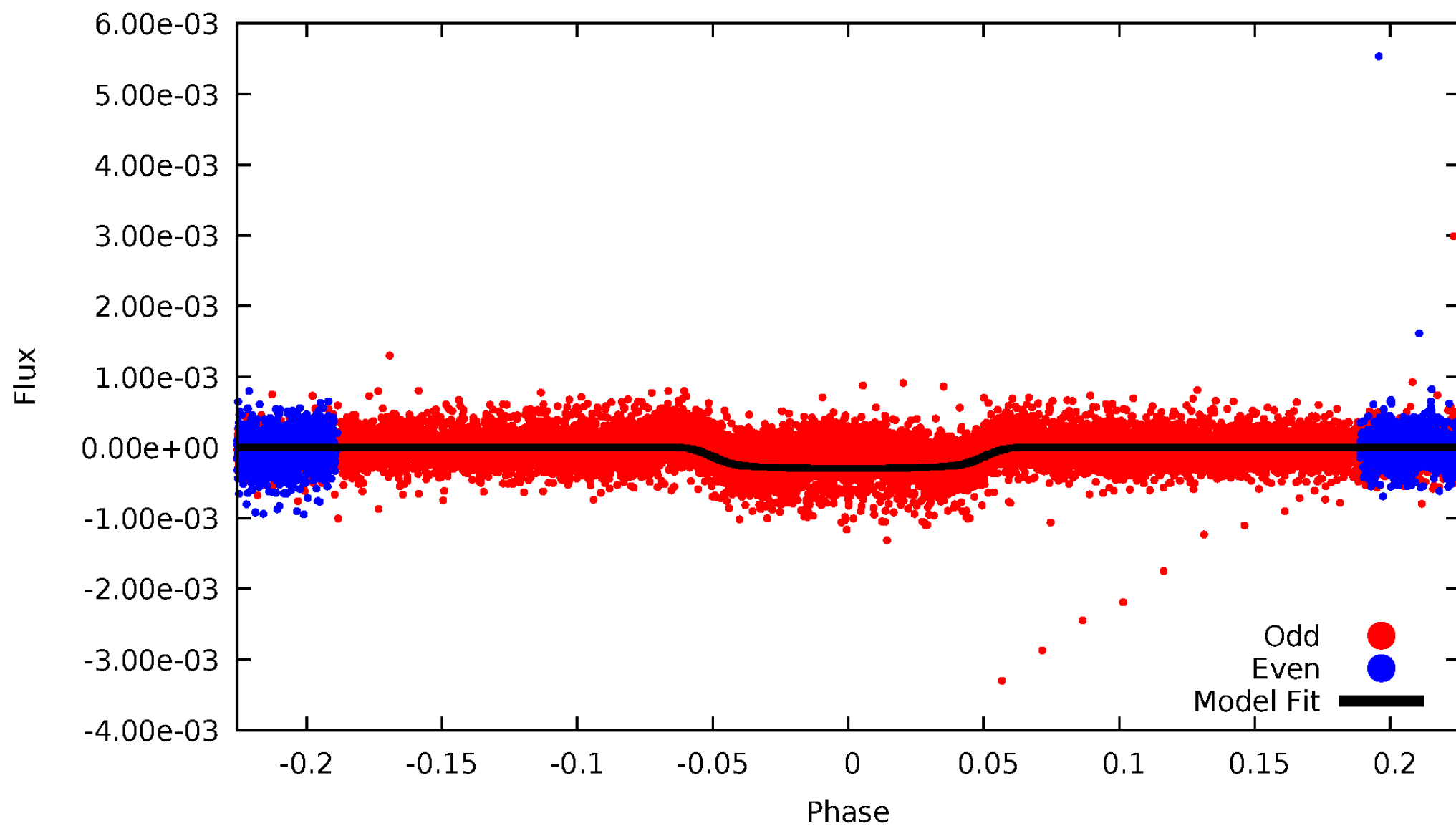


TCE 008801343-02



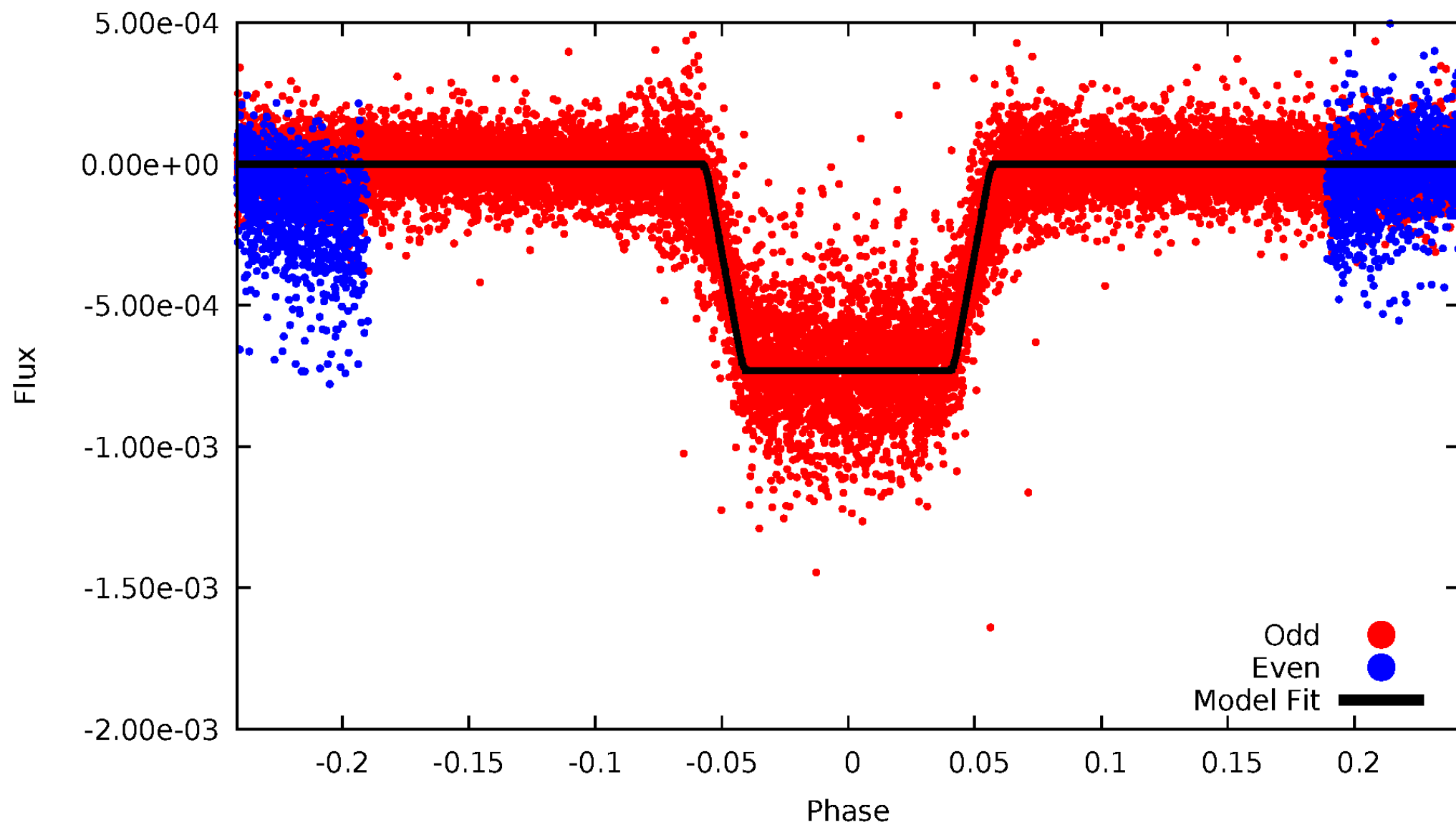
DV Odd/Even

TCE 008801343-02



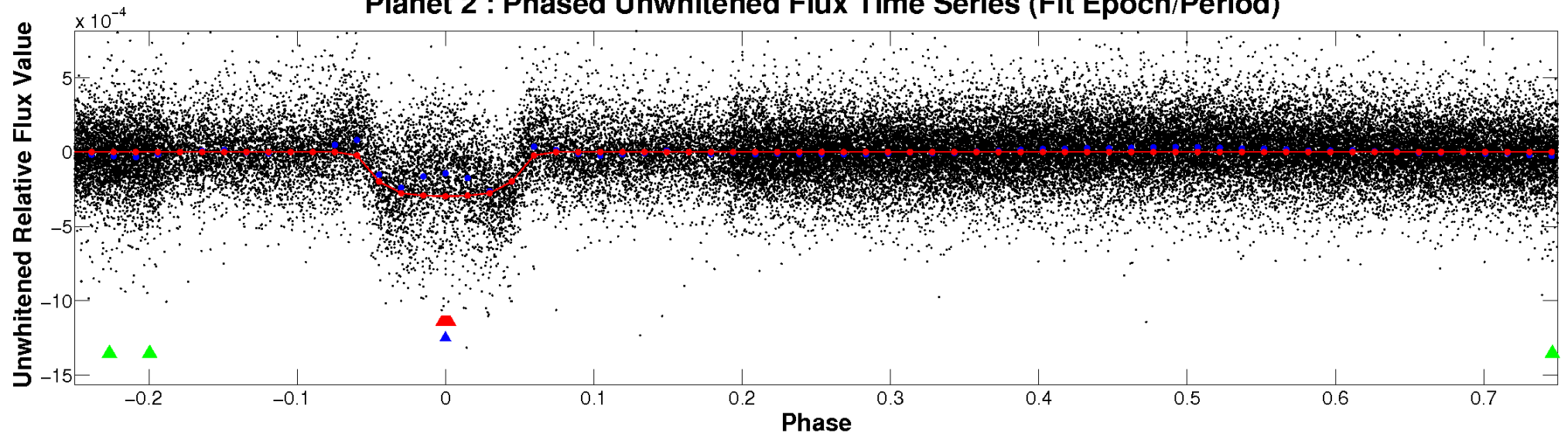
ALT Odd/Even

TCE 008801343-02

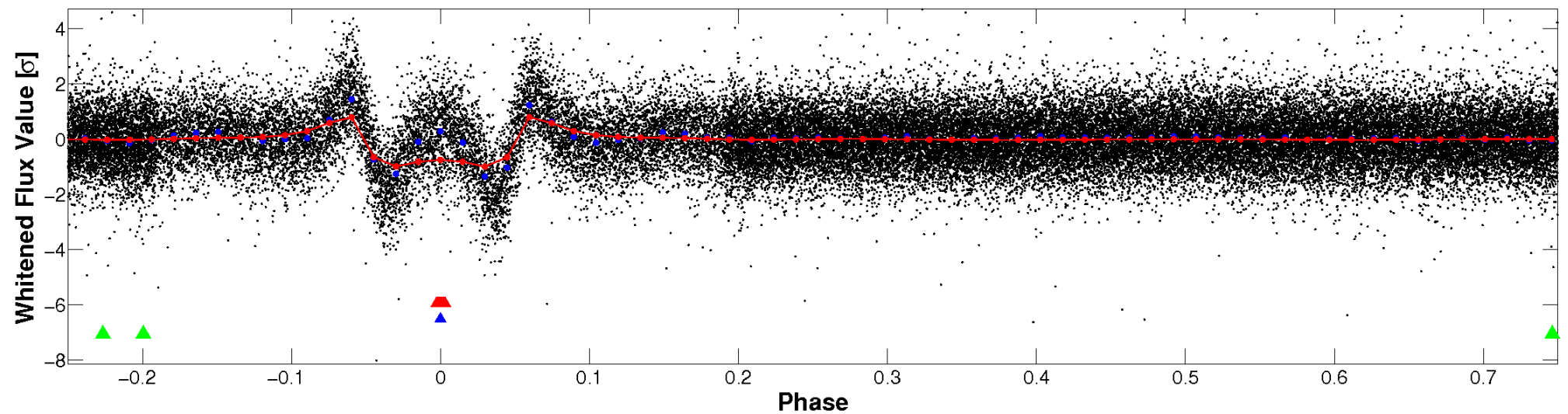


Non-Whitened Vs. Whitened Light Curve

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

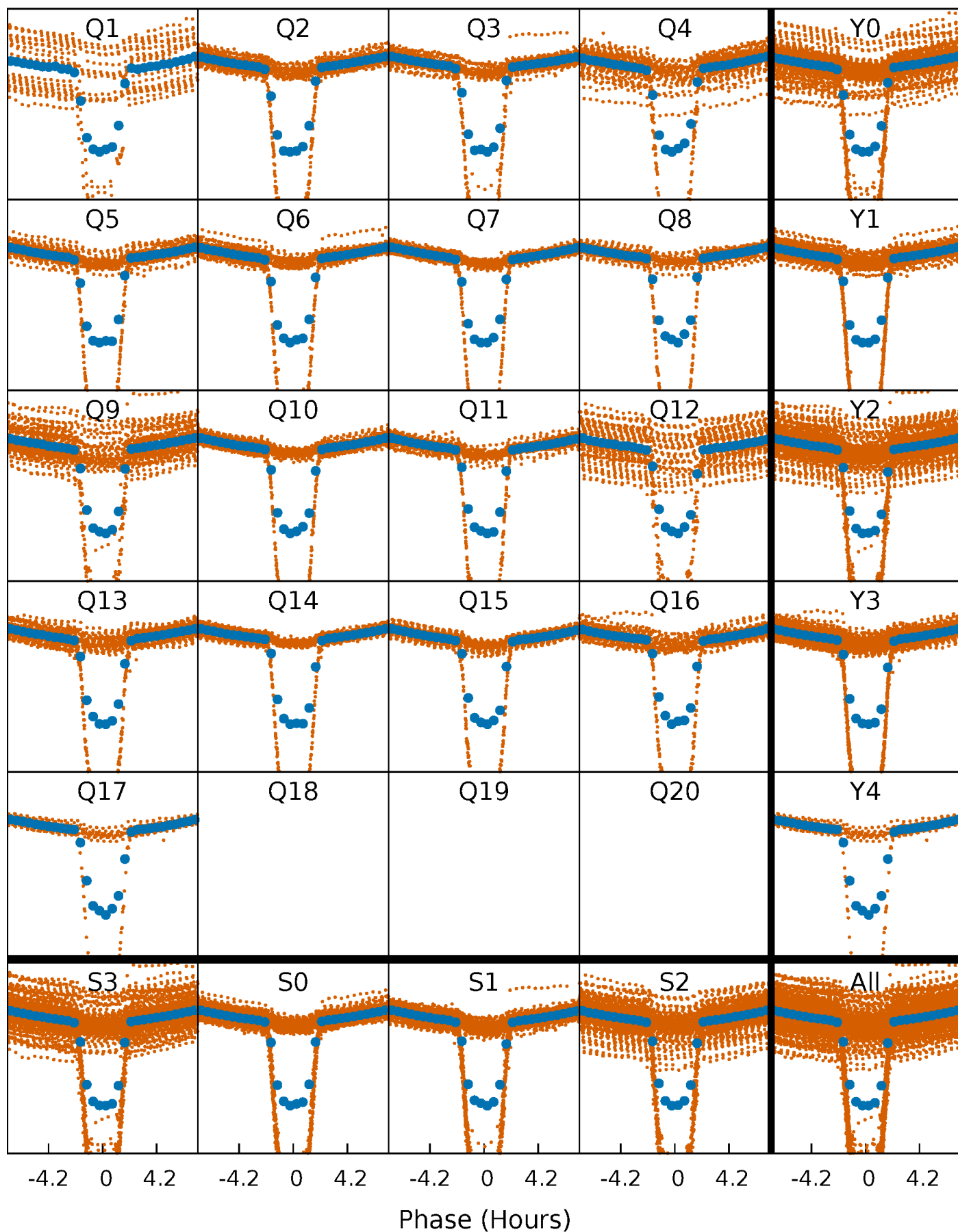


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



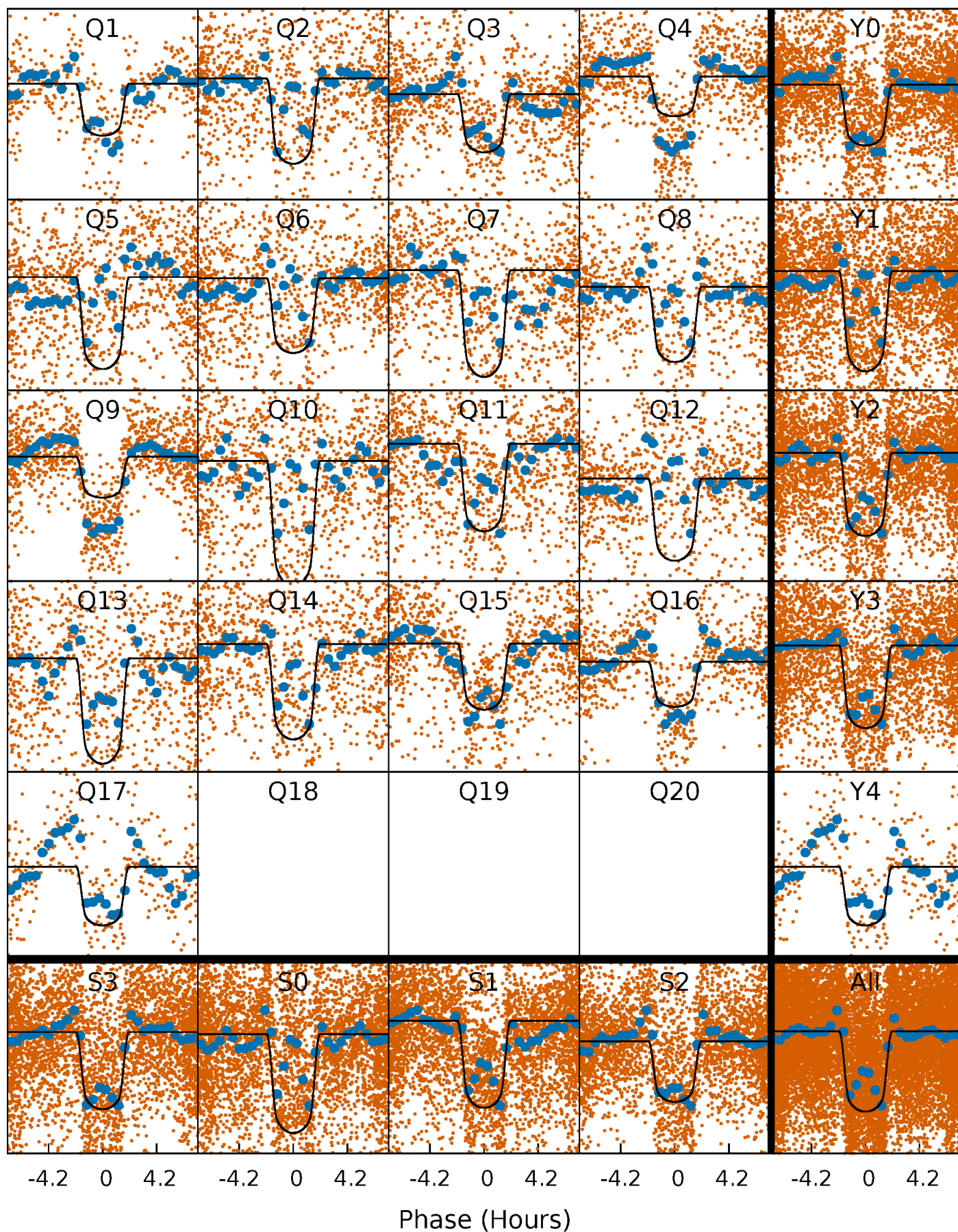
PDC Quarter-Phased Transit Curves

TCE 008801343-02 P= 1.369930 Days $T_0=131.814201$ (BKJD)



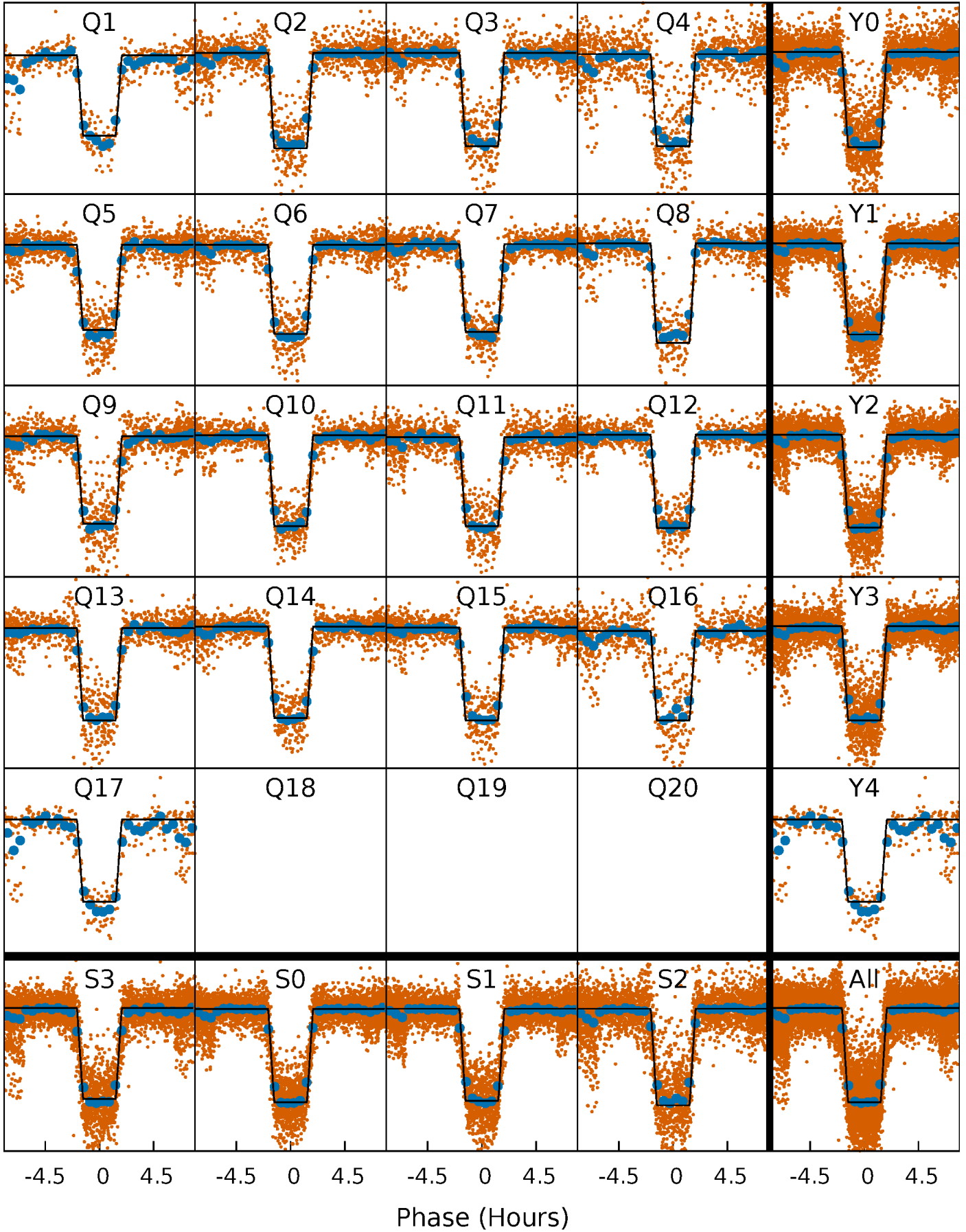
DV Quarter-Phased Transit Curves

TCE 008801343-02 P= 1.369930 Days $T_0=131.814201$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

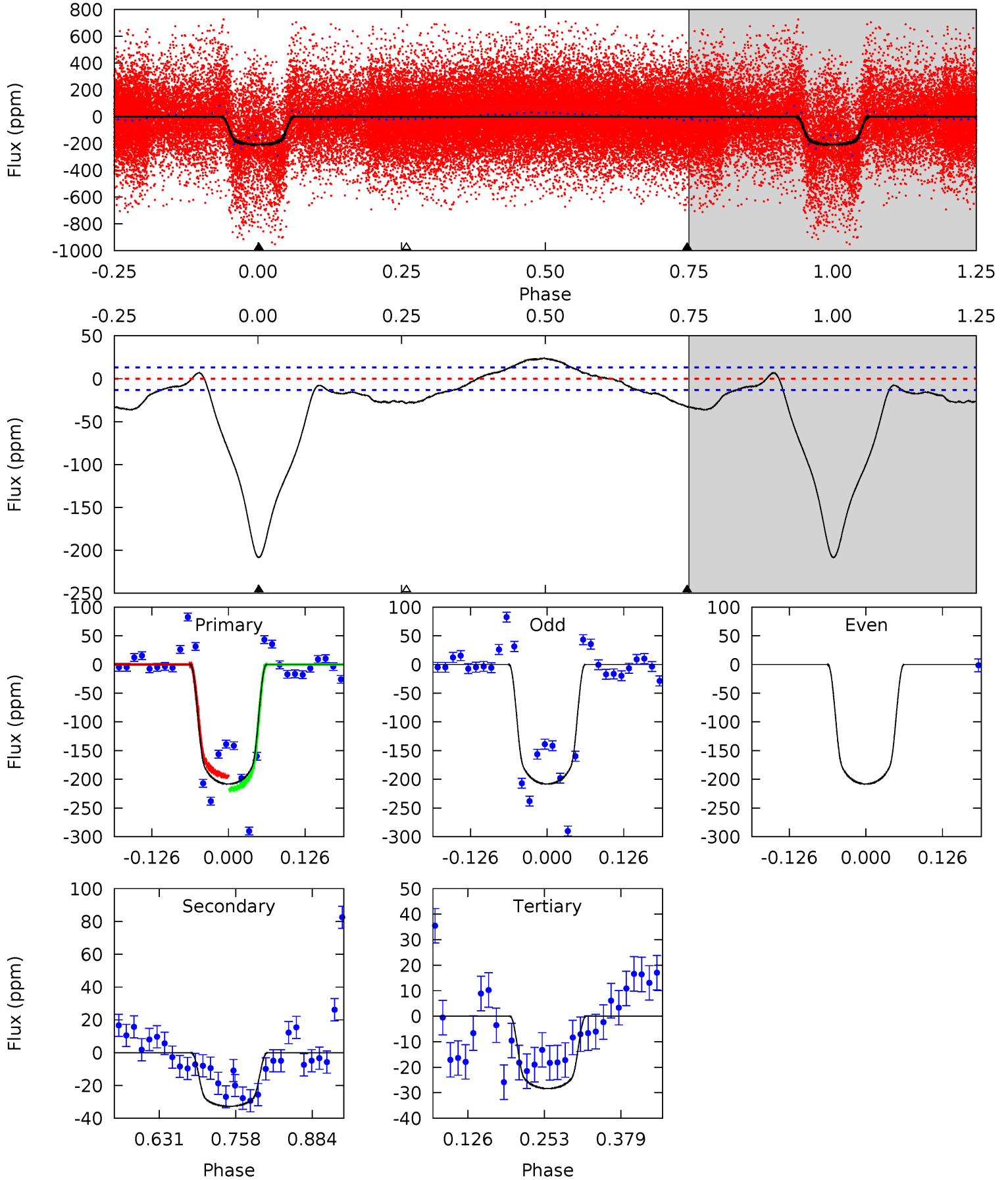
TCE 008801343-02 $P = 1.369932$ Days $T_0 = 131.813479$ (BKJD)



DV Model-Shift Uniqueness Test

008801343-02, P = 1.369930 Days, E = 130.444271 Days

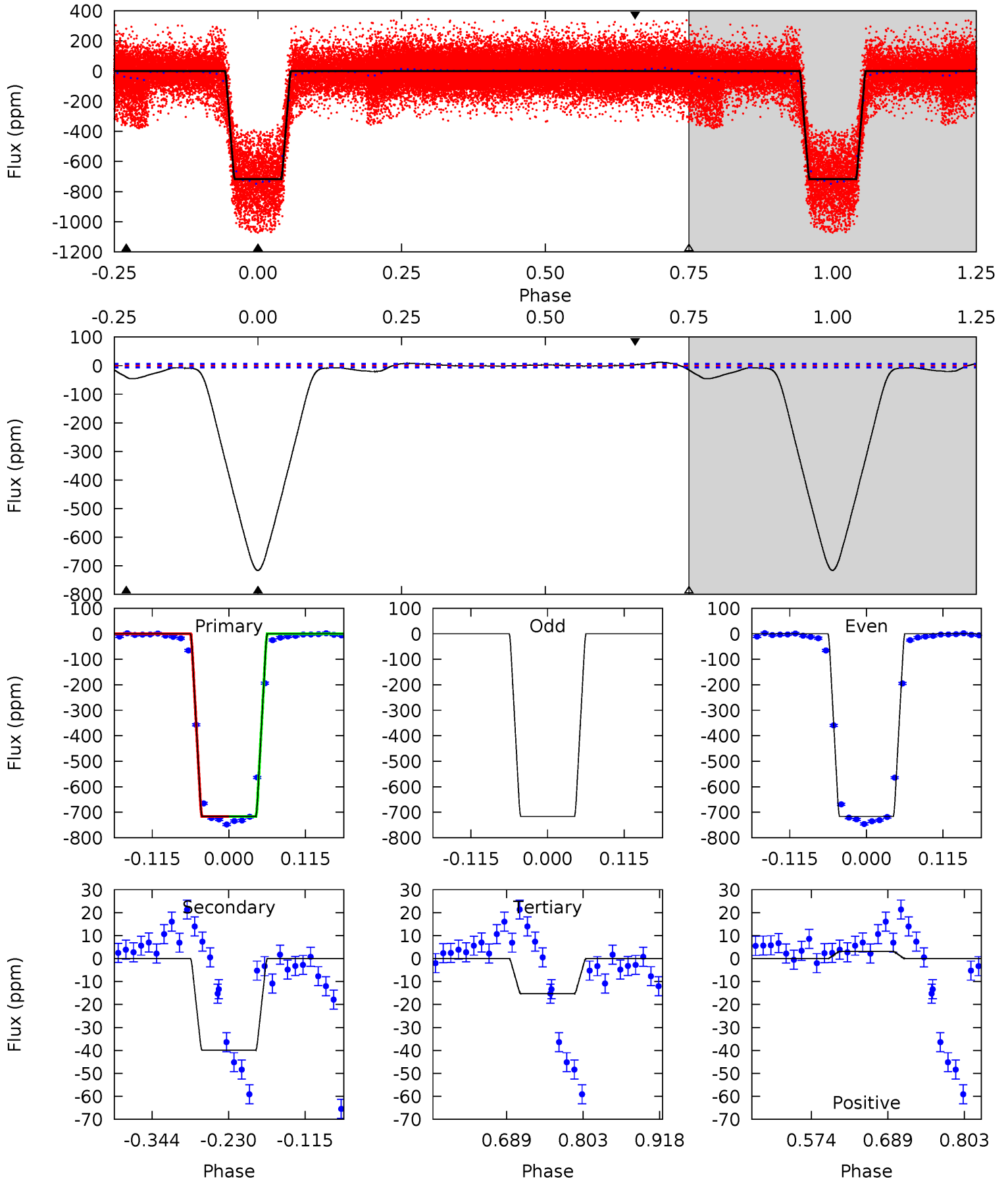
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
71.7	11.3	9.76	0	4.52	1.53	6.04	61.9	71.7	1.50	11.3	0	1.03	0.10	4.12



Alt Model-Shift Uniqueness Test

008801343-02, P = 1.369932 Days, E = 131.813479 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
500.6	27.9	10.7	2.14	4.54	1.58	4.69	490.0	498.5	17.2	25.8	0.01	1.00	0.02	0.13



Stellar Parameters For KIC 008801343

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6520^{+162}_{-179}	$3.844^{+0.300}_{-0.100}$	$-0.320^{+0.300}_{-0.250}$	$2.260^{+0.424}_{-0.727}$	$1.300^{+0.220}_{-0.220}$	$0.159^{+0.313}_{-0.048}$
	+2%/-3%	+8%/-3%	+94%/-78%	+19%/-32%	+17%/-17%	+197%/-30%
Source	PHO1	FLK73	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 008801343-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-33 ± 3	$4.46^{+0.59}_{-0.82}$	3650^{+218}_{-314}	3573^{+157}_{-189}	$0.646^{+0.291}_{-0.133}$
Alt.	-40 ± 1	$6.54^{+0.73}_{-1.22}$	3641^{+229}_{-293}	2797^{+364}_{-4488}	$0.368^{+0.147}_{-0.069}$

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 $A_{obs} \gg 1.0$

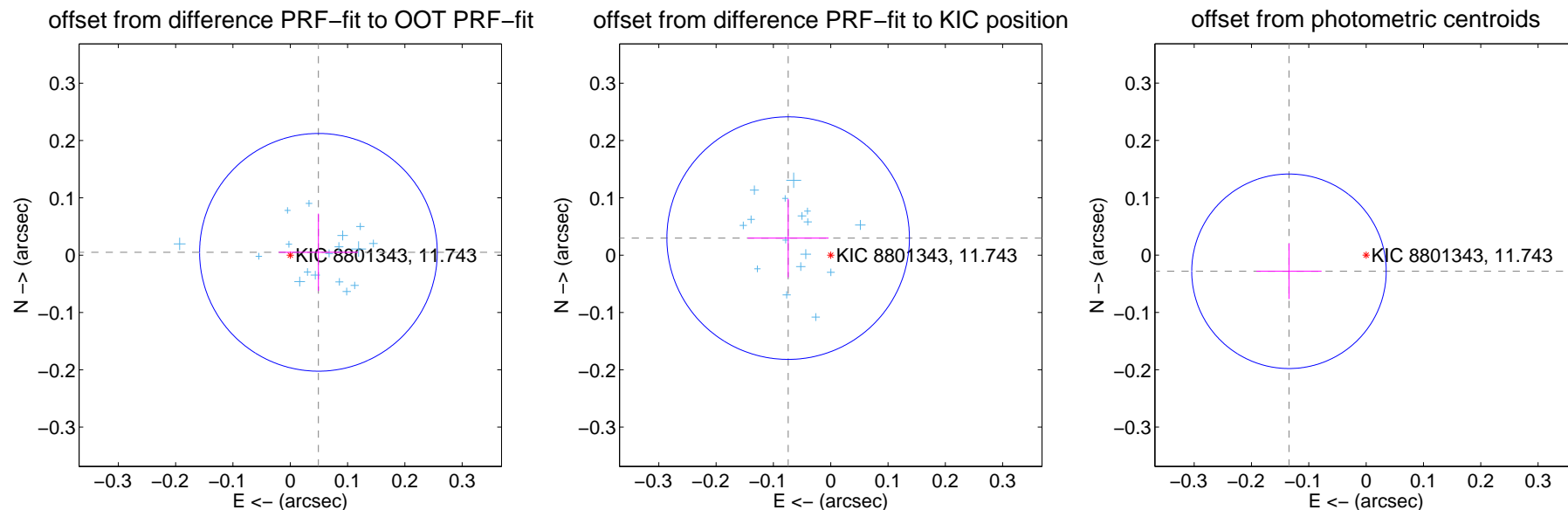
DV Centroid Data

Supplemental centroid analysis for 008801343-02. **Kepler magnitude: 11.74.** Transit SNR 56.82

There are 17 quarters with good PRF difference image offsets

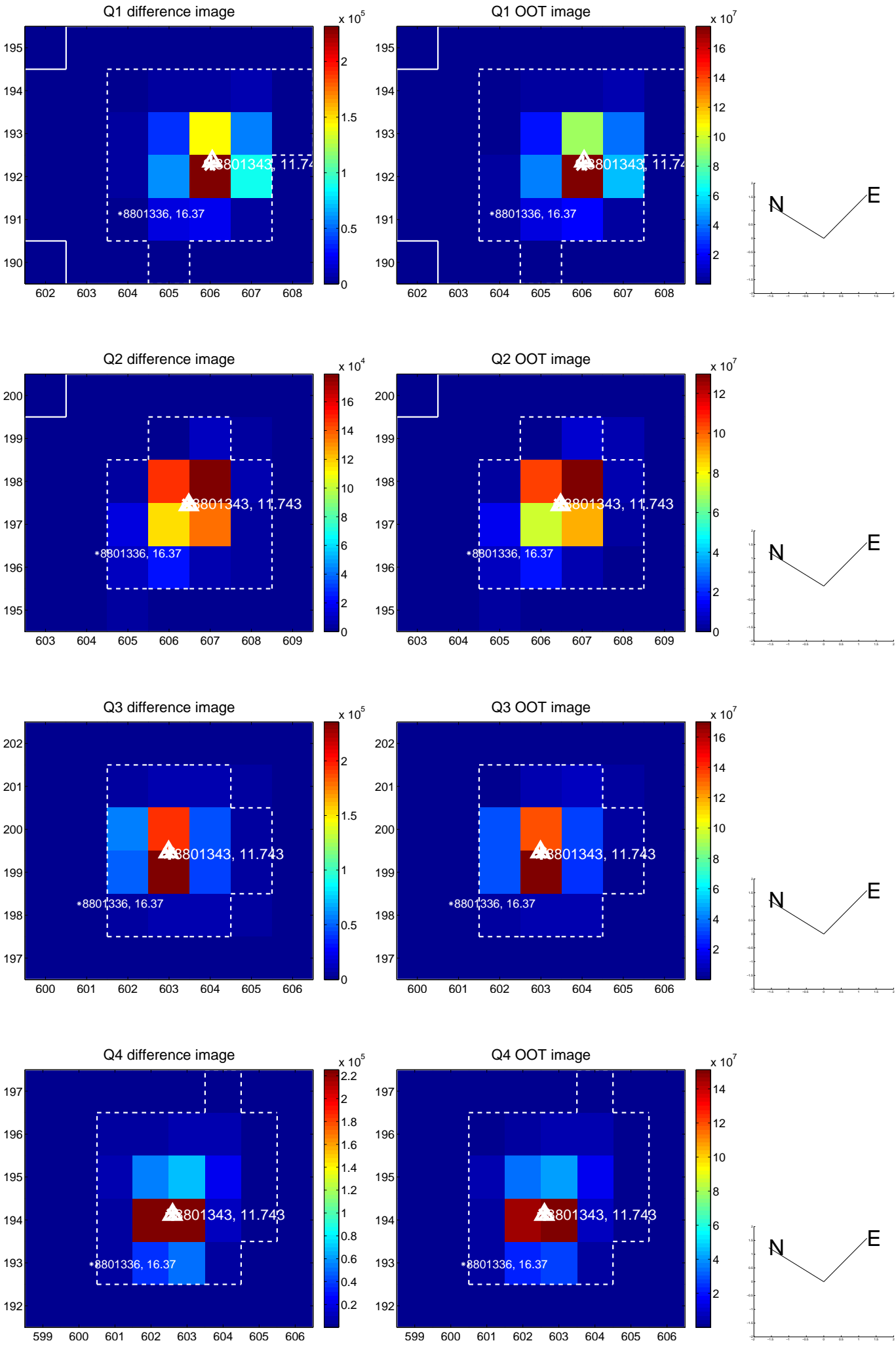
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.049 ± 0.069	0.71	-0.049 ± 0.069	0.005 ± 0.068
PRF-fit source offset from KIC position	0.080 ± 0.071	1.13	0.074 ± 0.071	0.030 ± 0.068
photometric centroid source offset	0.14 ± 0.06	2.43	0.13 ± 0.06	-0.03 ± 0.05

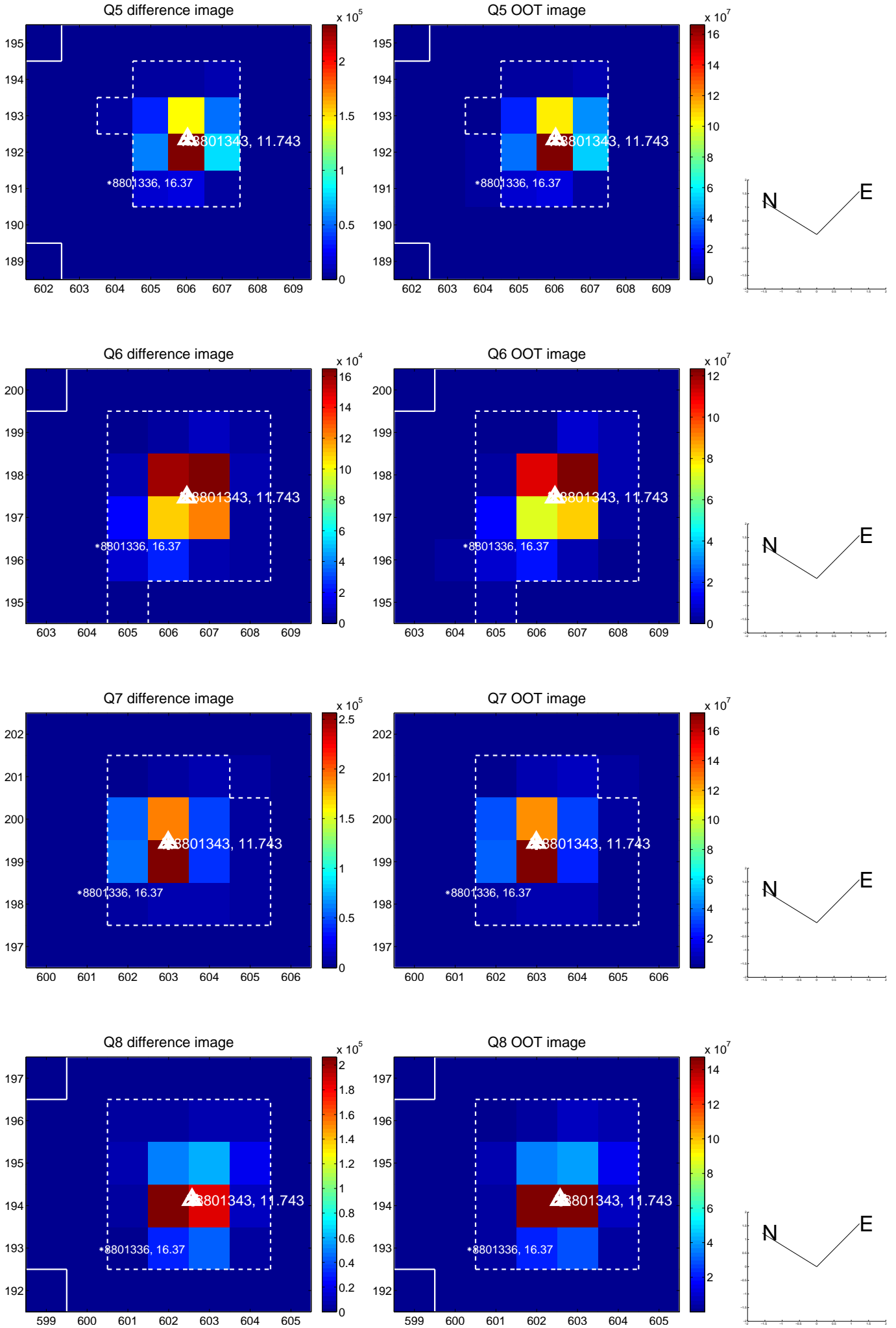


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

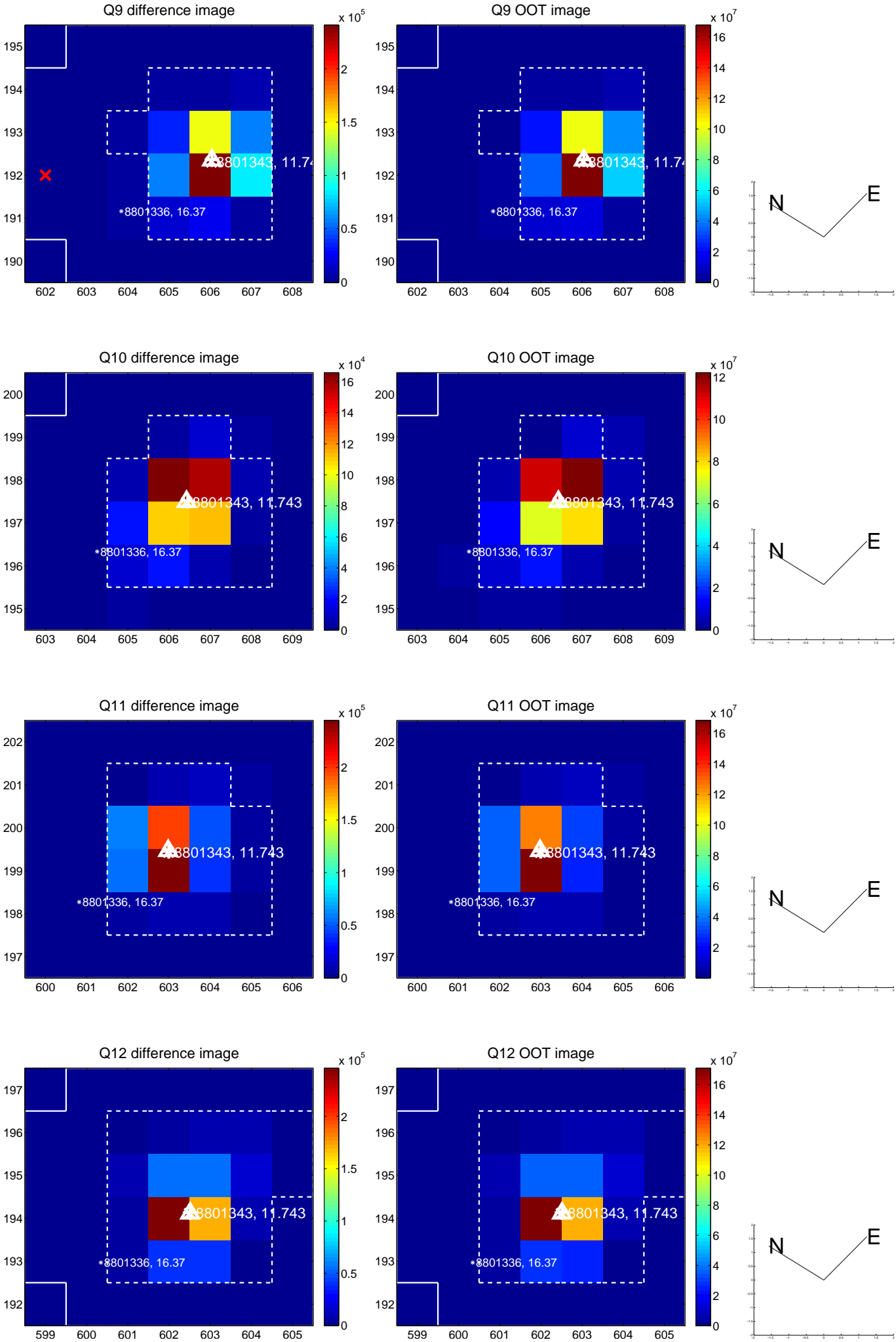
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



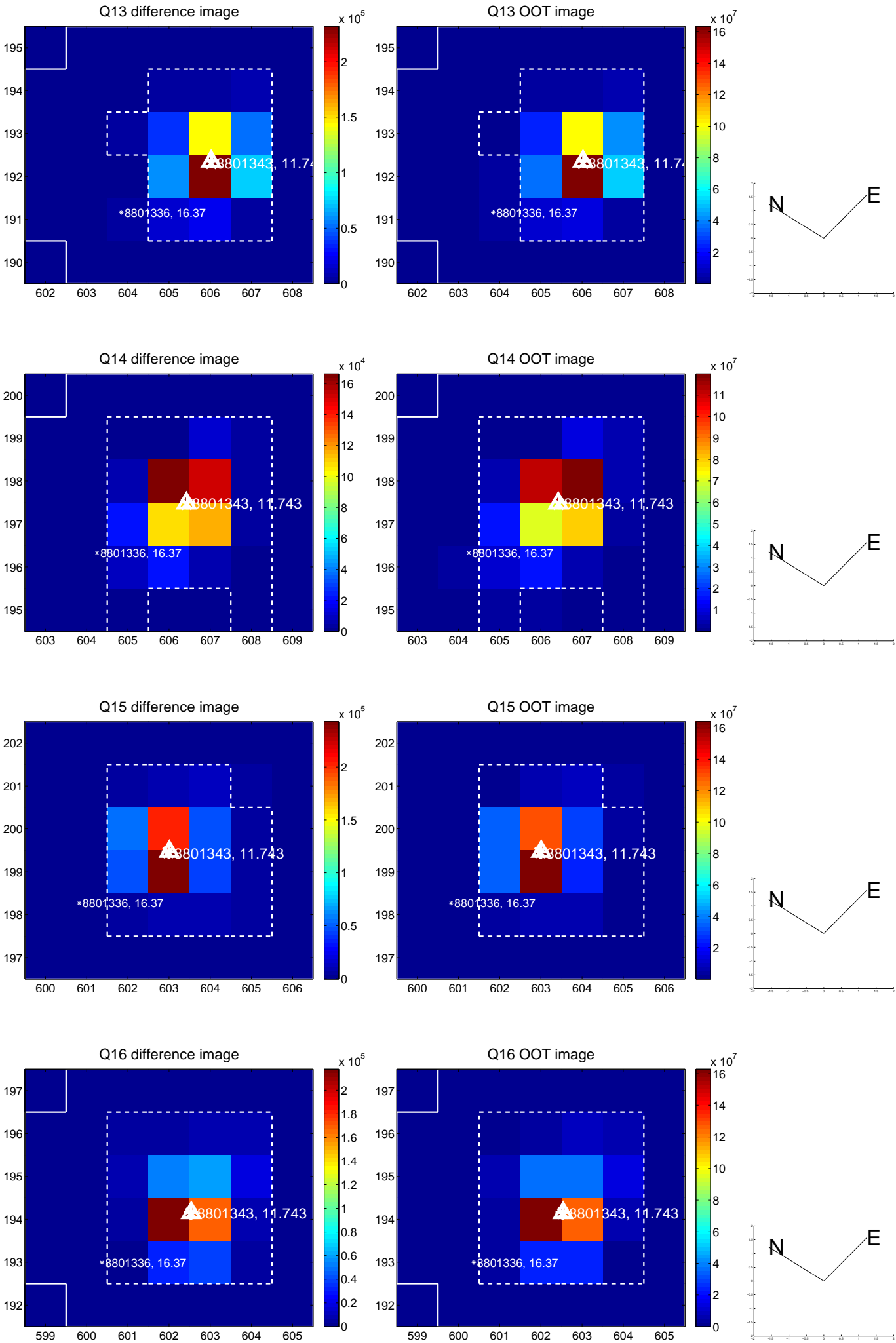
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



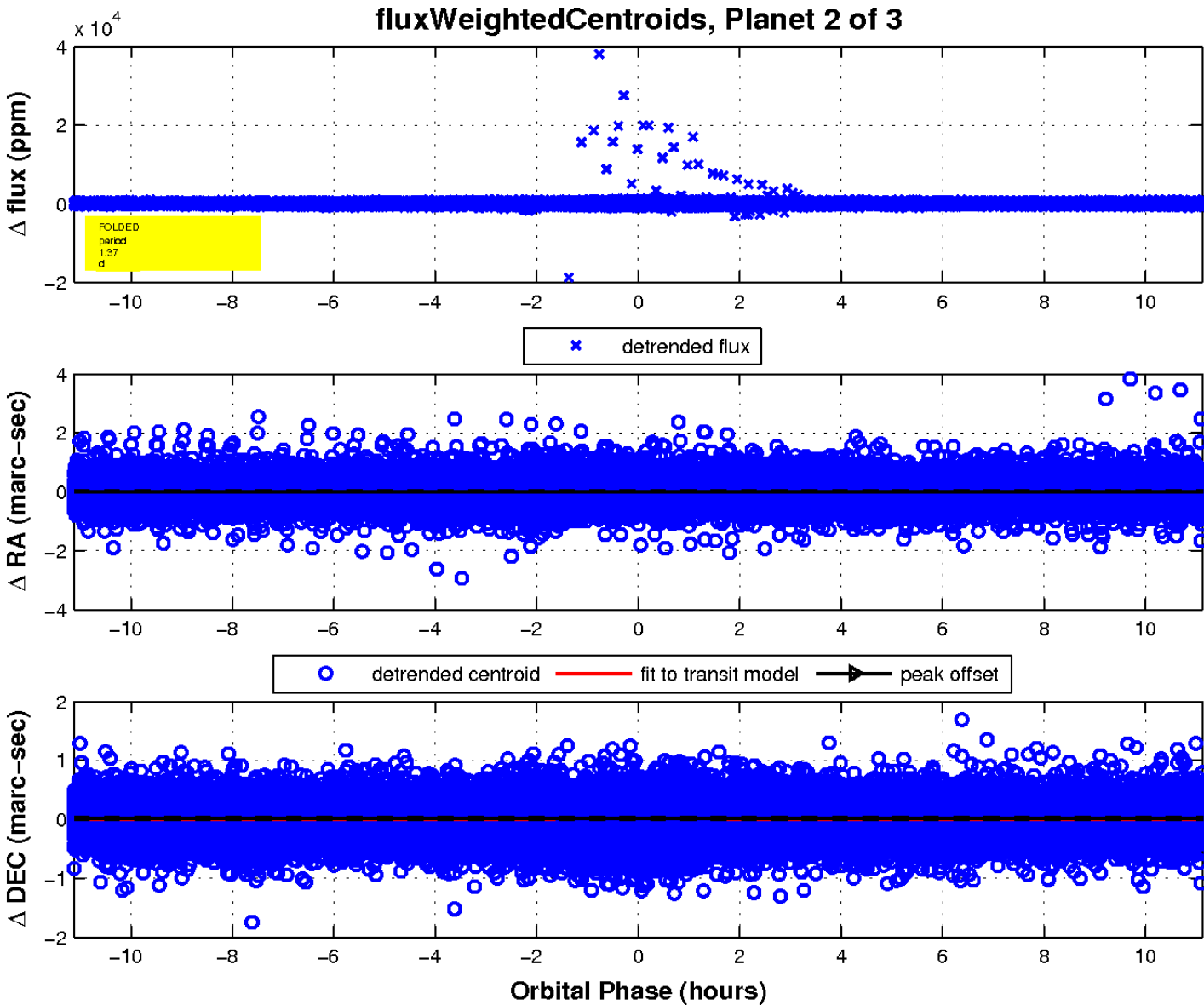
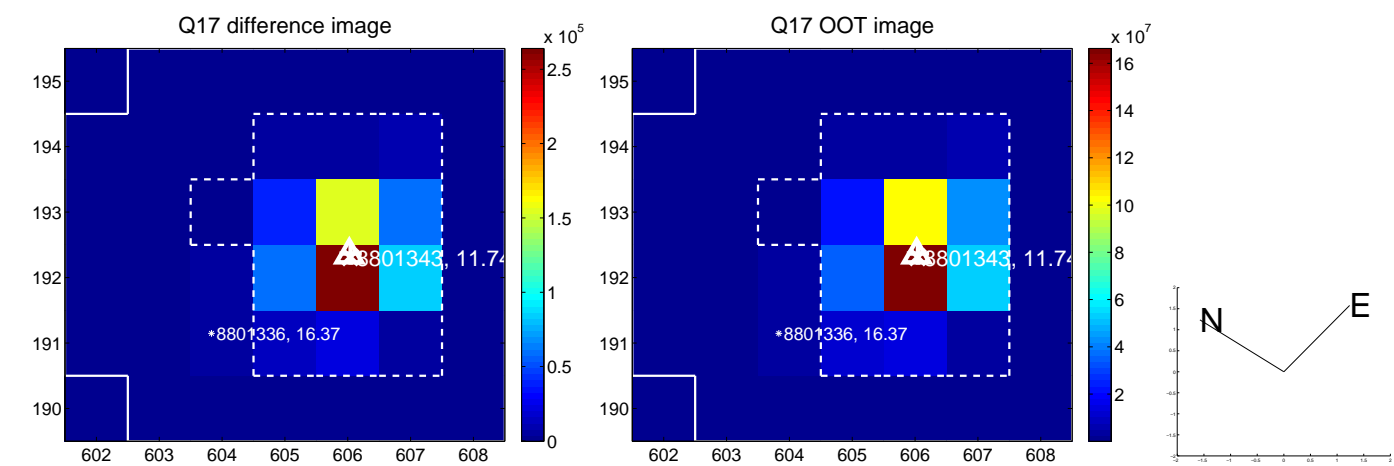
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

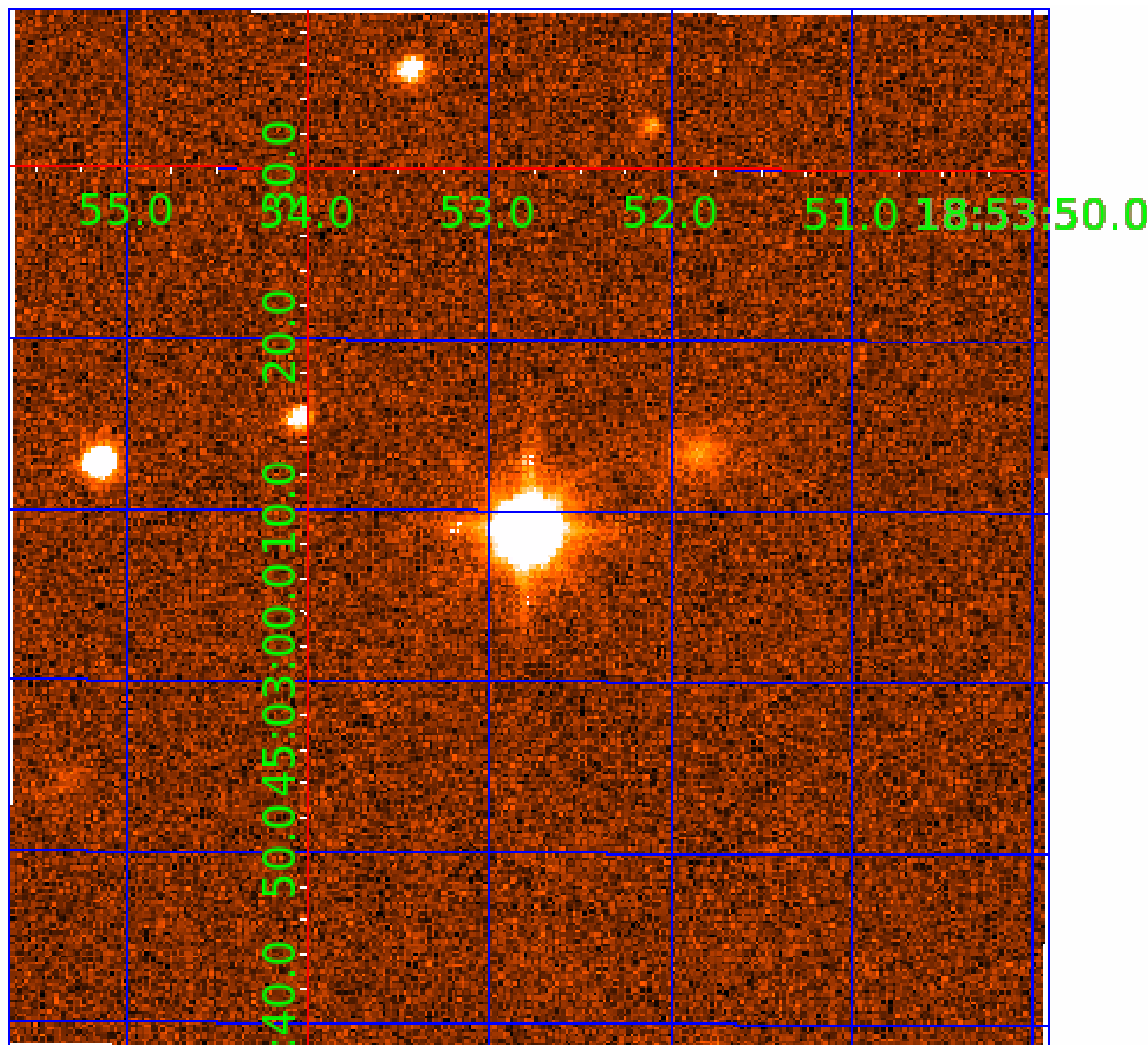


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008801343

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})
008801343-01	OBS	1247.01	2.739875	131.810313	19957.8	4.023	3950.9	3650.3	2.26	6520	34.22	4724.07
008801343-02	OBS	No	1.369930	131.814201	298.2	3.707	48.7	56.8	2.26	6520	4.56	11904.00
008801343-03	OBS	No	567.113663	361.689149	835.8	7.943	8.8	7.7	2.26	6520	12.34	3.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008801343-01	OBS	FP	0.48	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—HAS_SEC_TCE
008801343-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
008801343-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_SKYE—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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 008801343-03

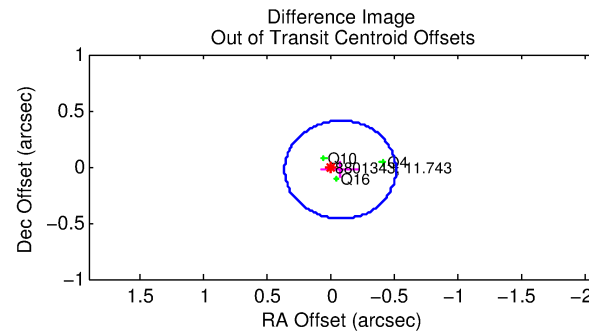
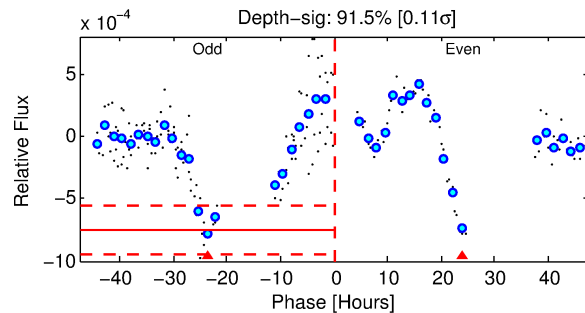
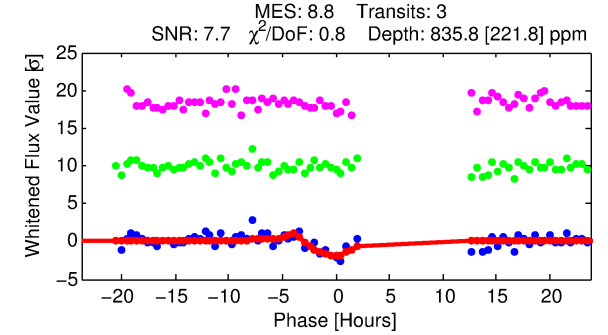
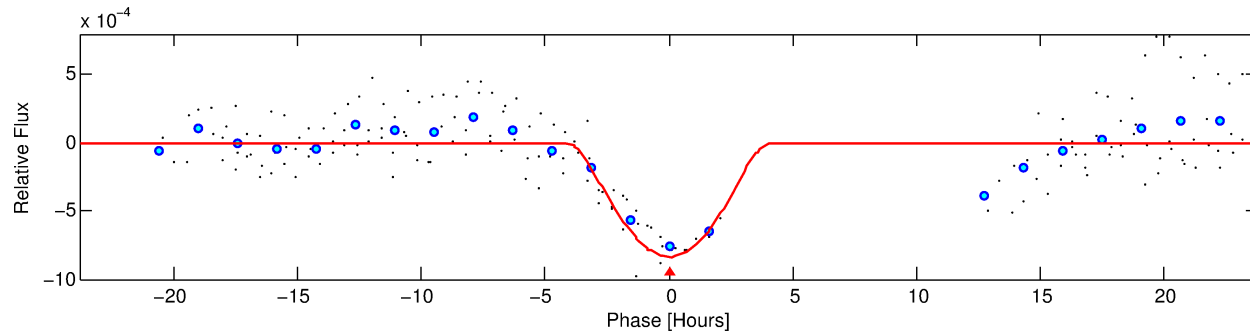
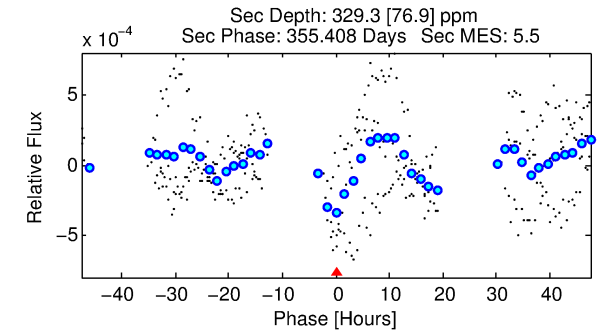
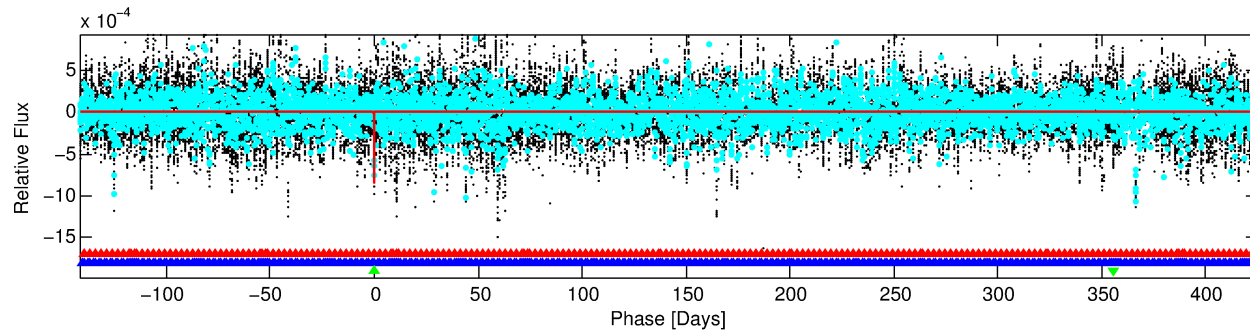
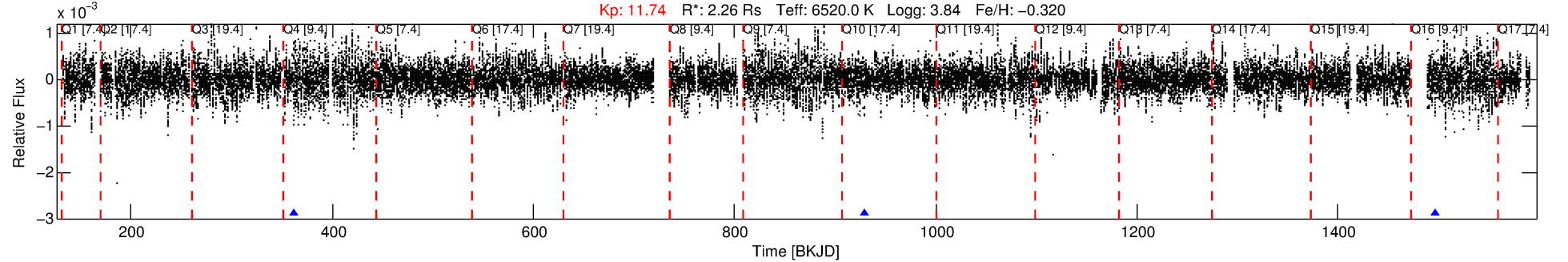
No Significant Match Found

DV One-Page Summary

KIC: 8801343 Candidate: 3 of 3 Period: 567.114 d

KOI: K01247 Corr: No Ephemeris Match

Kp: 11.74 R*: 2.26 Rs Teff: 6520.0 K Logg: 3.84 Fe/H: -0.320



DV Fit Results:

Period = 567.11366 [0.01226] d
Epoch = 361.6891 [0.0230] BKJD
Rp/R* = 0.0500 [0.0871]
a/R* = 175.14 [75.41]
b = 1.00 [0.13]
Seff = 3.86 [2.01]
Teq = 357 [46] K
Rp = 12.33 [21.85] Re
a = 1.4640 [0.4607] AU
Ag = 2552.37 [9006.90] [0.28σ]
Teffp = 3927 [3430] K [1.04σ]

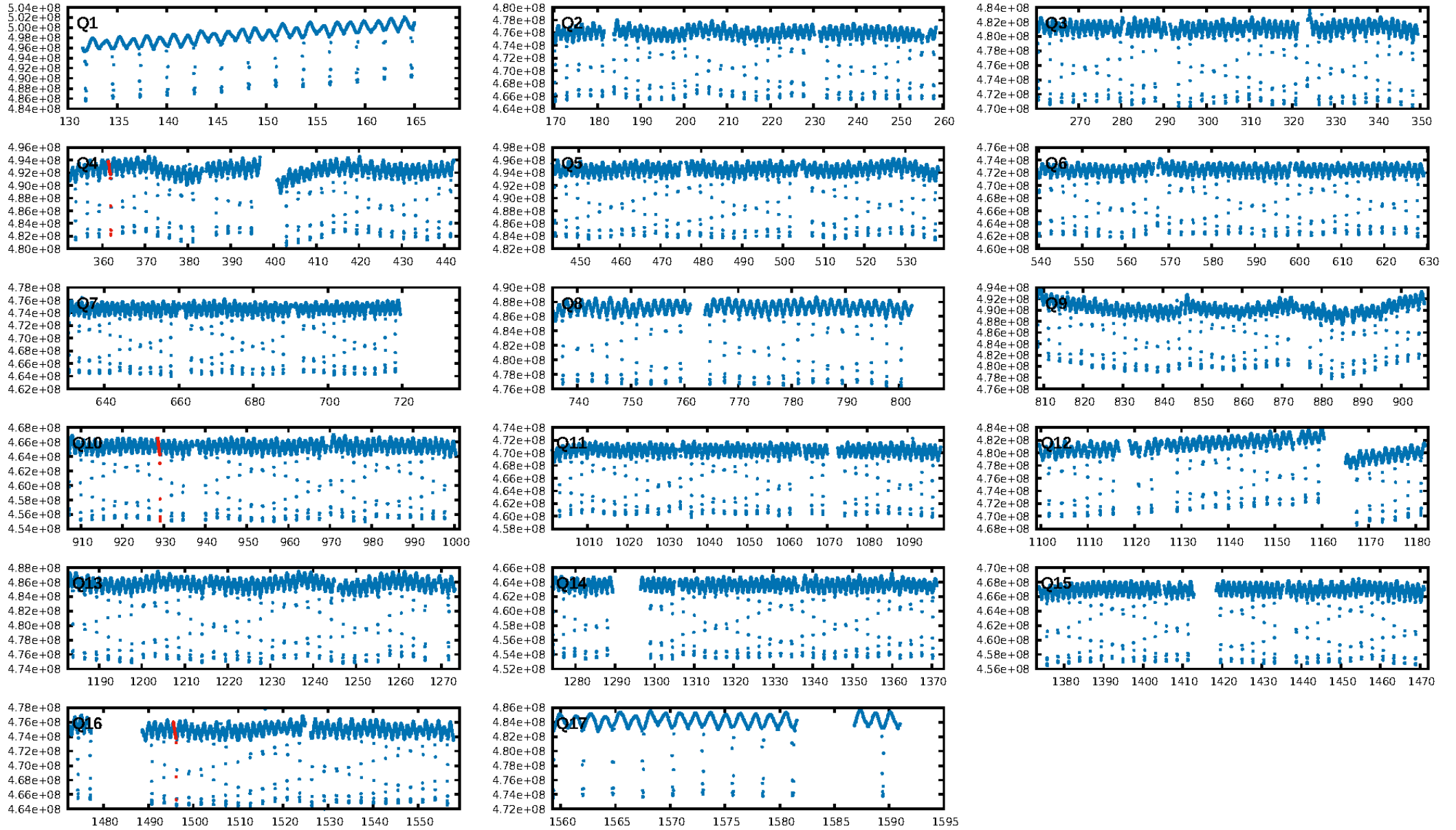
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [1521.31σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 13.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 7.99e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -4.978
Centroid-sig: 5.1%
Centroid-so: 0.374 arcsec [1.57σ]
OotOffset-rm: 0.084 arcsec [0.57σ]
OotOffset-st: 1/0/2/0 [3]
KicOffset-rm: 0.005 arcsec [0.04σ]
KicOffset-st: 1/0/2/0 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 0.00 [0/3]

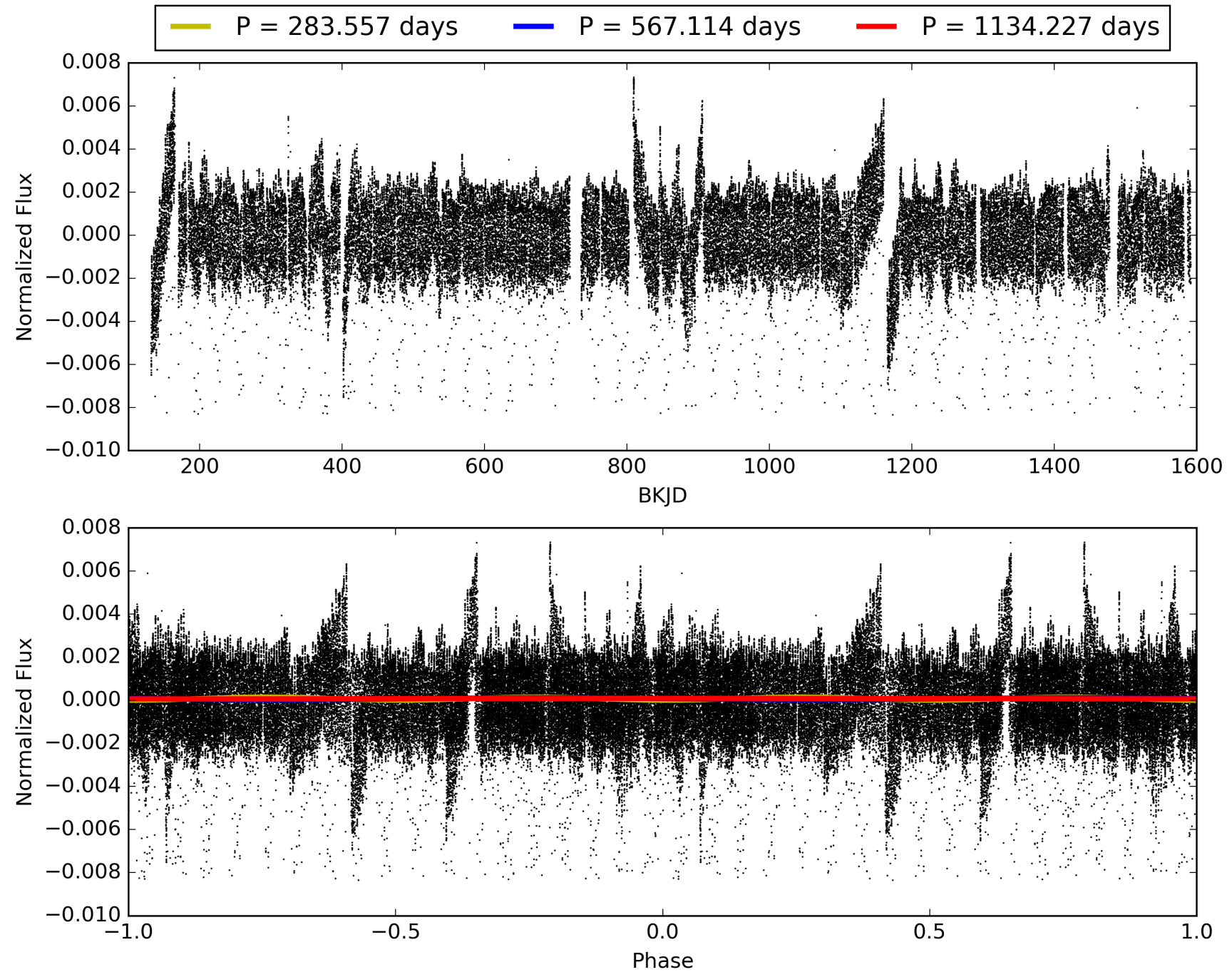
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 23:18:15 Z

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

TCE 008801343-03, PDC Light Curves

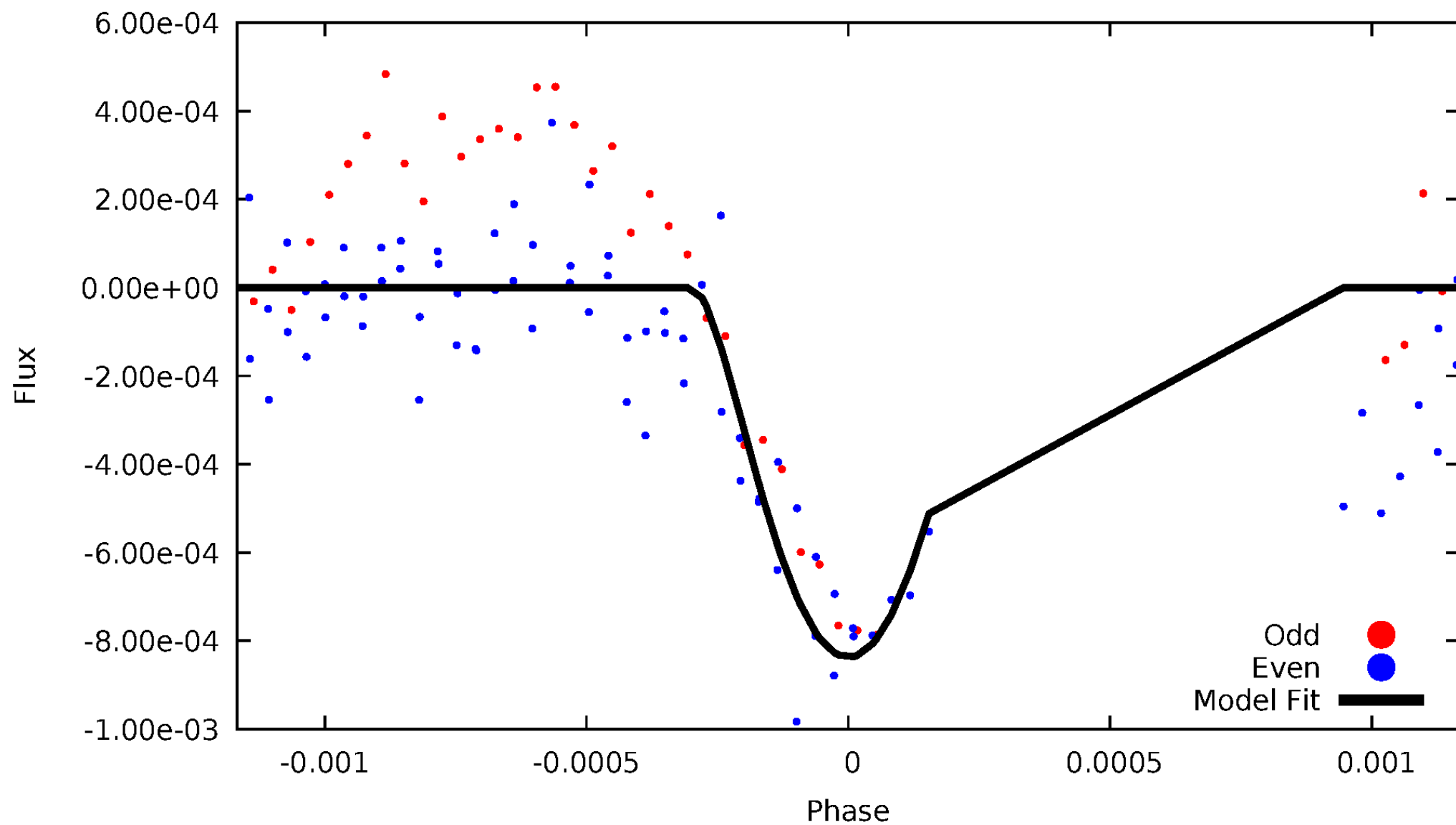


TCE 008801343-03



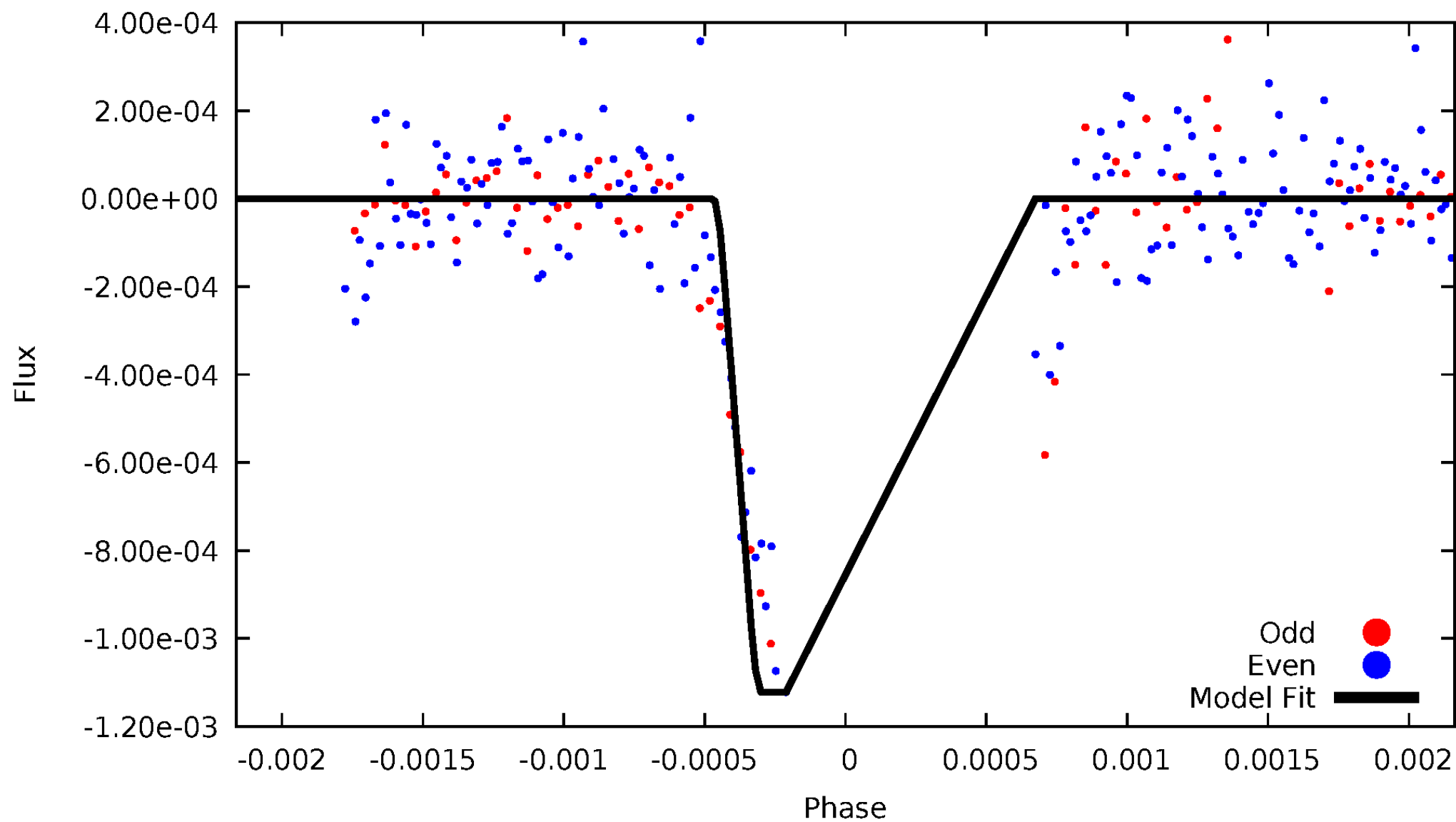
DV Odd/Even

TCE 008801343-03



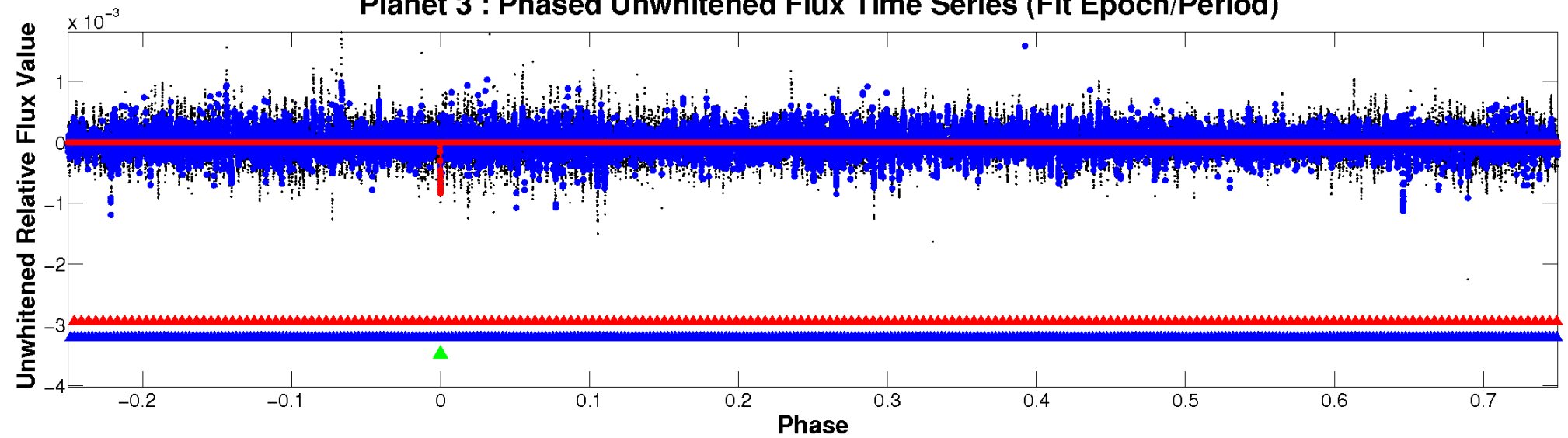
ALT Odd/Even

TCE 008801343-03

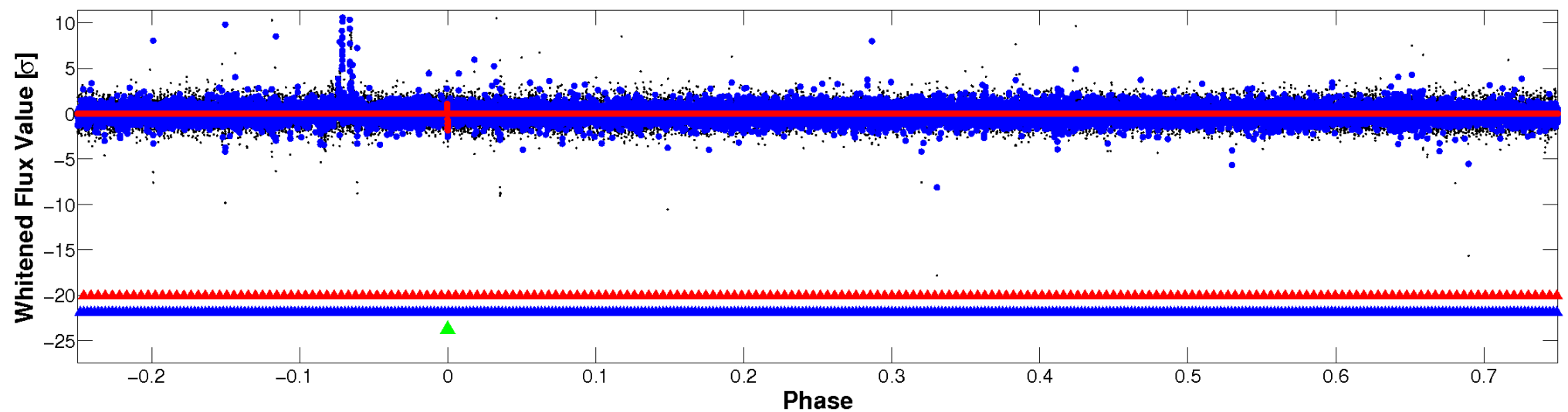


Non-Whitened Vs. Whitened Light Curve

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

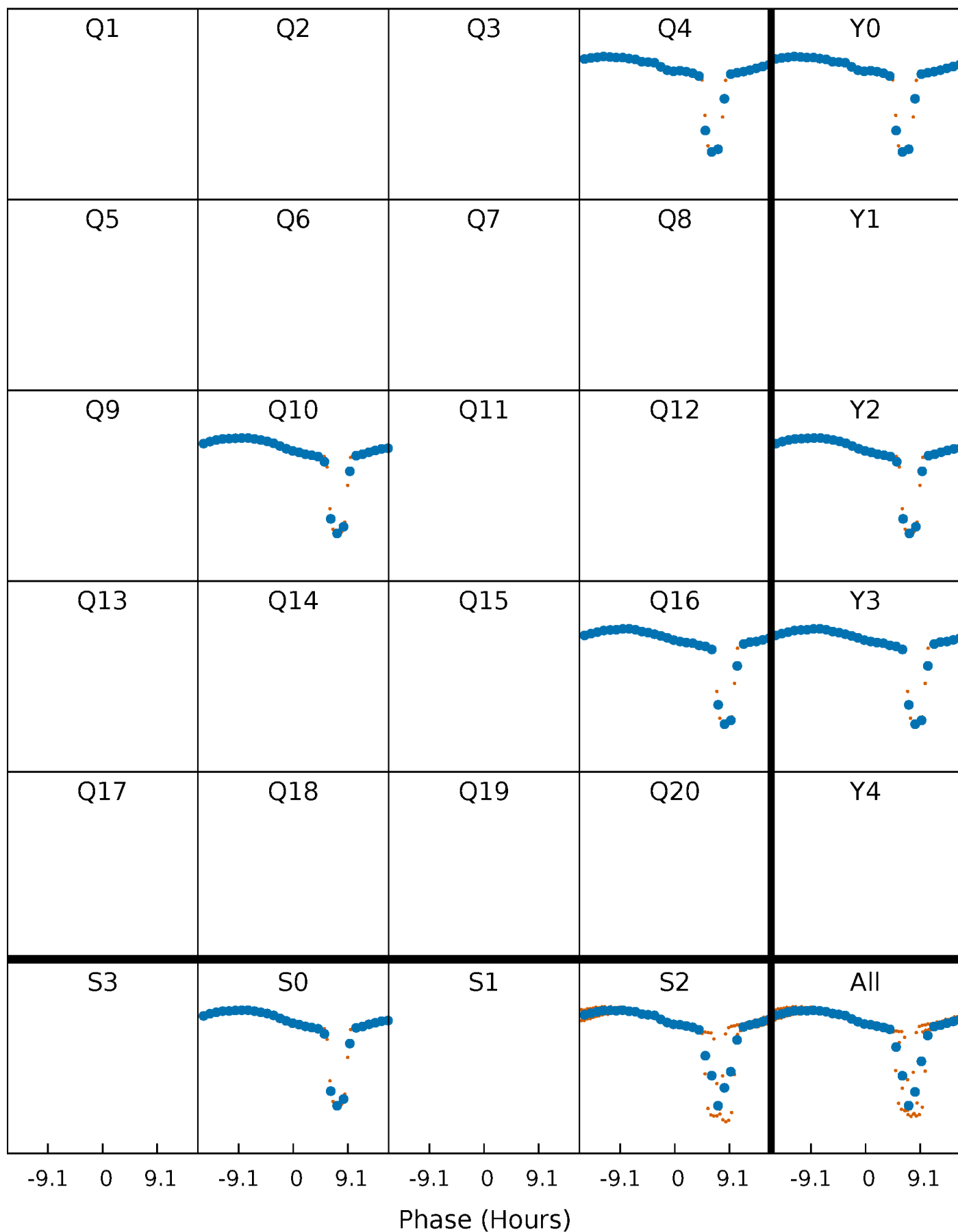


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



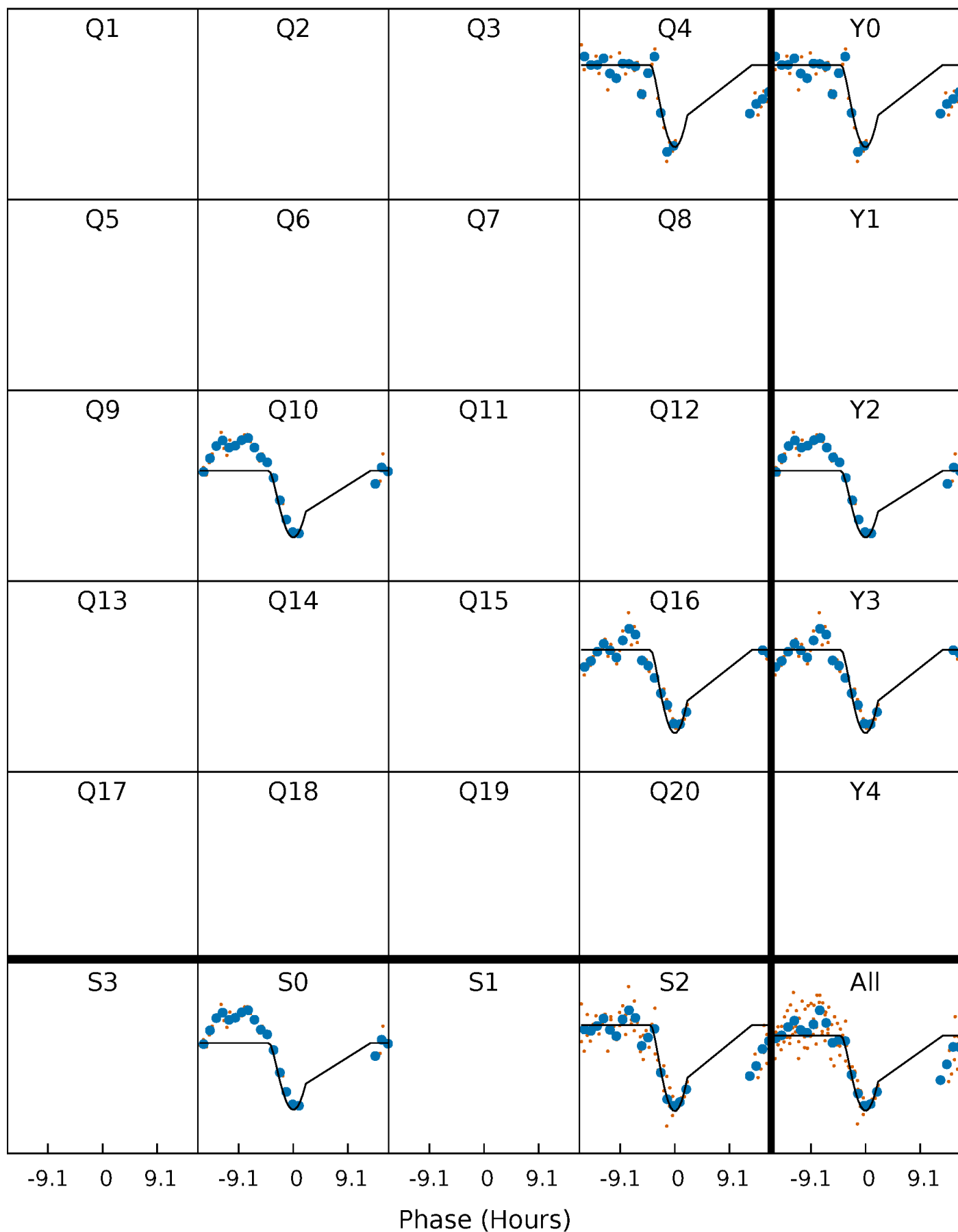
PDC Quarter-Phased Transit Curves

TCE 008801343-03 P=567.113663 Days $T_0=361.689149$ (BKJD)



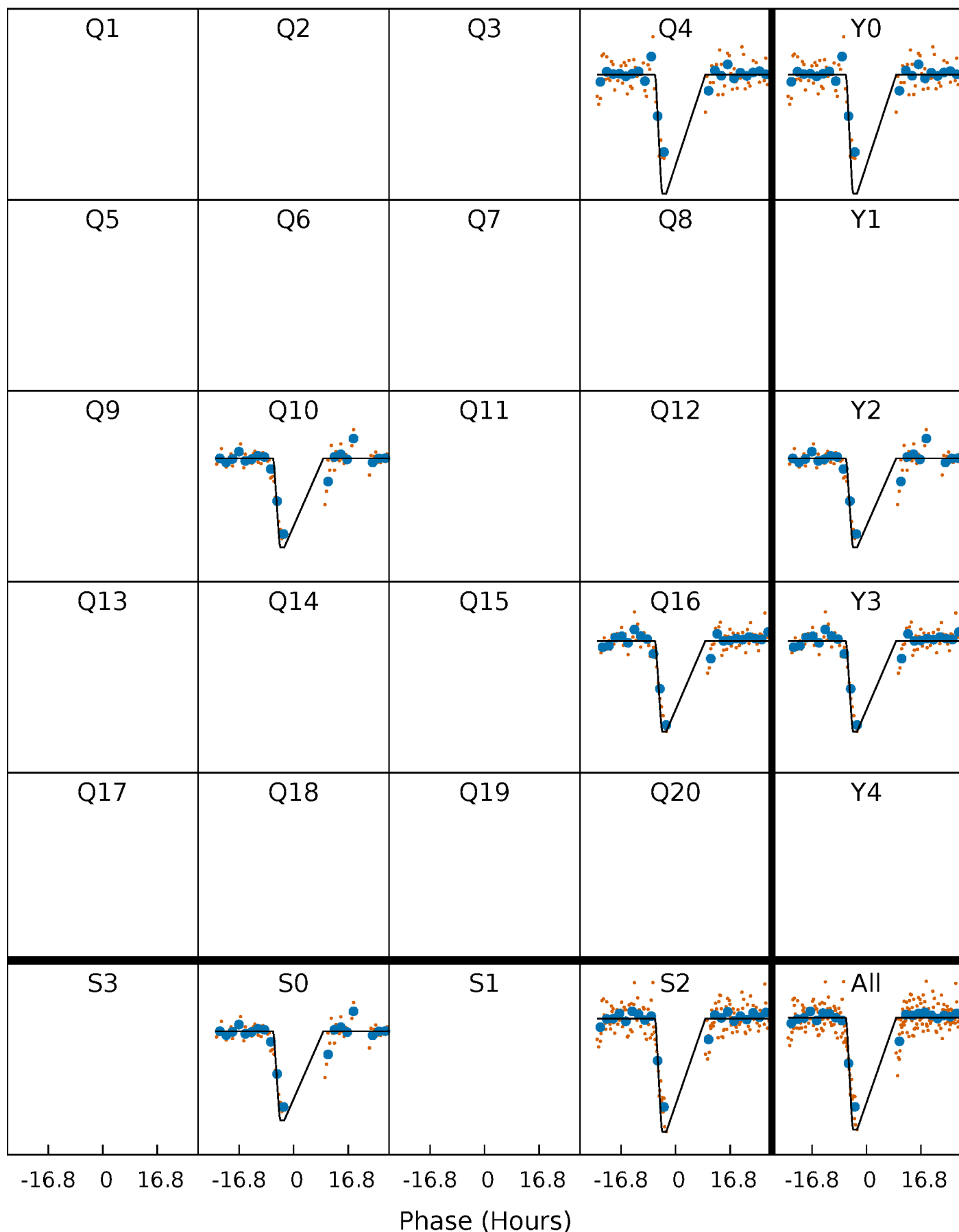
DV Quarter-Phased Transit Curves

TCE 008801343-03 $P=567.113663$ Days $T_0=361.689149$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

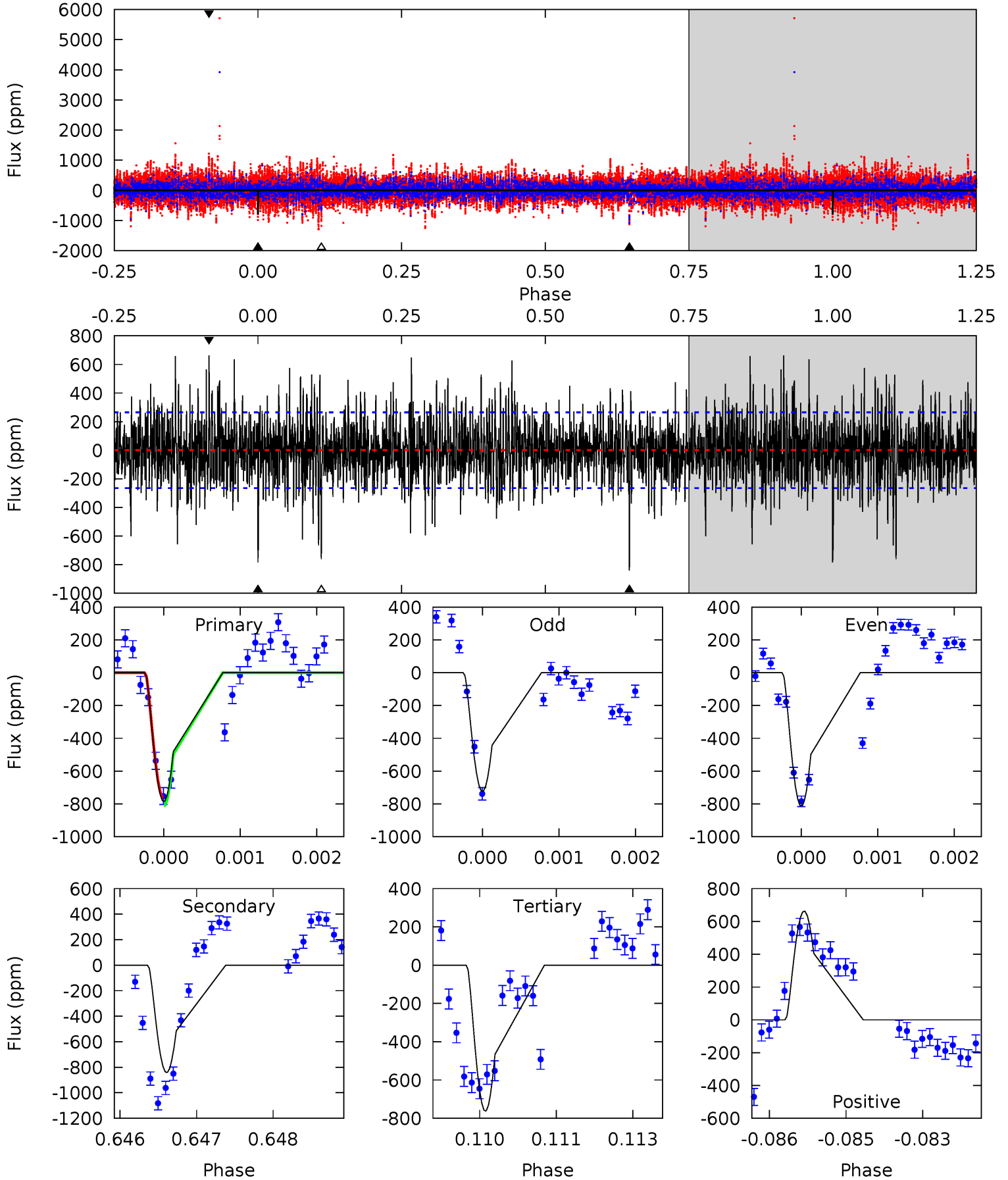
TCE 008801343-03 P=567.140269 Days $T_0=361.842943$ (BKJD)



DV Model-Shift Uniqueness Test

008801343-03, P = 567.113663 Days, E = 361.689149 Days

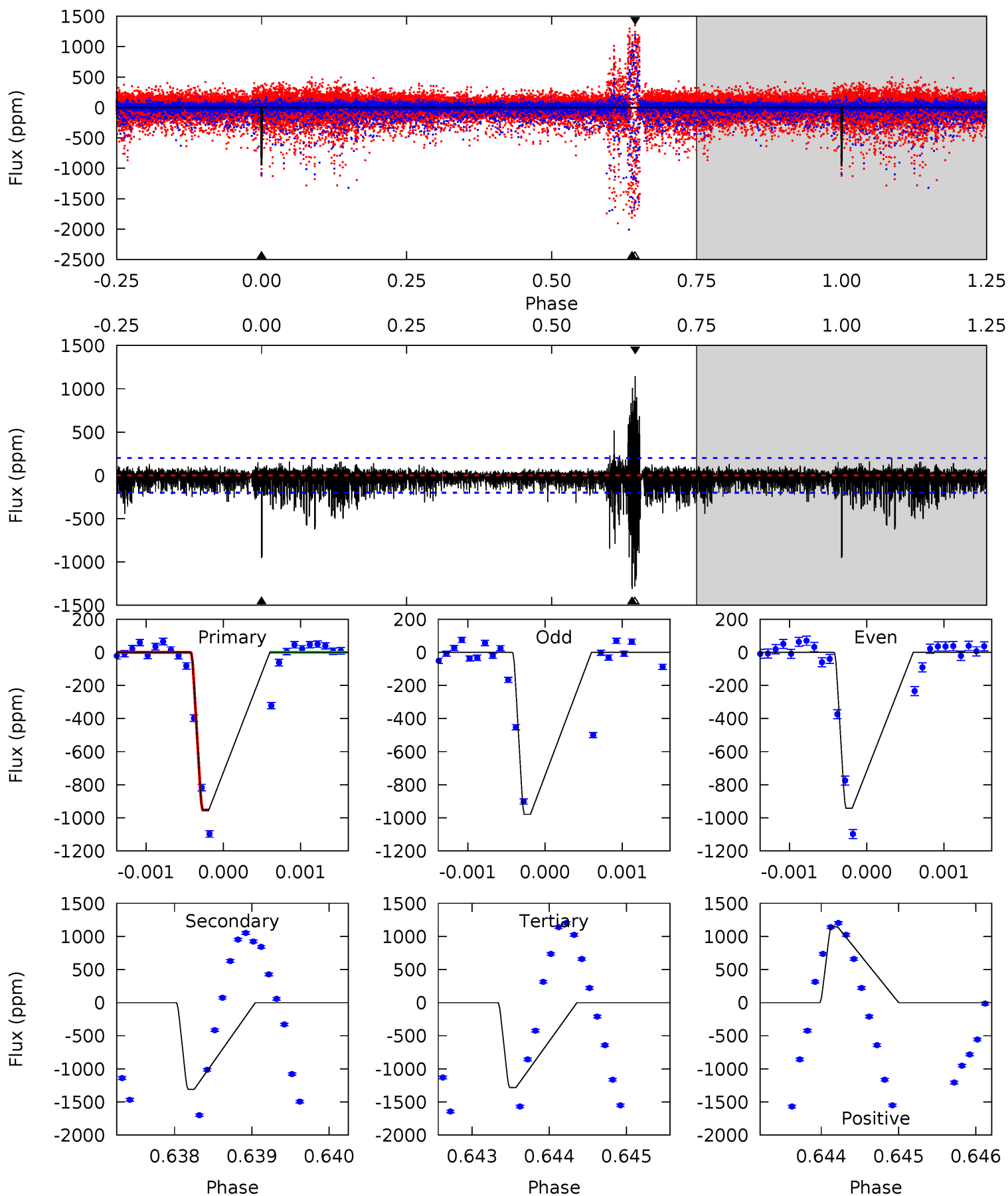
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.0	17.2	15.6	13.5	5.42	3.23	3.54	0.47	2.50	1.62	3.65	0.89	1.04	0.44	0.43



Alt Model-Shift Uniqueness Test

008801343-03, P = 567.140269 Days, E = 361.842943 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.8	35.4	34.7	31.0	5.43	3.26	2.79	-8.94	-5.19	0.66	4.41	0.44	0	0.47	0



Stellar Parameters For KIC 008801343

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	ρ_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6520^{+162}_{-179}	$3.844^{+0.300}_{-0.100}$	$-0.320^{+0.300}_{-0.250}$	$2.260^{+0.424}_{-0.727}$	$1.300^{+0.220}_{-0.220}$	$0.159^{+0.313}_{-0.048}$
	+2%/-3%	+8%/-3%	+94%/-78%	+19%/-32%	+17%/-17%	+197%/-30%
Source	PHO1	FLK73	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 008801343-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-841 ± 49	$17.81^{+18.54}_{-11.36}$	488^{+29}_{-41}	4216^{+2451}_{-858}	3148^{+21061}_{-2375}
Alt.	-1308 ± 37	$16.91^{+17.15}_{-11.46}$	490^{+31}_{-43}	4717^{+3545}_{-998}	5412^{+45511}_{-4043}

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 $A_{obs} \gg 1.0$

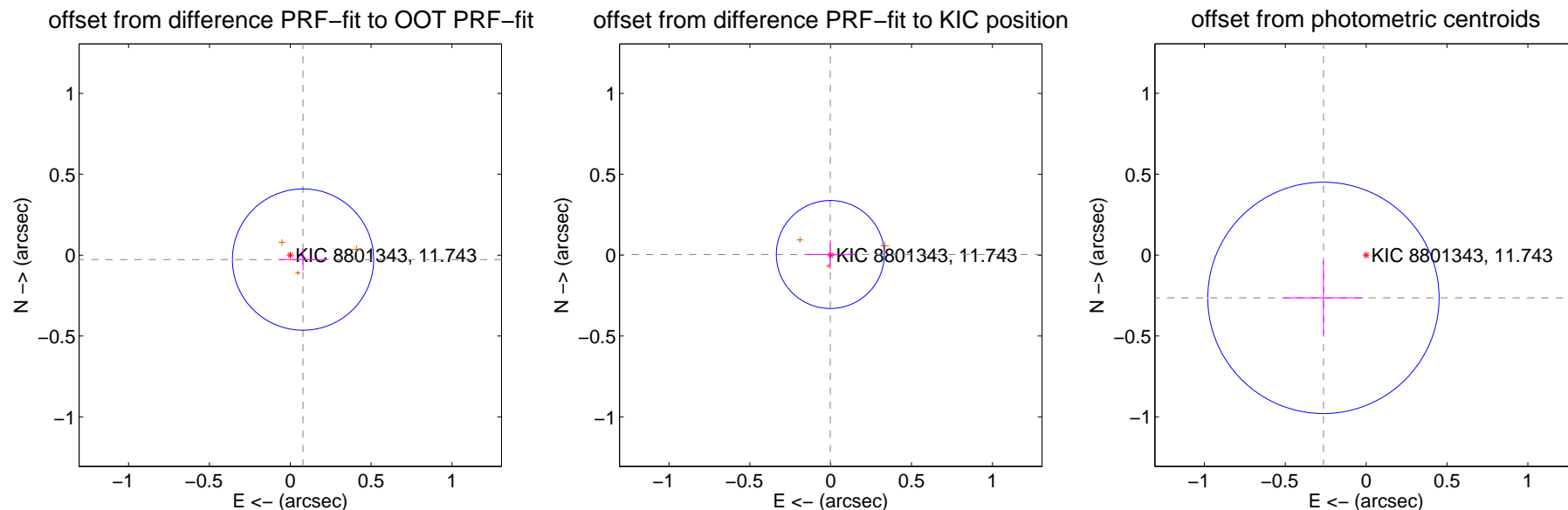
DV Centroid Data

Supplemental centroid analysis for 008801343-03. **Kepler magnitude: 11.74.** Transit SNR 7.68

There are 0 quarters with good PRF difference image offsets

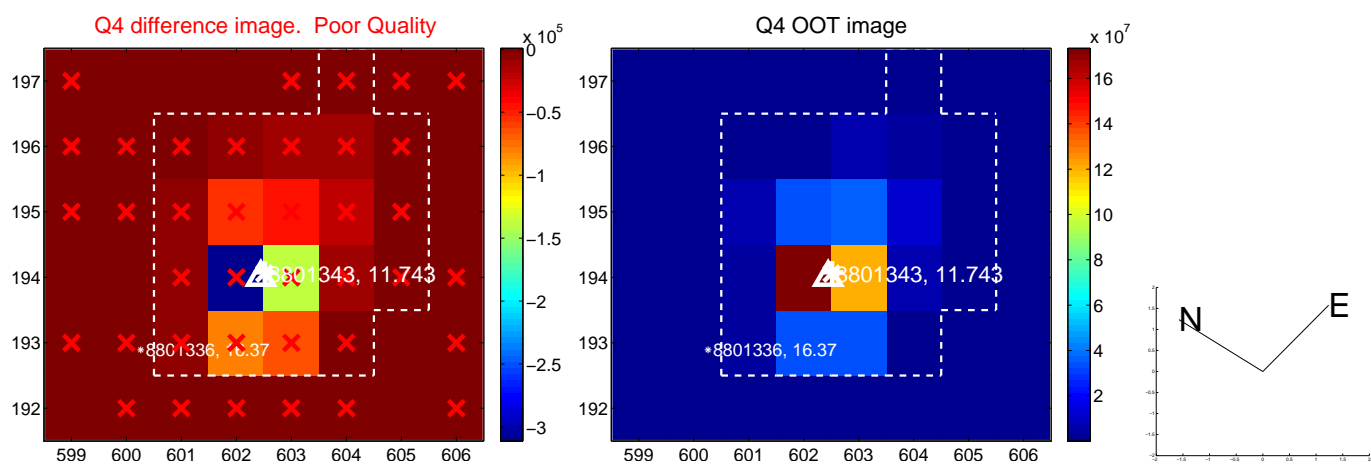
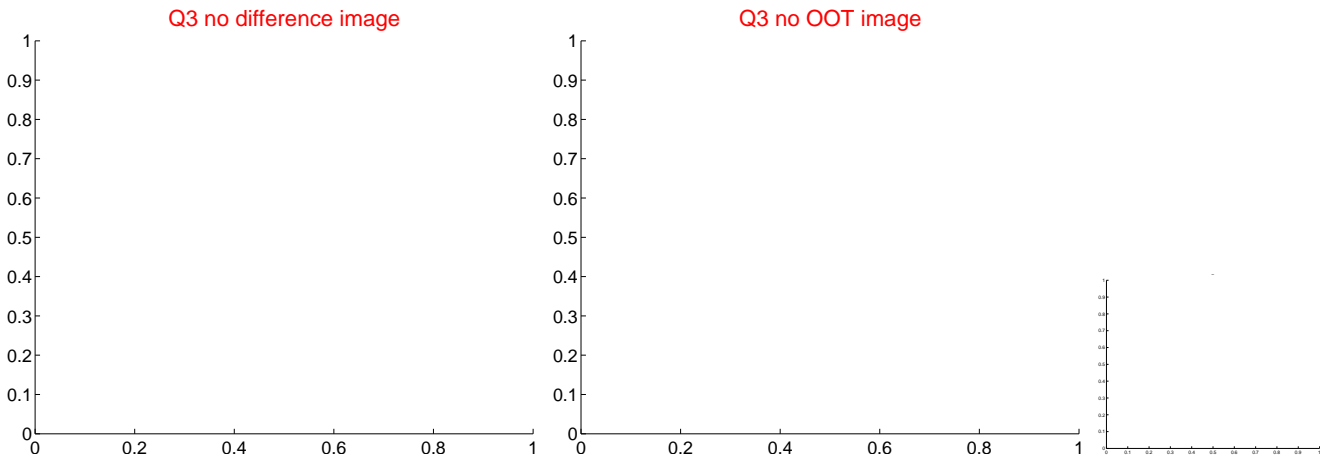
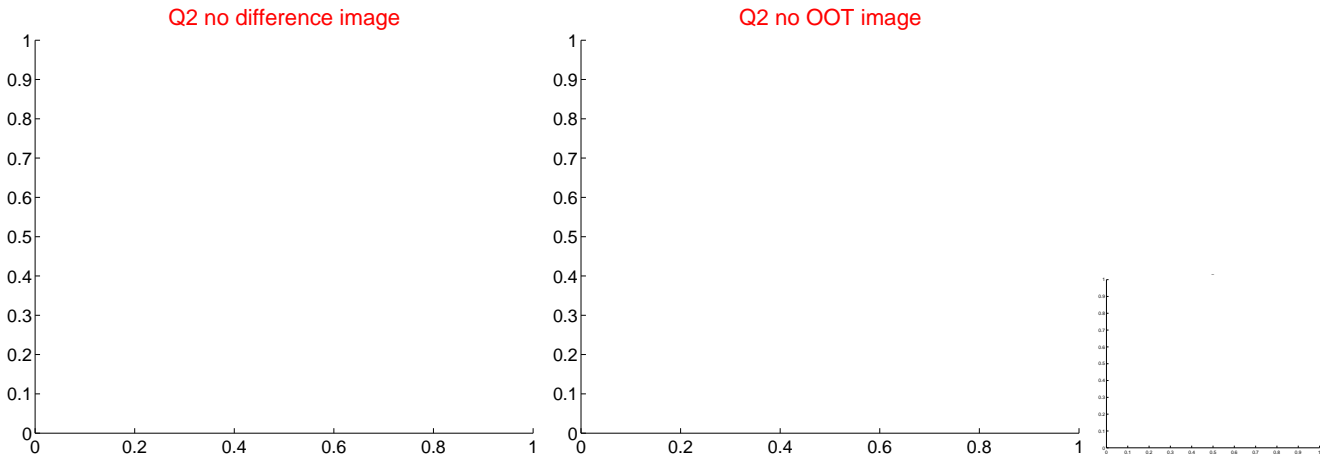
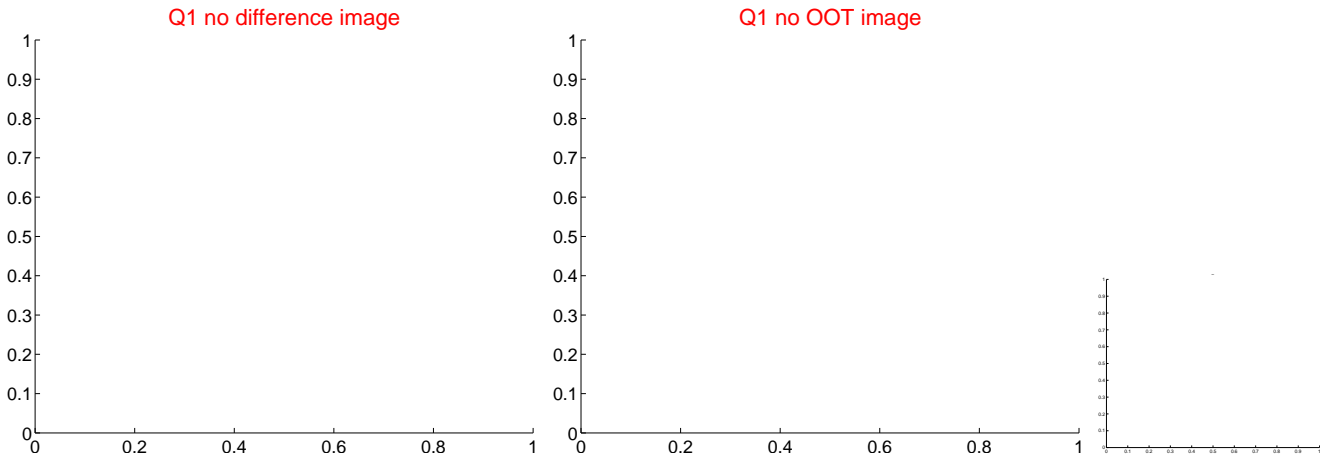
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.084 ± 0.146	0.57	-0.079 ± 0.148	-0.027 ± 0.068
PRF-fit source offset from KIC position	0.005 ± 0.111	0.04	0.003 ± 0.154	0.004 ± 0.089
photometric centroid source offset	0.37 ± 0.24	1.57	0.26 ± 0.25	-0.26 ± 0.23



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.

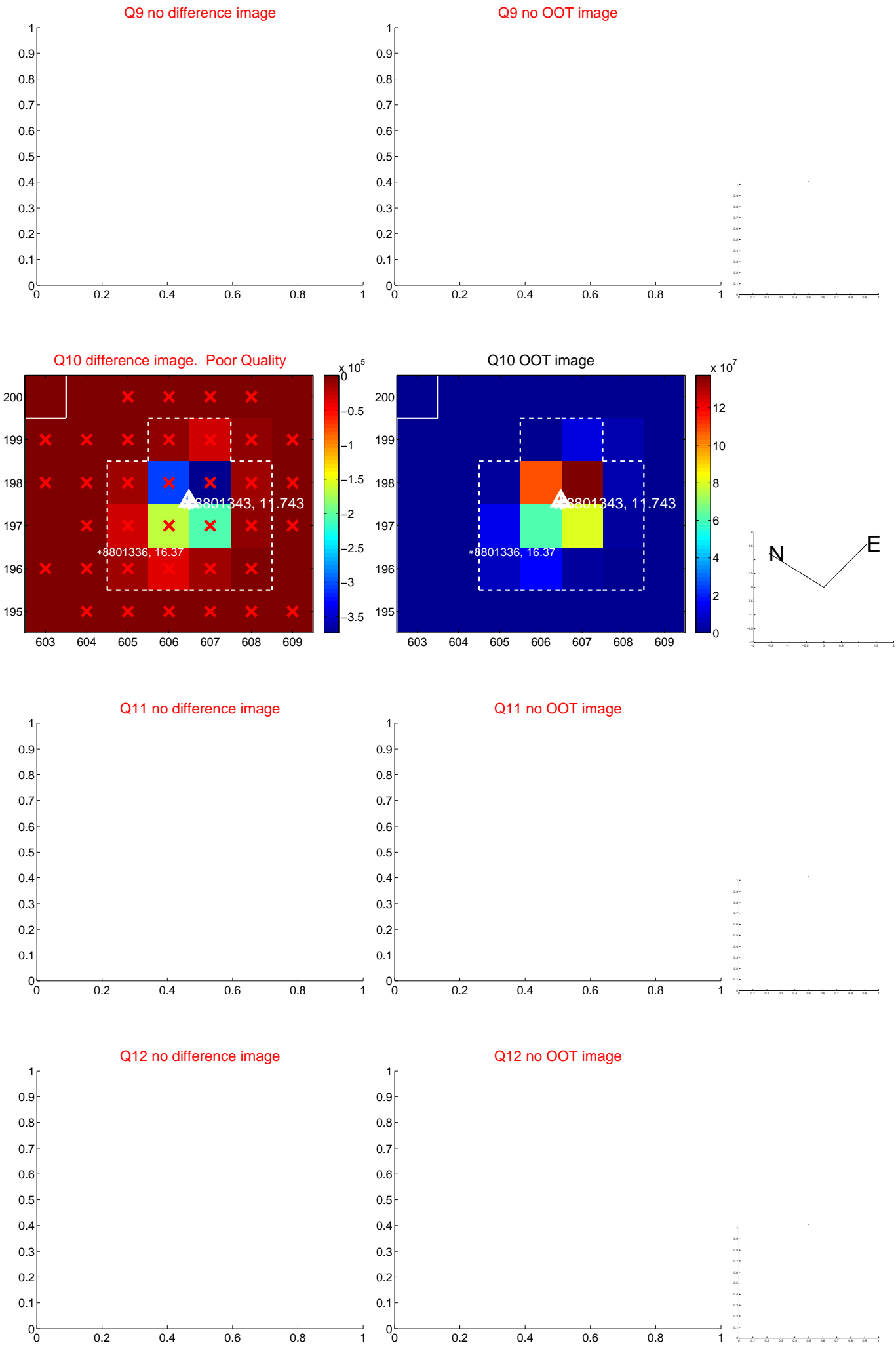
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



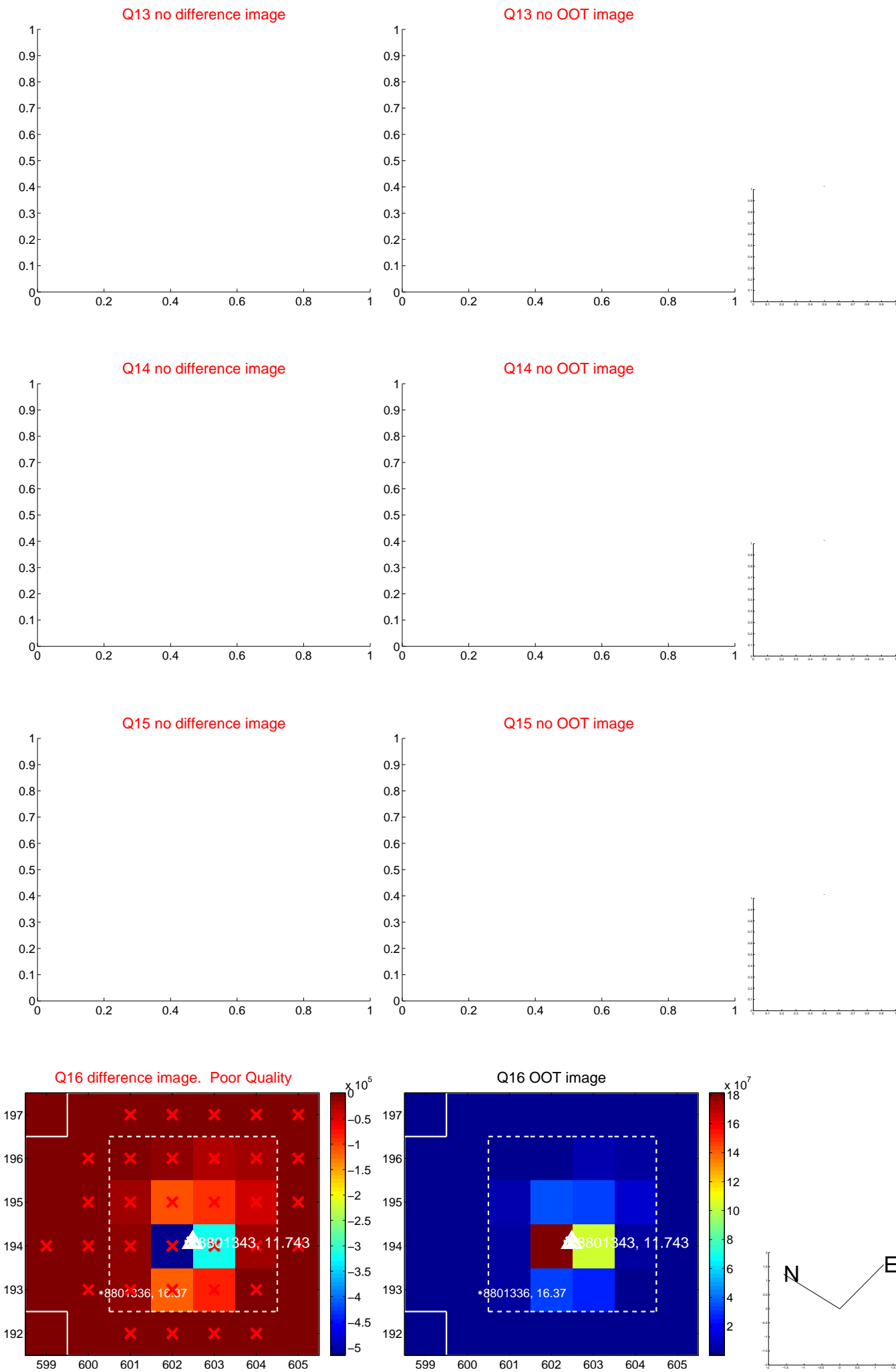
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



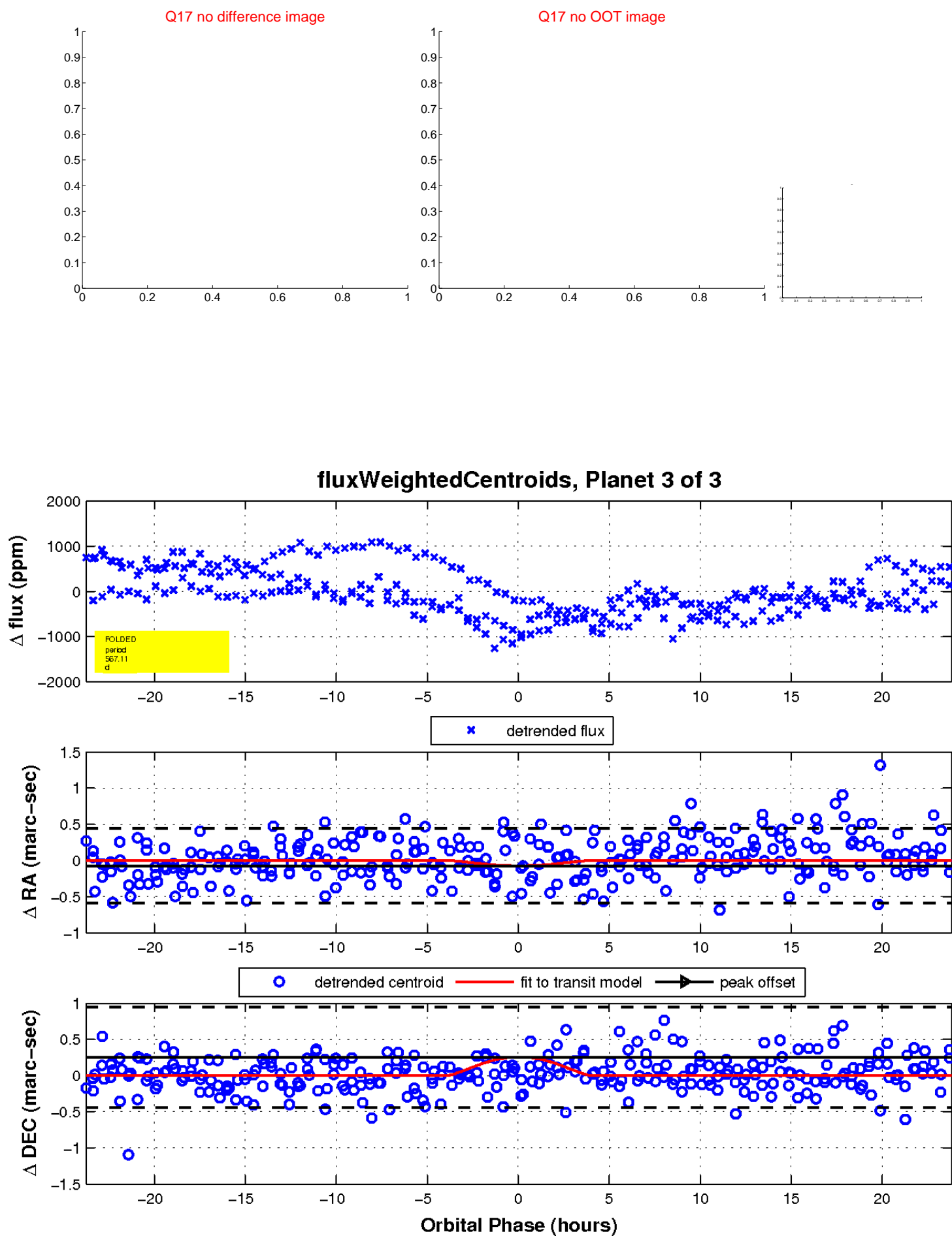
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

