

KIC 007943602

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})
007943602-01	OBS	No	14.692055	134.950399	16081.9	7.580	209.7	299.4	3.09	5096	70.53	460.57
007943602-02	OBS	No	14.691965	134.431090	31409.4	10.437	379.8	378.1	3.09	5096	61.24	460.58
007943602-03	OBS	No	14.692236	142.207286	9817.6	11.800	115.5	163.1	3.09	5096	36.35	460.57

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007943602-01	OBS	FP	0.00	1	0	0	0	LPP_DV
007943602-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—SAME_NTL_PERIOD
007943602-03	OBS	FP	0.00	1	0	0	0	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.

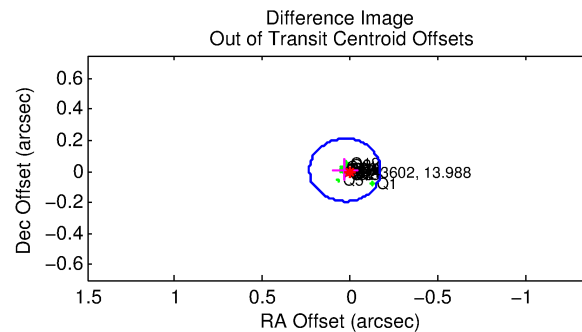
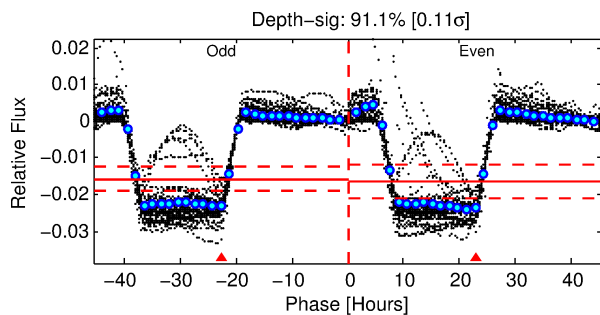
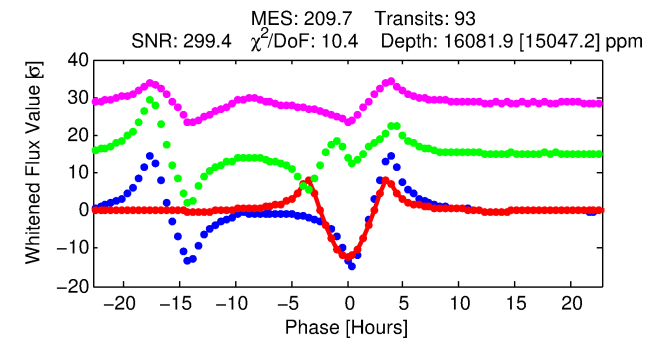
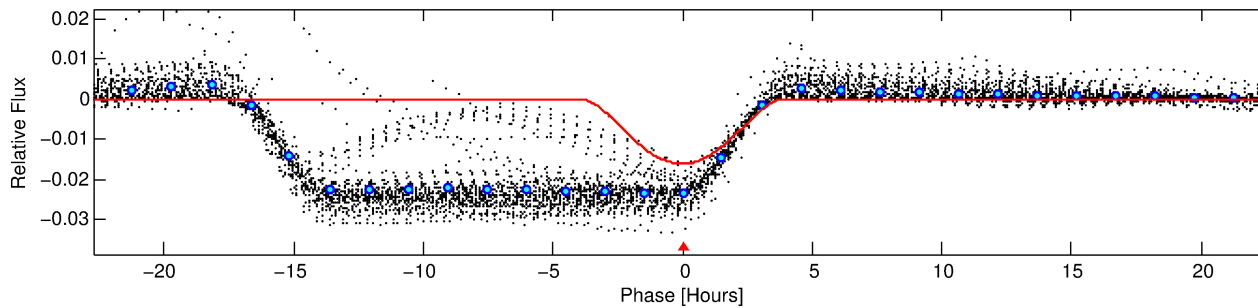
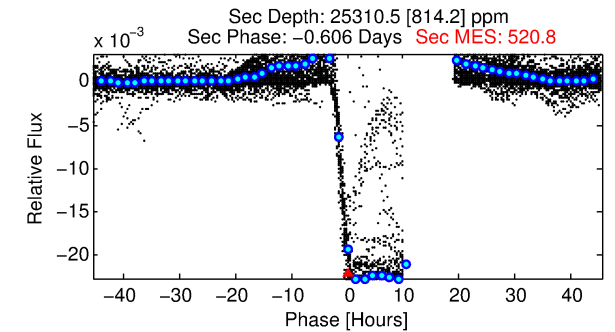
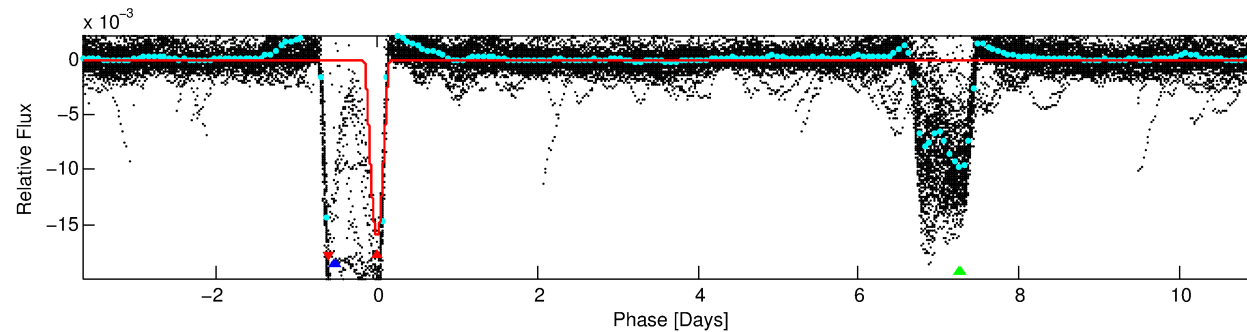
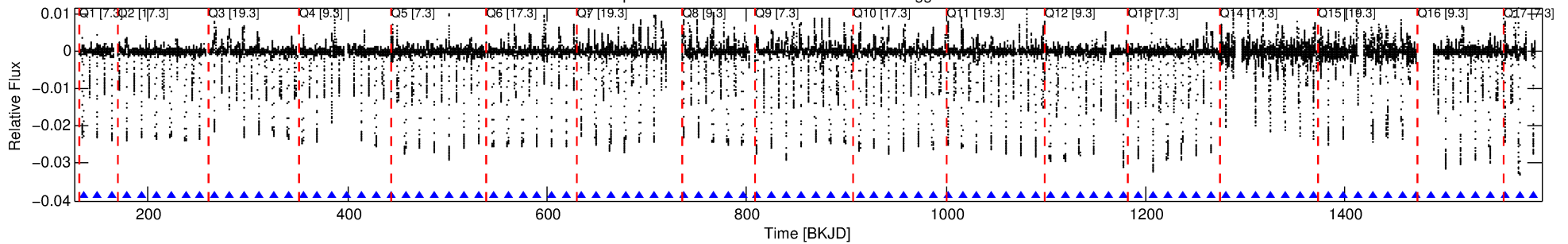
Ephemeris Match Information For 007943602-01

No Significant Match Found

DV One-Page Summary

KIC: 7943602 Candidate: 1 of 3 Period: 14.692 d

Kp: 13.99 R*: 3.09 Rs Teff: 5096.0 K Logg: 3.40 Fe/H: -0.560



DV Fit Results:

Period = 14.69206 [0.00002] d
Epoch = 134.9504 [0.0012] BKJD
Rp/R* = 0.2095 [0.0490]
a/R* = 10.13 [0.24]
b = 1.00 [0.06]
Seff = 460.57 [260.45]
Teff = 1181 [167] K
Rp = 70.53 [39.95] Re
a = 0.1118 [0.0456] AU
Ag = 34.97 [25.45] [1.33σ]
Teffp = 4441 [533] K [5.84σ]

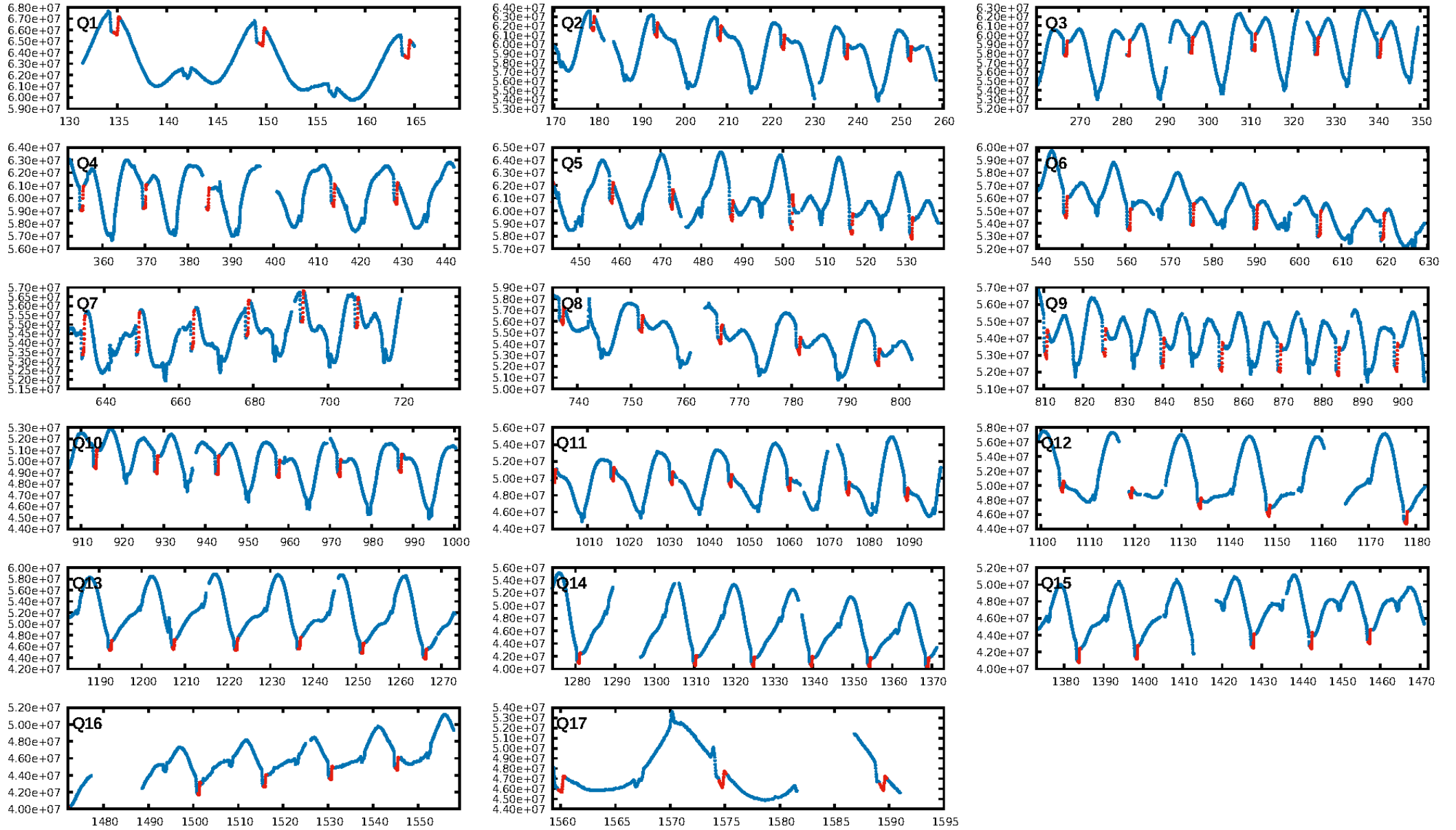
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [87/87]
GhostDiagnostic-chr: 1.237
Centroid-sig: 0.0%
Centroid-so: 0.275 arcsec [33.47σ]
OotOffset-rm: 0.032 arcsec [0.47σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.260 arcsec [3.80σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

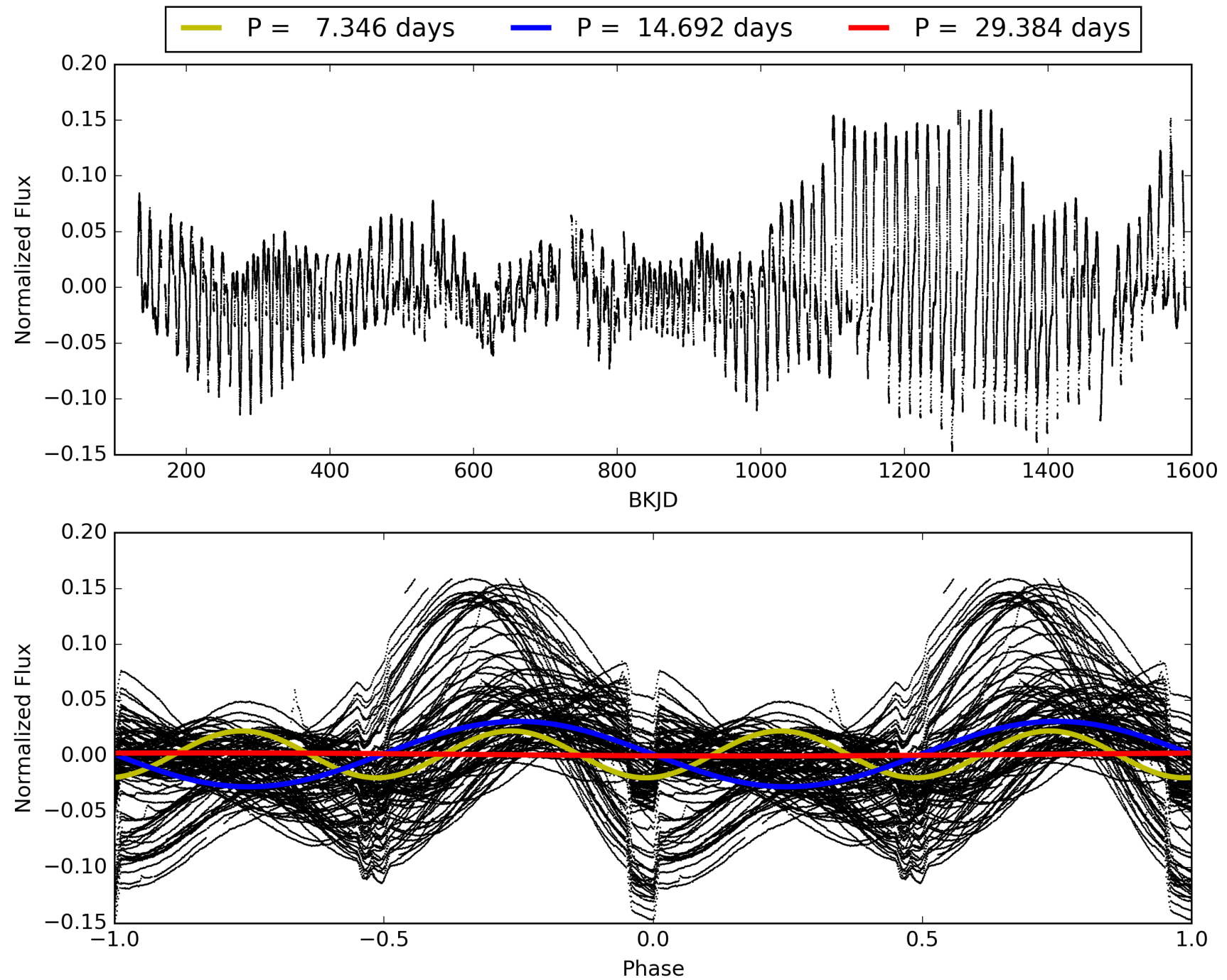
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 007943602-01, PDC Light Curves

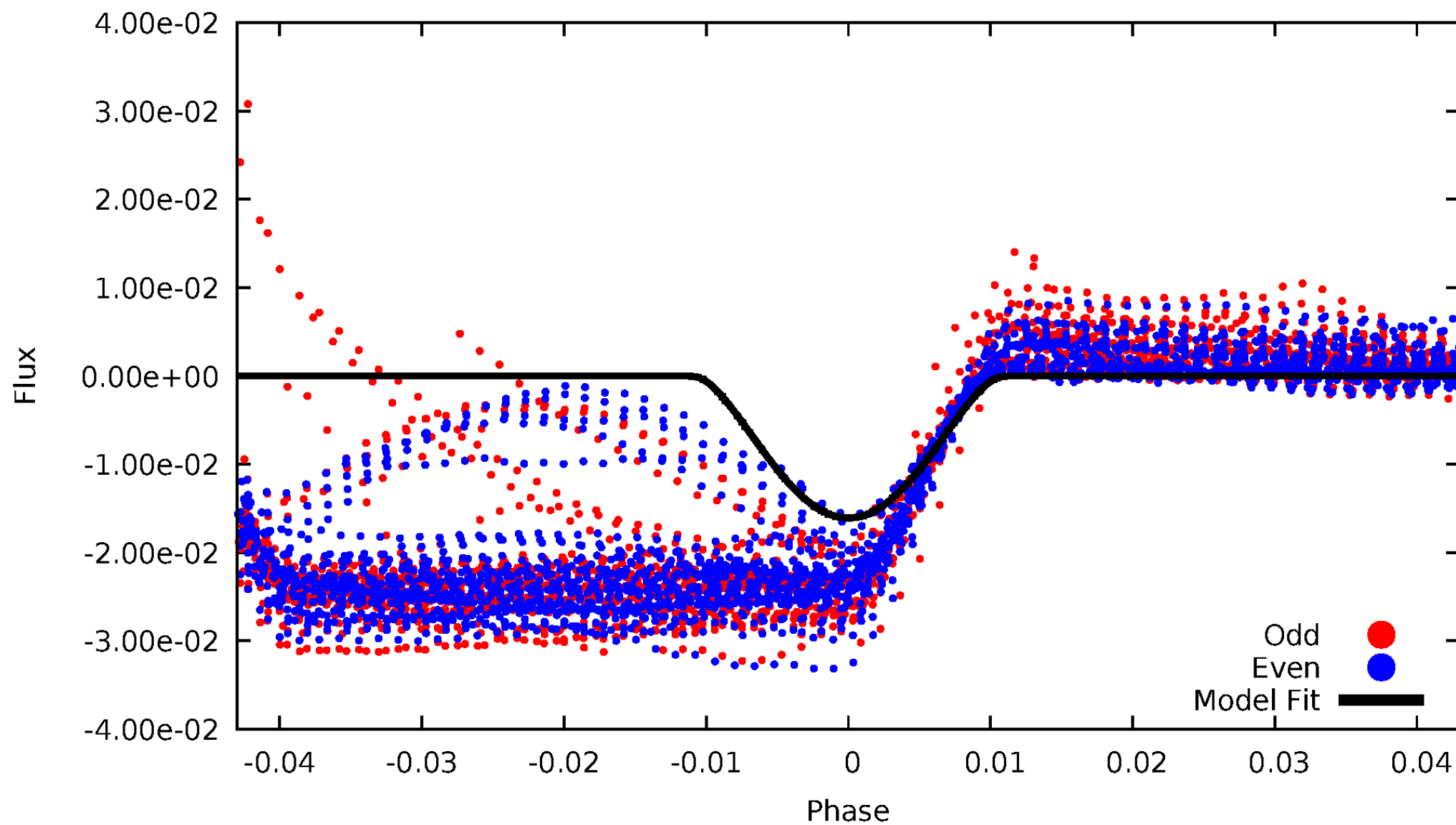


TCE 007943602-01



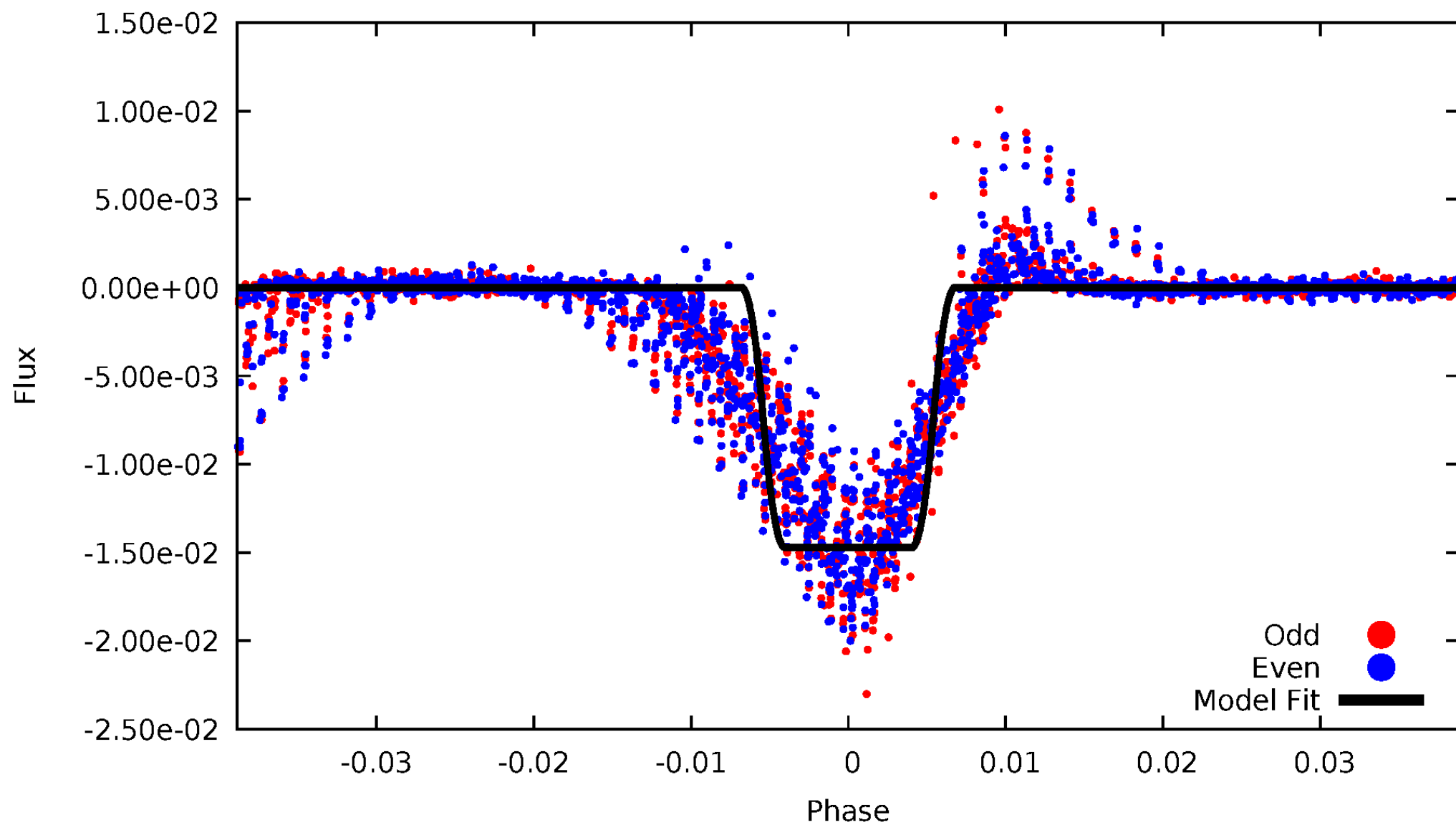
DV Odd/Even

TCE 007943602-01



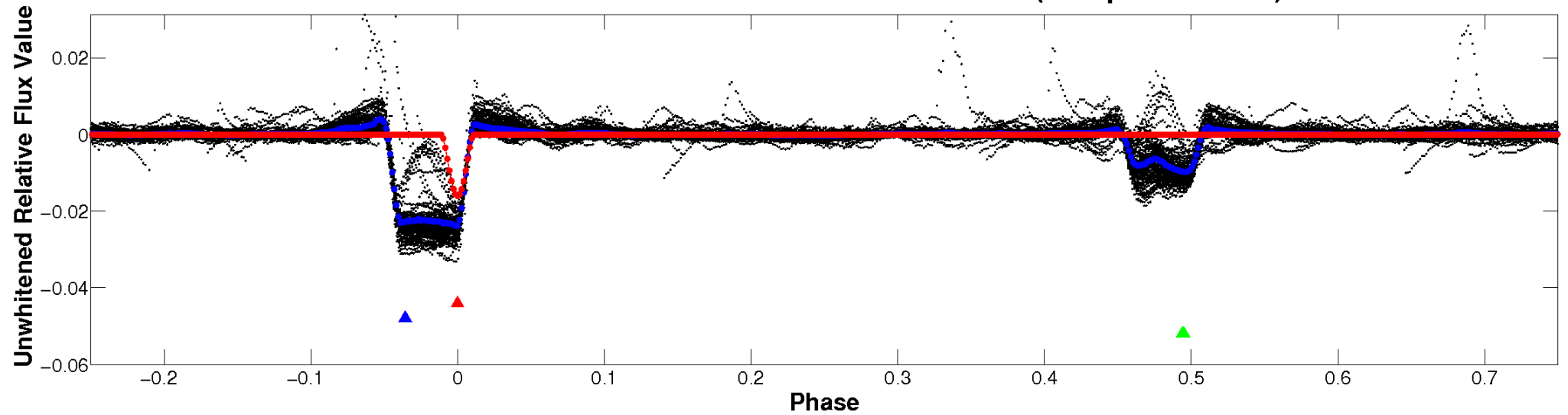
ALT Odd/Even

TCE 007943602-01

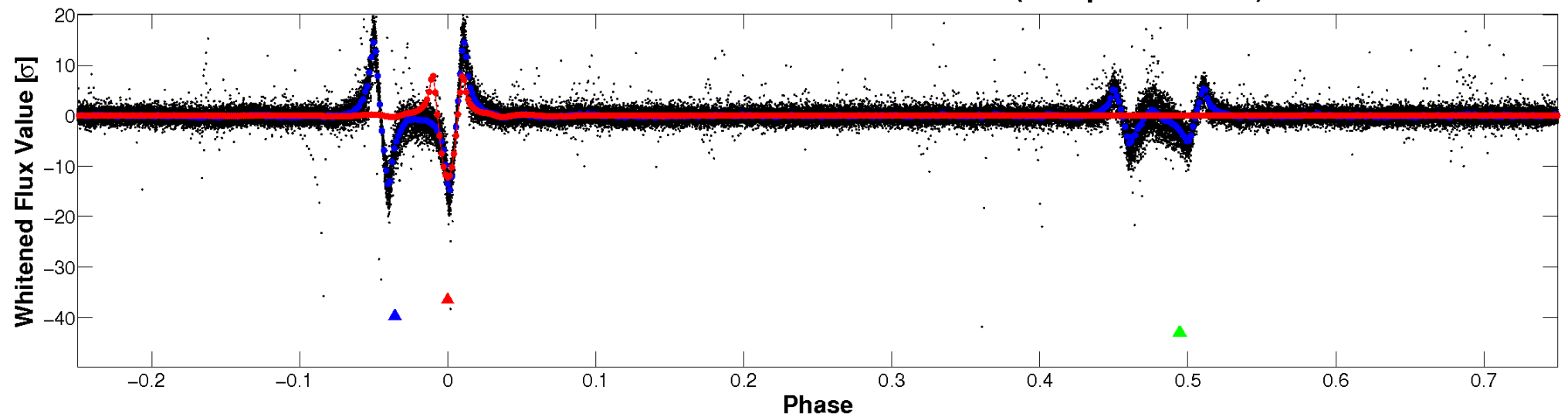


Non-Whitened Vs. Whitened Light Curve

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

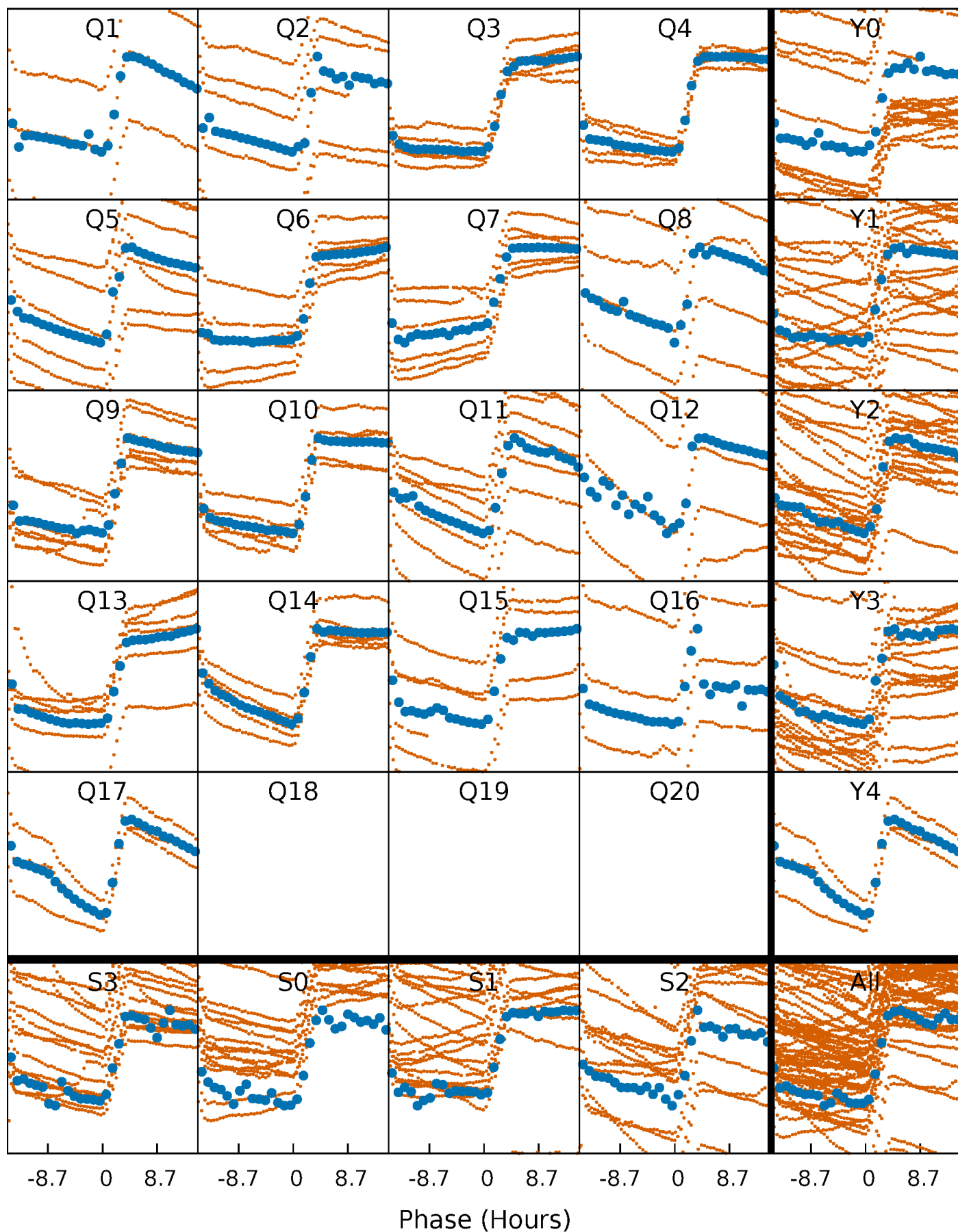


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



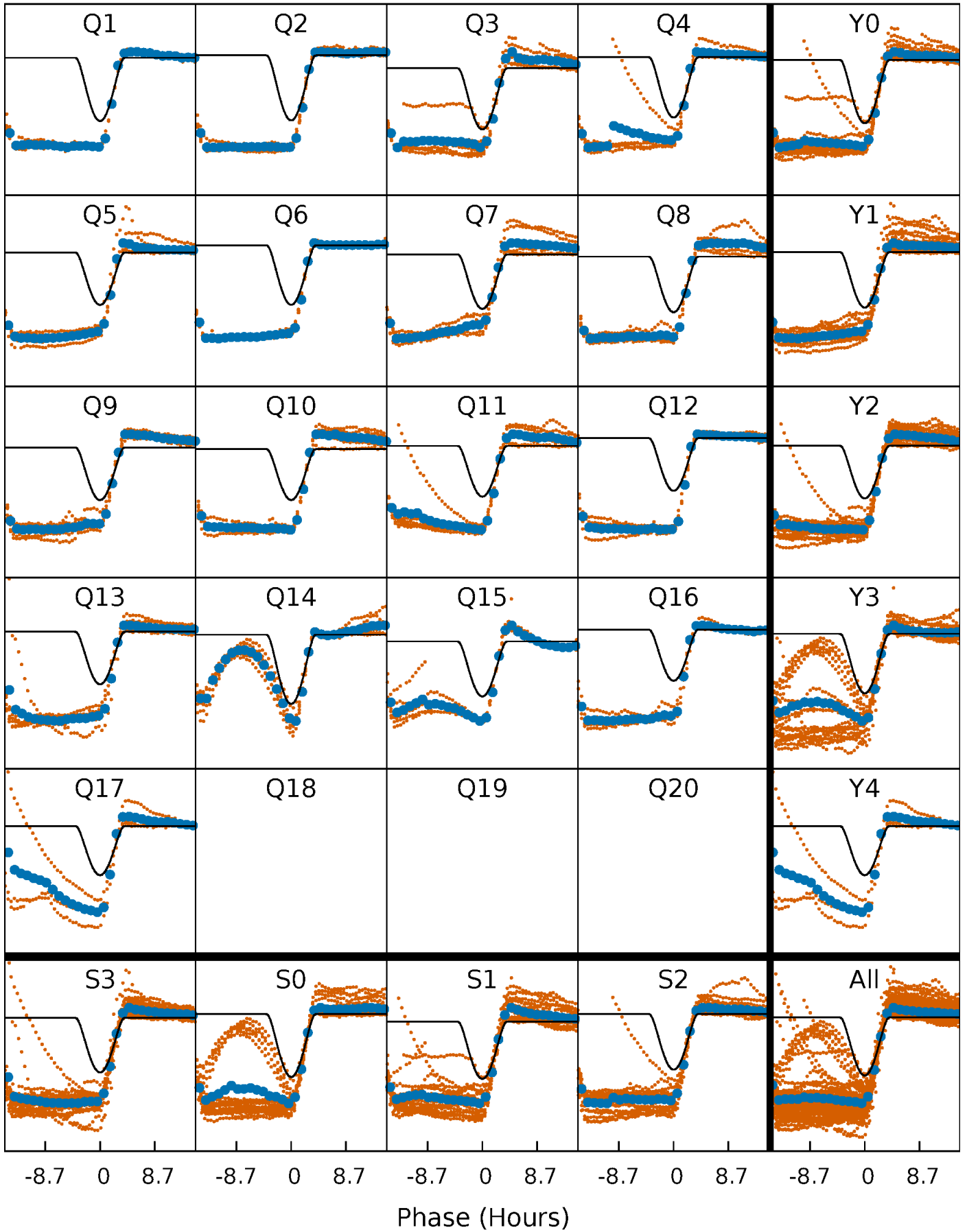
PDC Quarter-Phased Transit Curves

TCE 007943602-01 P= 14.692055 Days $T_0=134.950399$ (BKJD)



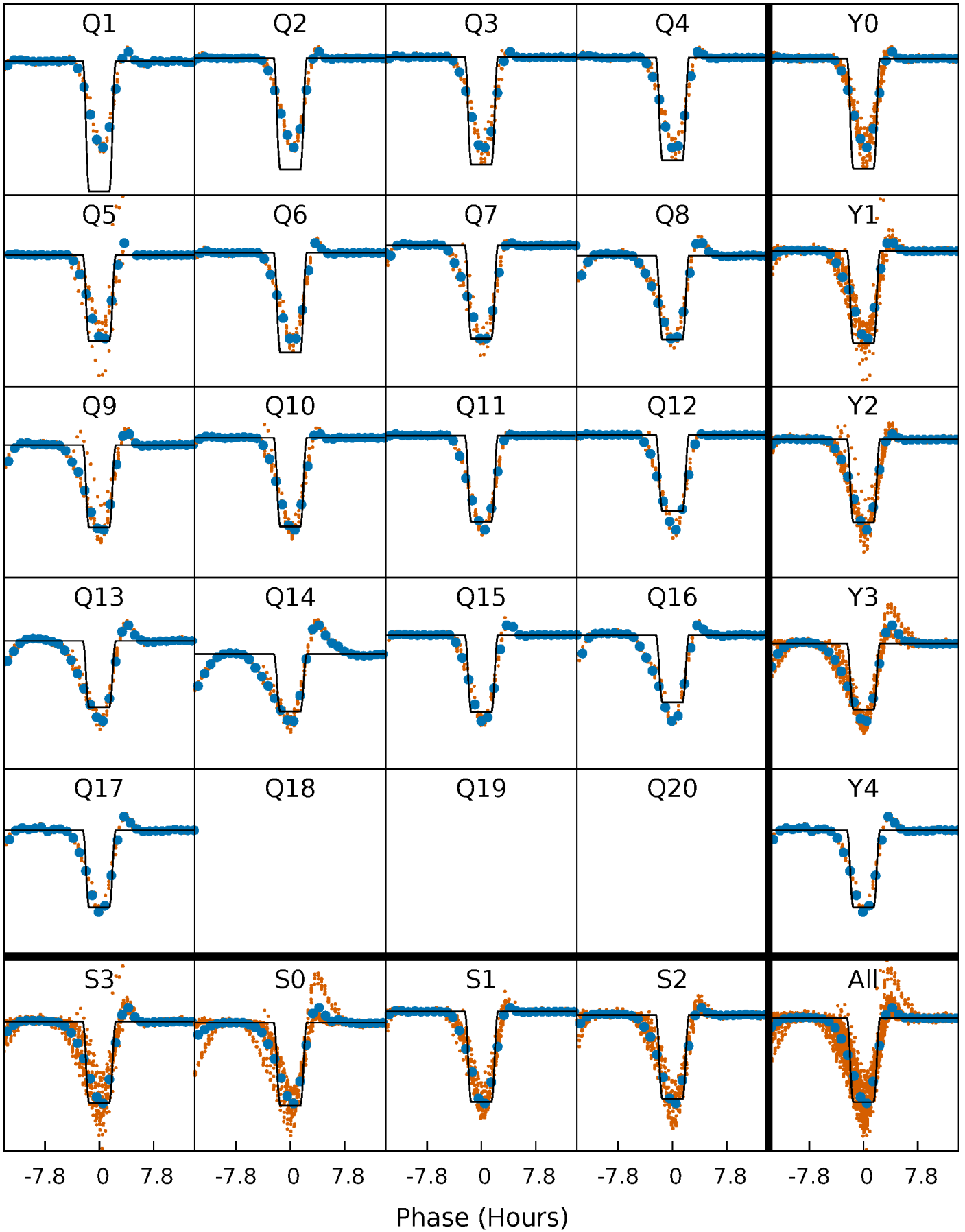
DV Quarter-Phased Transit Curves

TCE 007943602-01 P= 14.692055 Days $T_0=134.950399$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

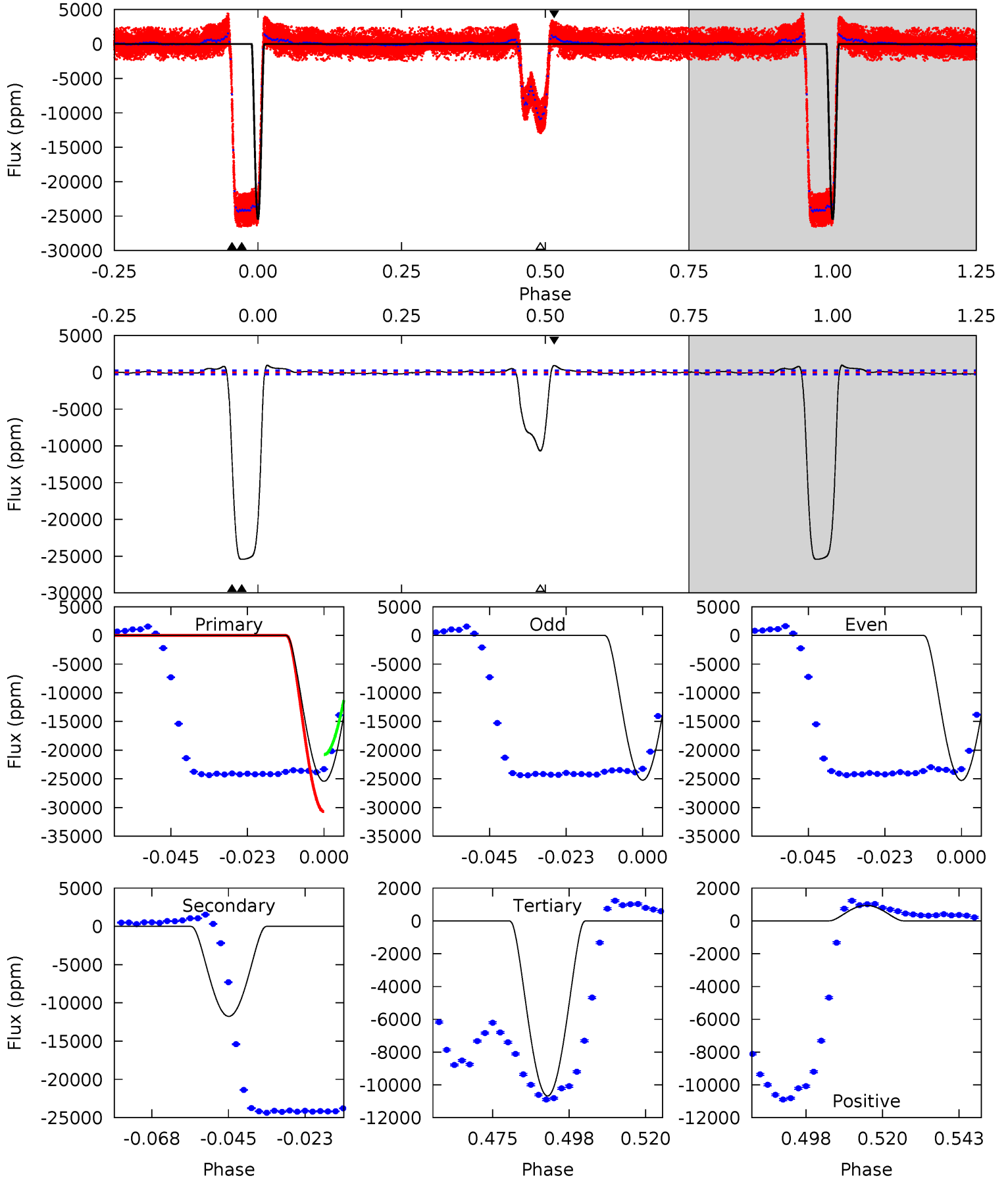
TCE 007943602-01 P= 14.692043 Days $T_0=134.961069$ (BKJD)



DV Model-Shift Uniqueness Test

007943602-01, P = 14.692055 Days, E = 120.258344 Days

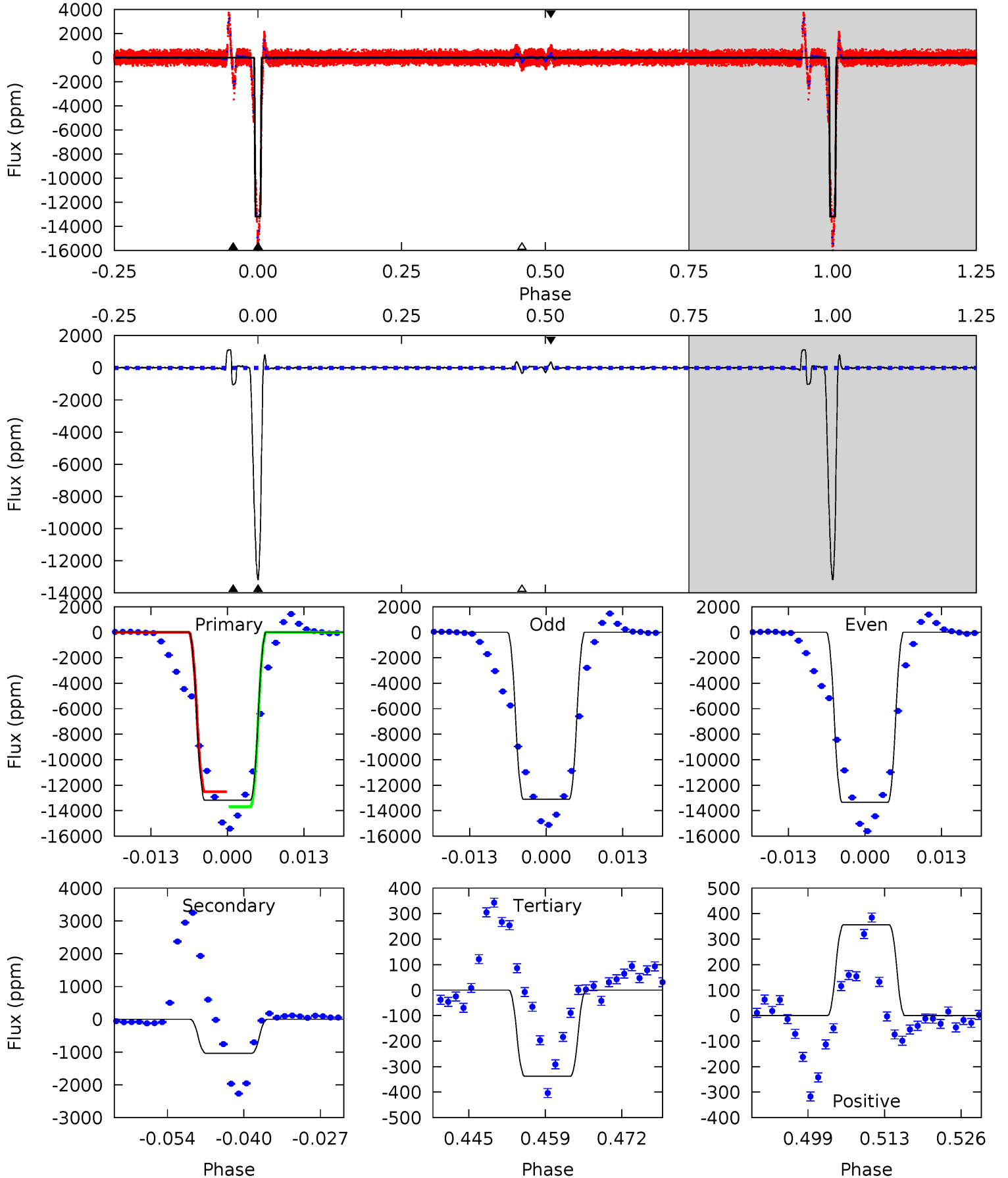
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
483.7	223.9	203.2	17.9	4.87	2.28	44.8	280.5	465.8	20.7	206.0	0.44	1.00	0.04	152.9



Alt Model-Shift Uniqueness Test

007943602-01, P = 14.692043 Days, E = 120.269026 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
958.2	75.6	24.6	25.9	4.97	2.47	3.06	933.6	932.3	51.1	49.7	8.77	0.98	0.08	0



Stellar Parameters For KIC 007943602

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5096^{+128}_{-102}	$3.395^{+0.285}_{-0.285}$	$-0.560^{+0.300}_{-0.200}$	$3.086^{+1.592}_{-0.857}$	$0.863^{+0.296}_{-0.106}$	$0.041^{+0.061}_{-0.026}$
	+3%/-2%	+8%/-8%	+54%/-36%	+52%/-28%	+34%/-12%	+148%/-63%
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 007943602-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-11766 ± 53	$70.99^{+26.61}_{-20.46}$	1643^{+205}_{-145}	3935^{+429}_{-285}	16^{+16}_{-7}
Alt.	-1040 ± 14	$41.32^{+21.50}_{-15.94}$	1650^{+201}_{-150}	3153^{+511}_{-327}	$4.423^{+7.511}_{-2.513}$

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

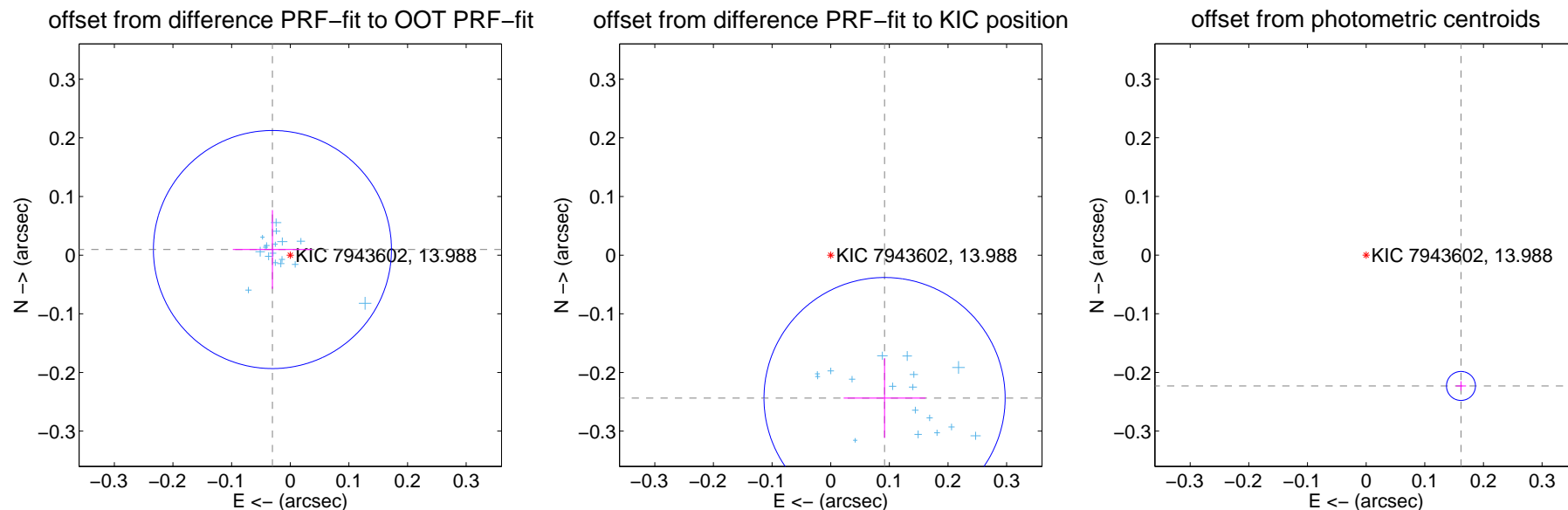
DV Centroid Data

Supplemental centroid analysis for 007943602-01. Kepler magnitude: 13.99. Transit SNR 299.36

There are 17 quarters with good PRF difference image offsets

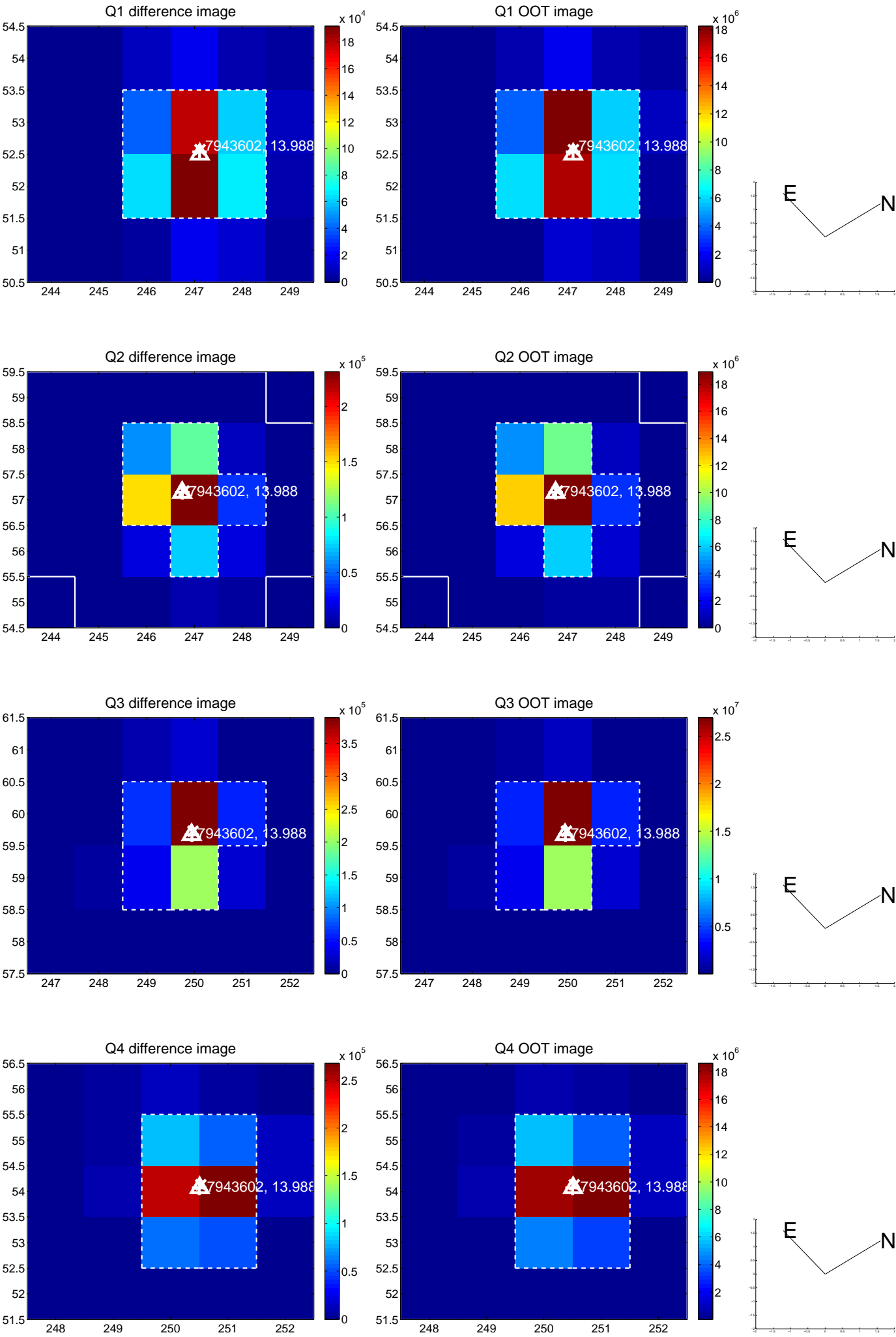
The direct PRF centroid is offset from the target star catalog position by about 0.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.032 ± 0.068	0.47	0.030 ± 0.068	0.010 ± 0.067
PRF-fit source offset from KIC position	0.260 ± 0.069	3.80	-0.092 ± 0.070	-0.244 ± 0.068
photometric centroid source offset	0.28 ± 0.01	33.47	-0.16 ± 0.01	-0.22 ± 0.01

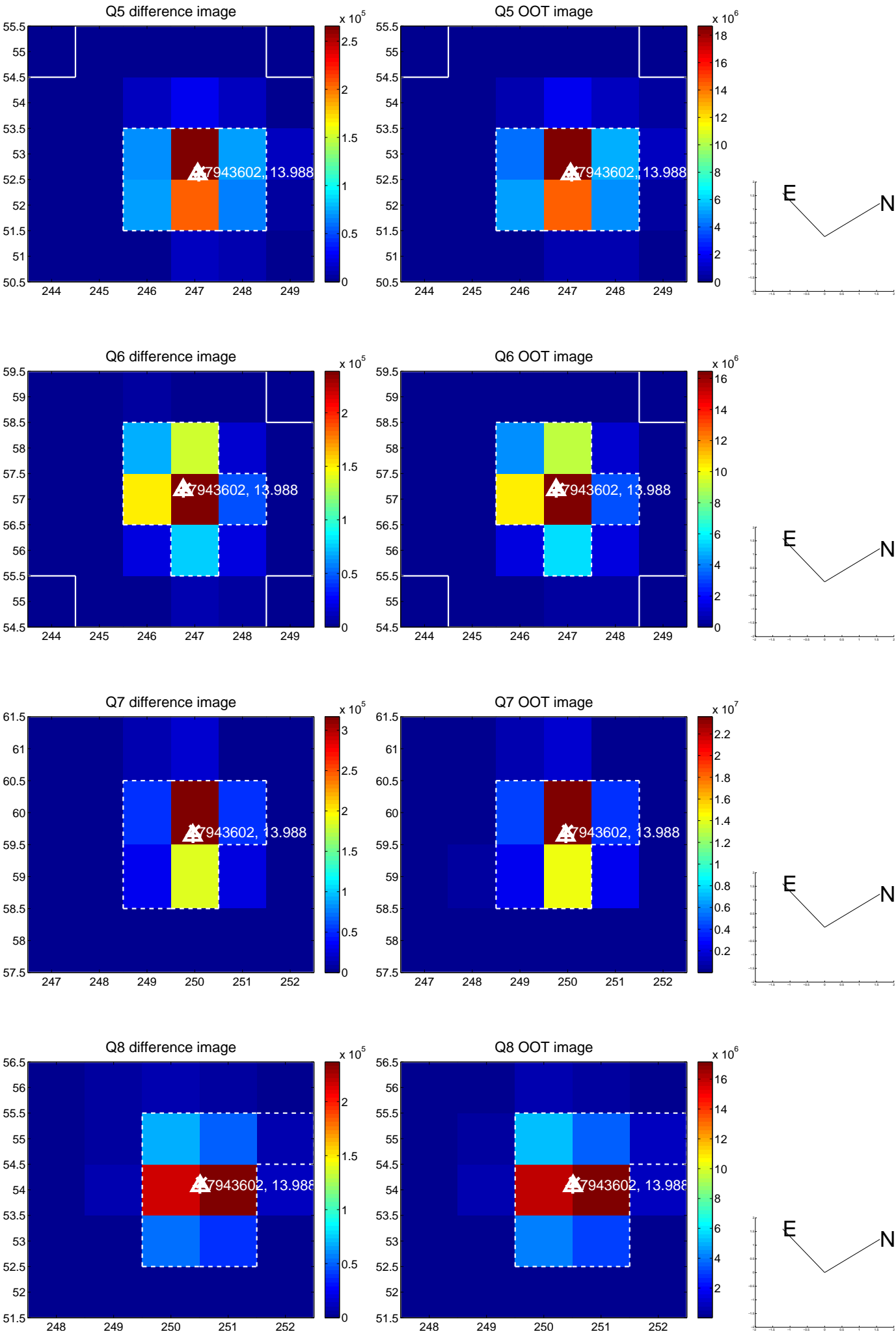


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

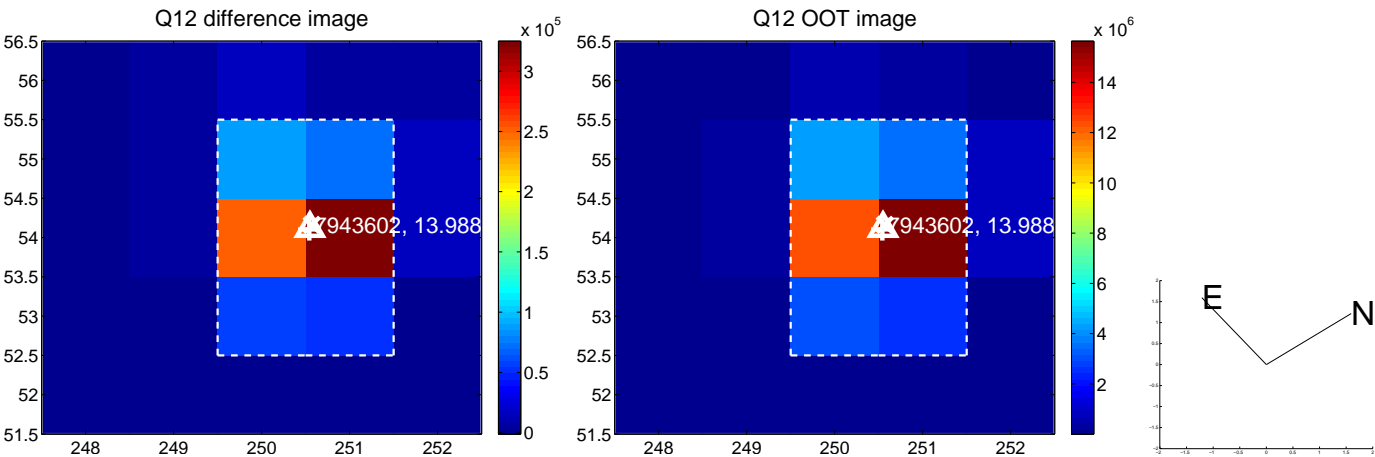
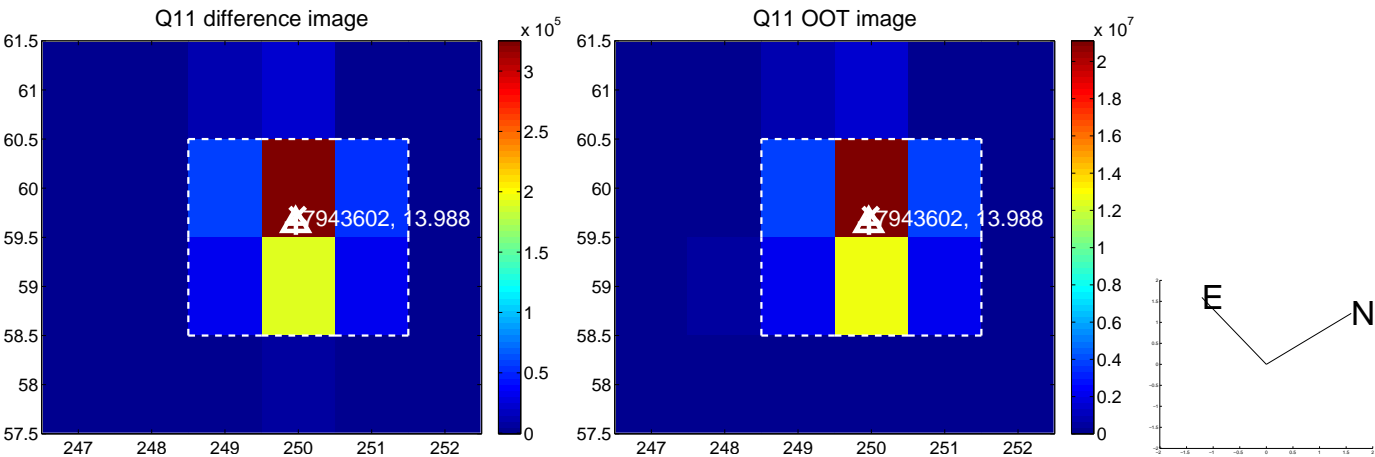
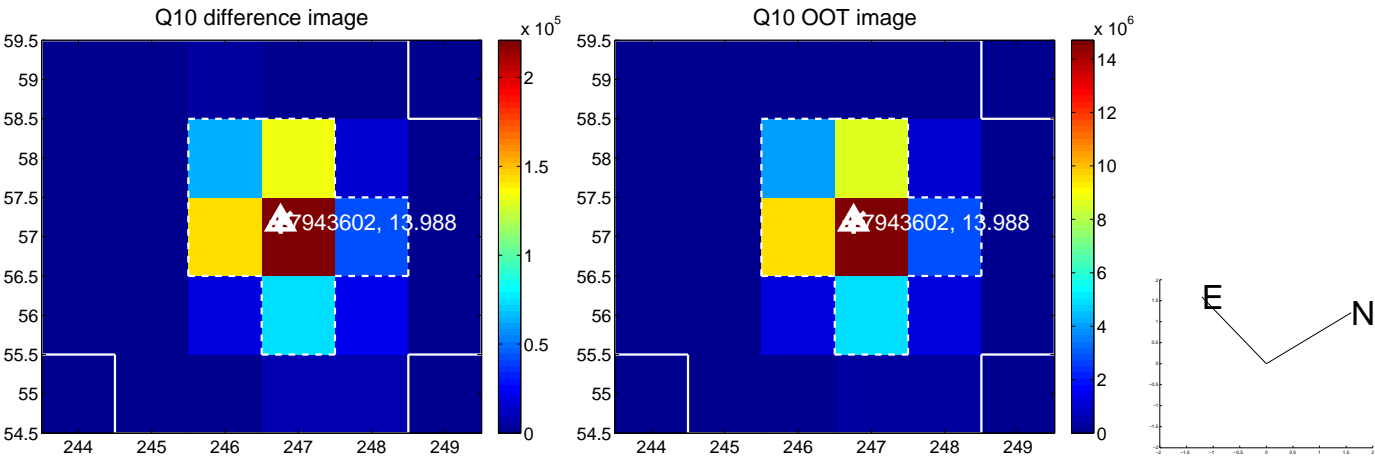
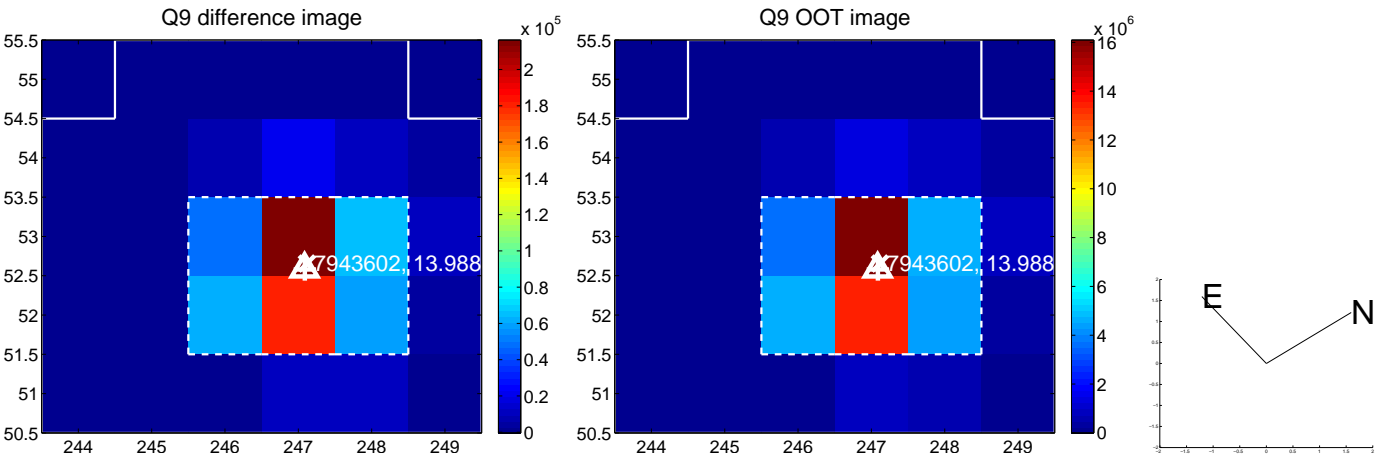
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



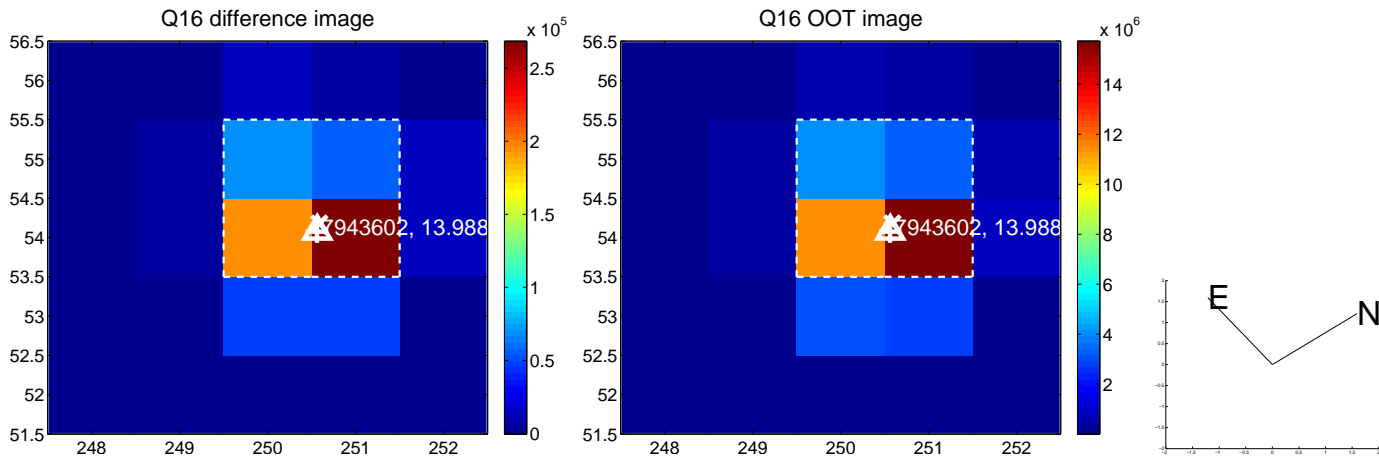
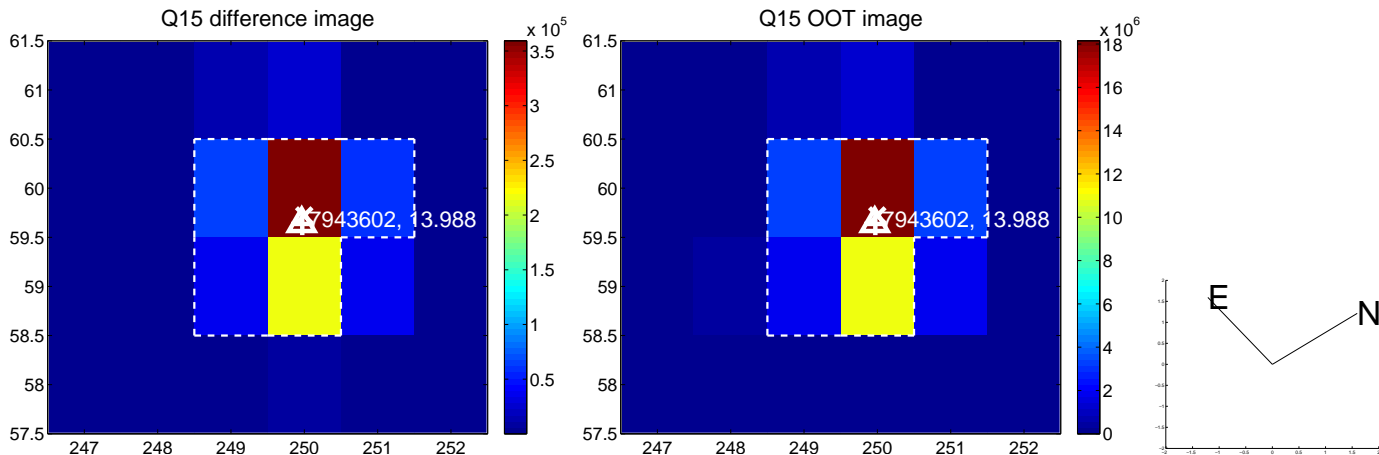
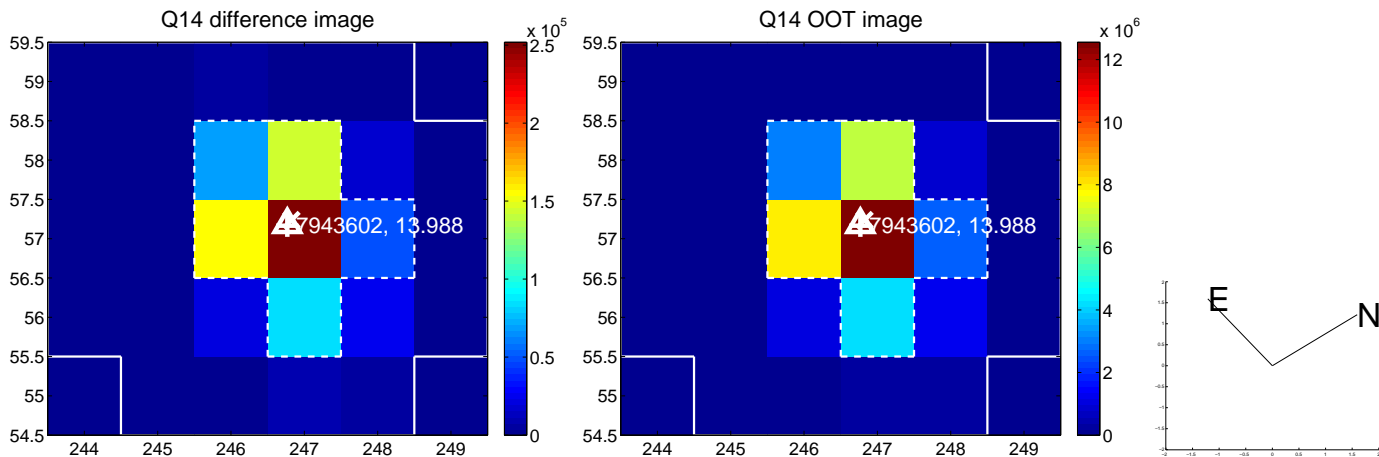
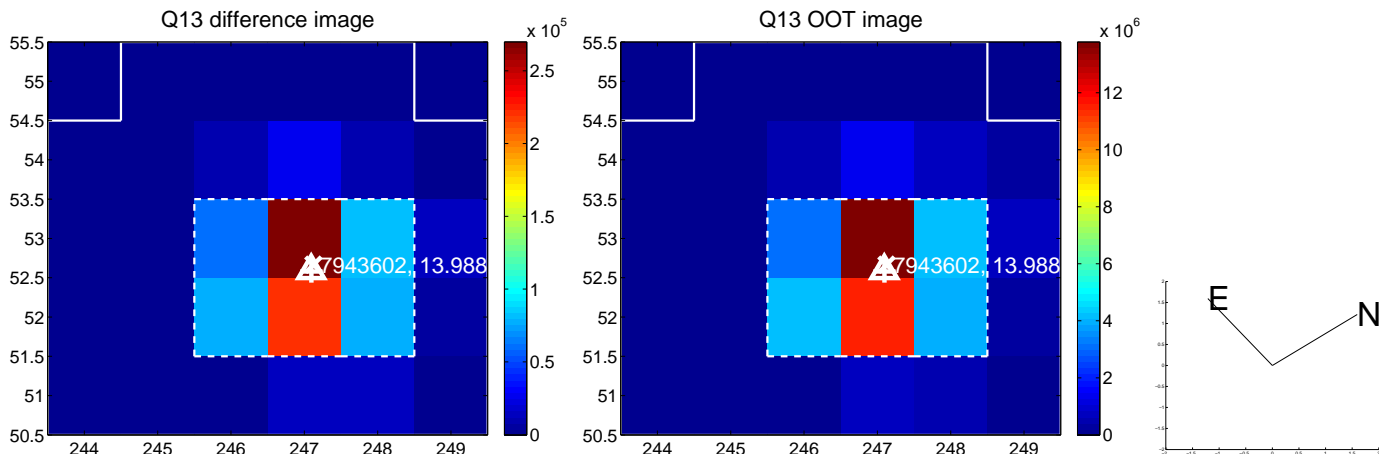
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



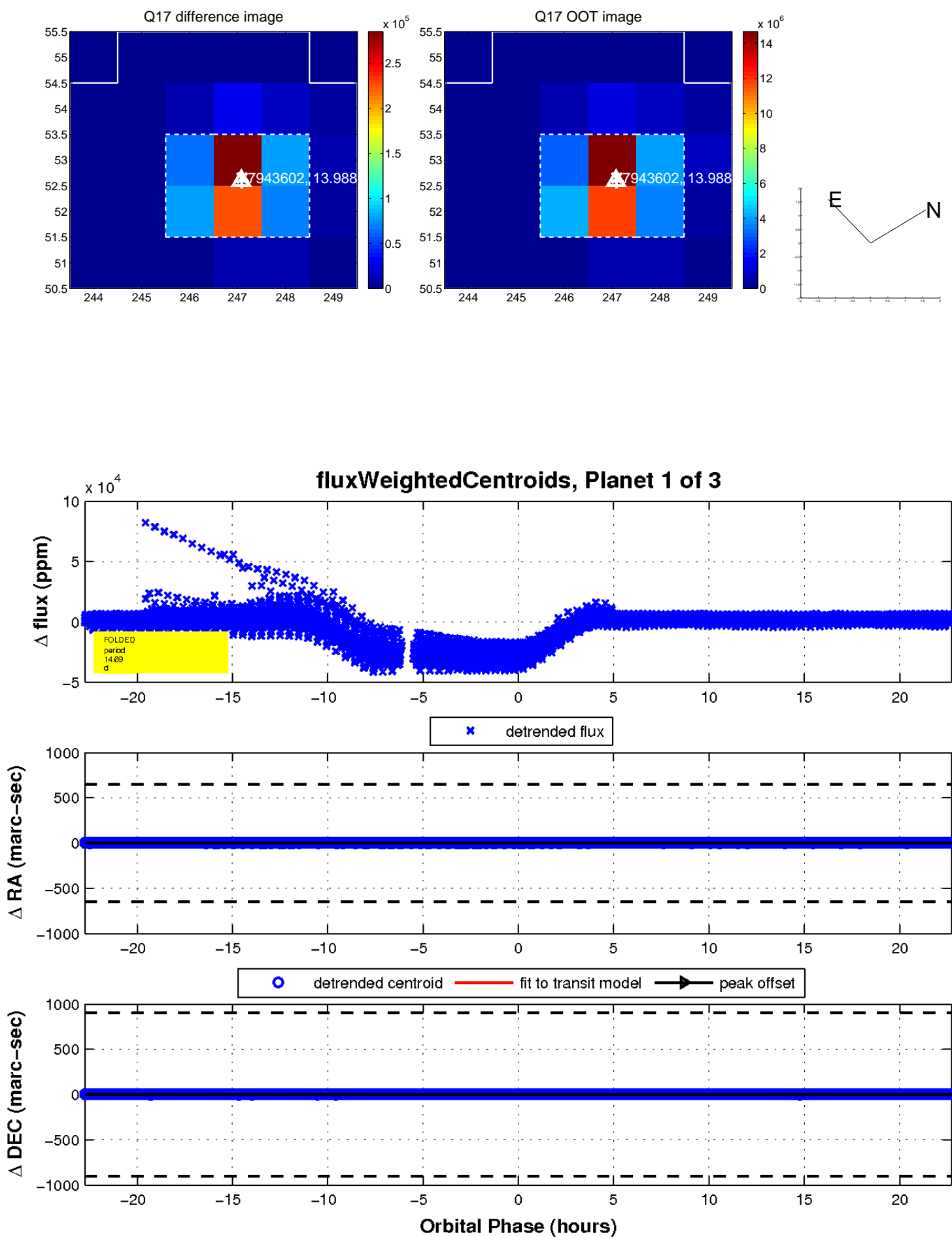
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

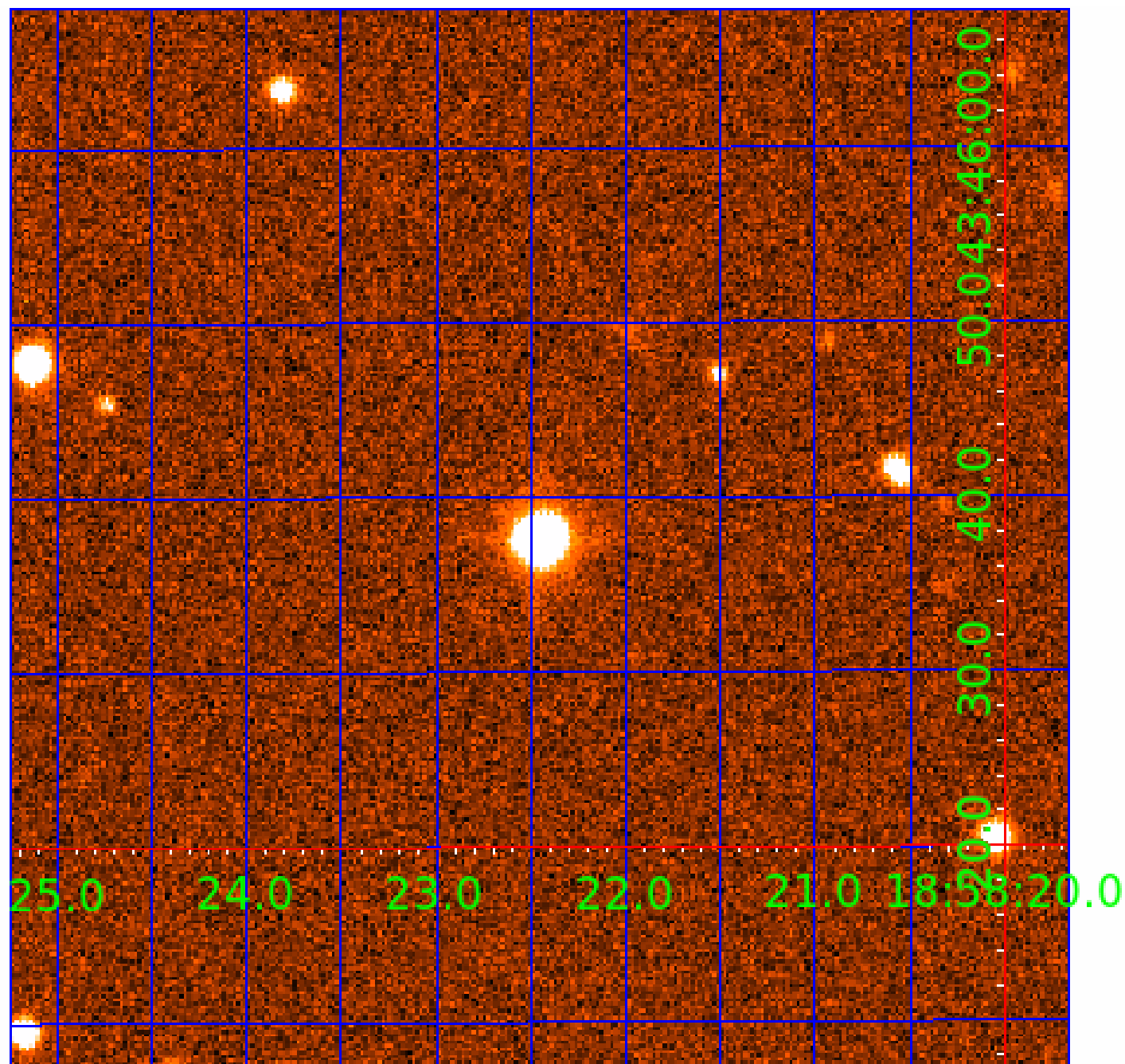


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007943602

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})
007943602-01	OBS	No	14.692055	134.950399	16081.9	7.580	209.7	299.4	3.09	5096	70.53	460.57
007943602-02	OBS	No	14.691965	134.431090	31409.4	10.437	379.8	378.1	3.09	5096	61.24	460.58
007943602-03	OBS	No	14.692236	142.207286	9817.6	11.800	115.5	163.1	3.09	5096	36.35	460.57

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007943602-01	OBS	FP	0.00	1	0	0	0	LPP_DV
007943602-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—SAME_NTL_PERIOD
007943602-03	OBS	FP	0.00	1	0	0	0	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.

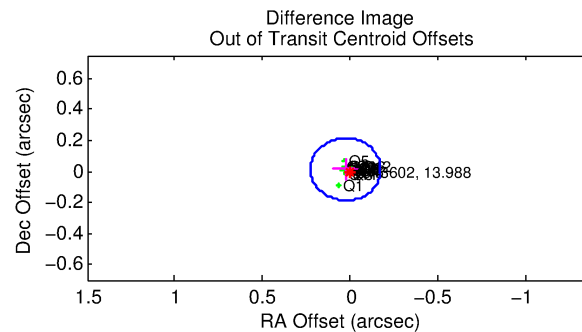
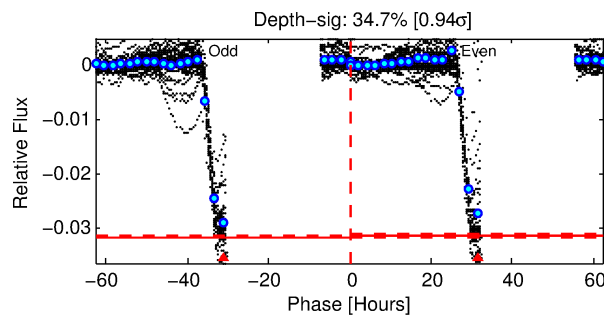
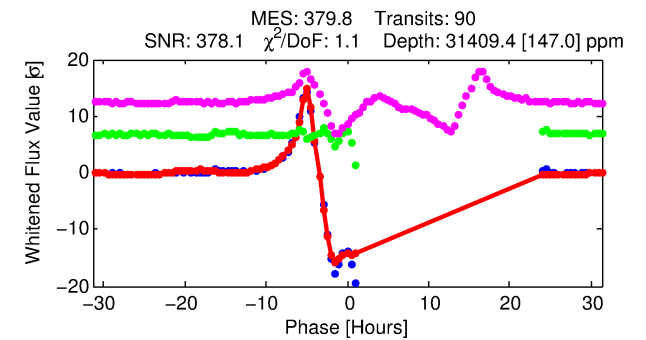
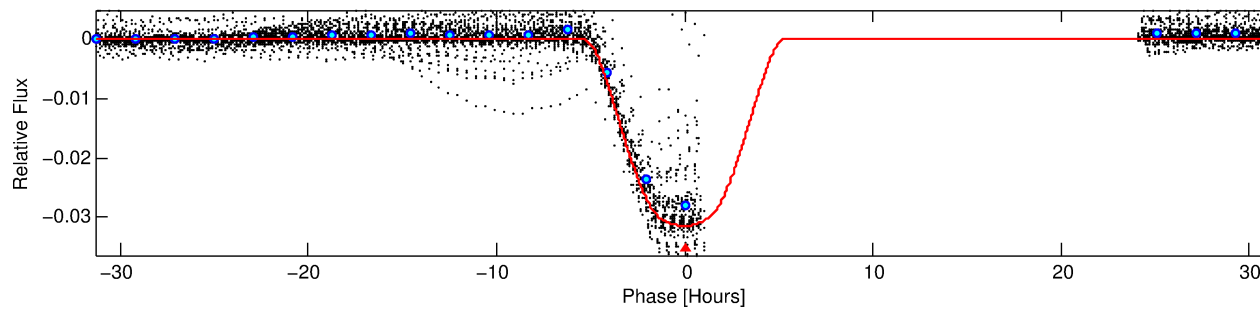
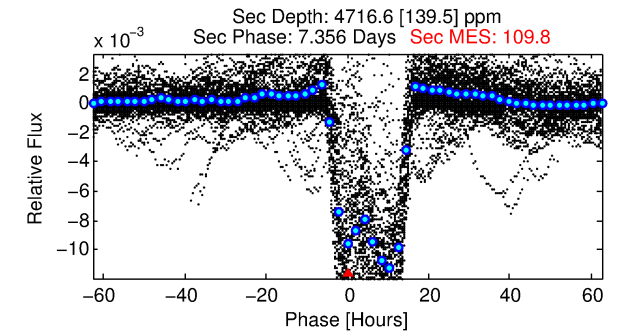
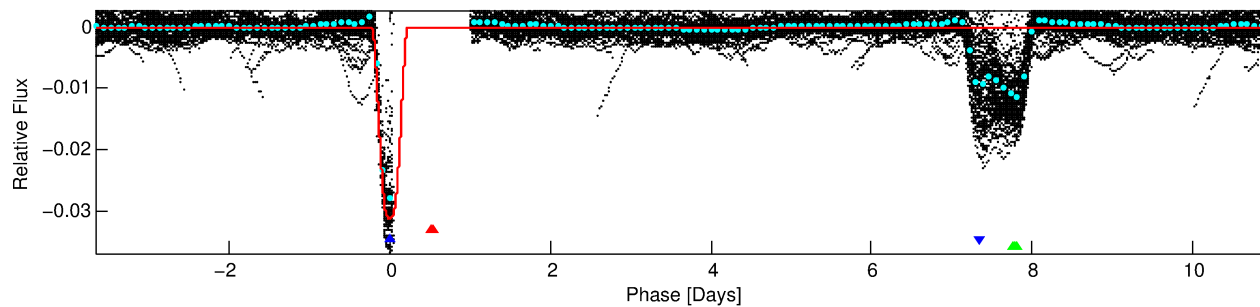
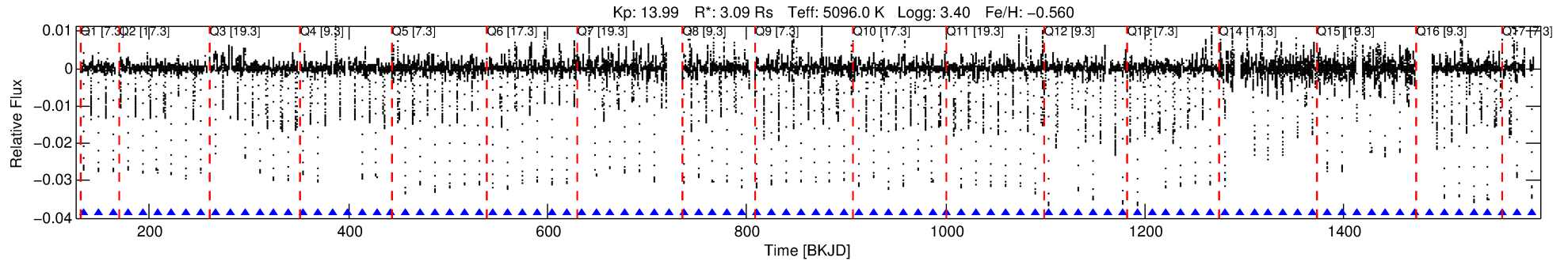
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007943602-02

No Significant Match Found

DV One-Page Summary

KIC: 7943602 Candidate: 2 of 3 Period: 14.692 d



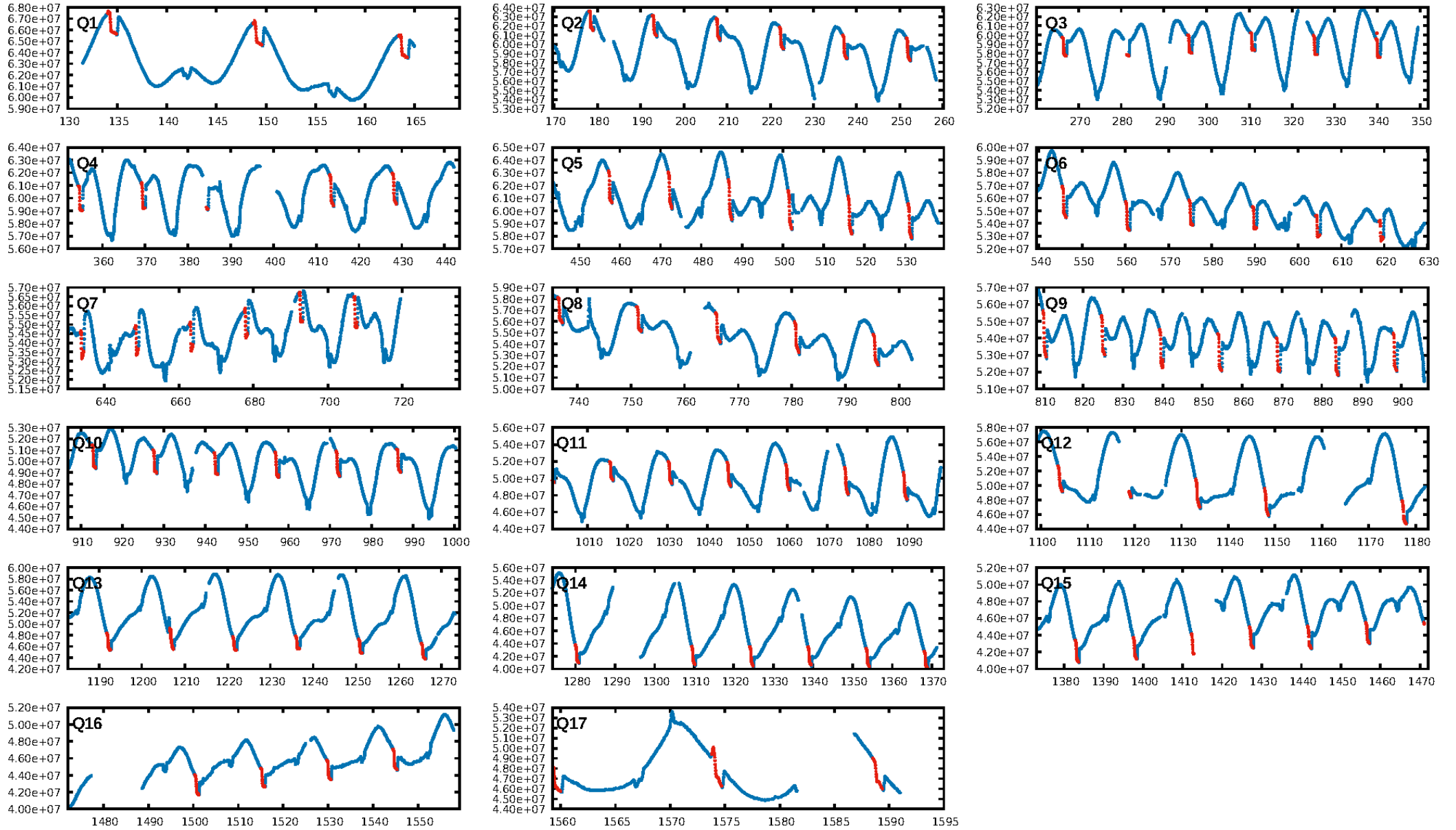
DV Fit Results:

Period = 14.69196 [0.00001] d
Epoch = 134.4311 [0.0007] BKJD
Rp/R* = 0.1819 [0.0004]
a/R* = 9.54 [0.02]
b = 0.79 [0.00]
Seff = 460.58 [260.45]
Teq = 1181 [167] K
Rp = 61.24 [31.59] Re
a = 0.1118 [0.0456] AU
Ag = 8.64 [4.82] [1.59σ]
Teffp = 3132 [82] K [10.48σ]

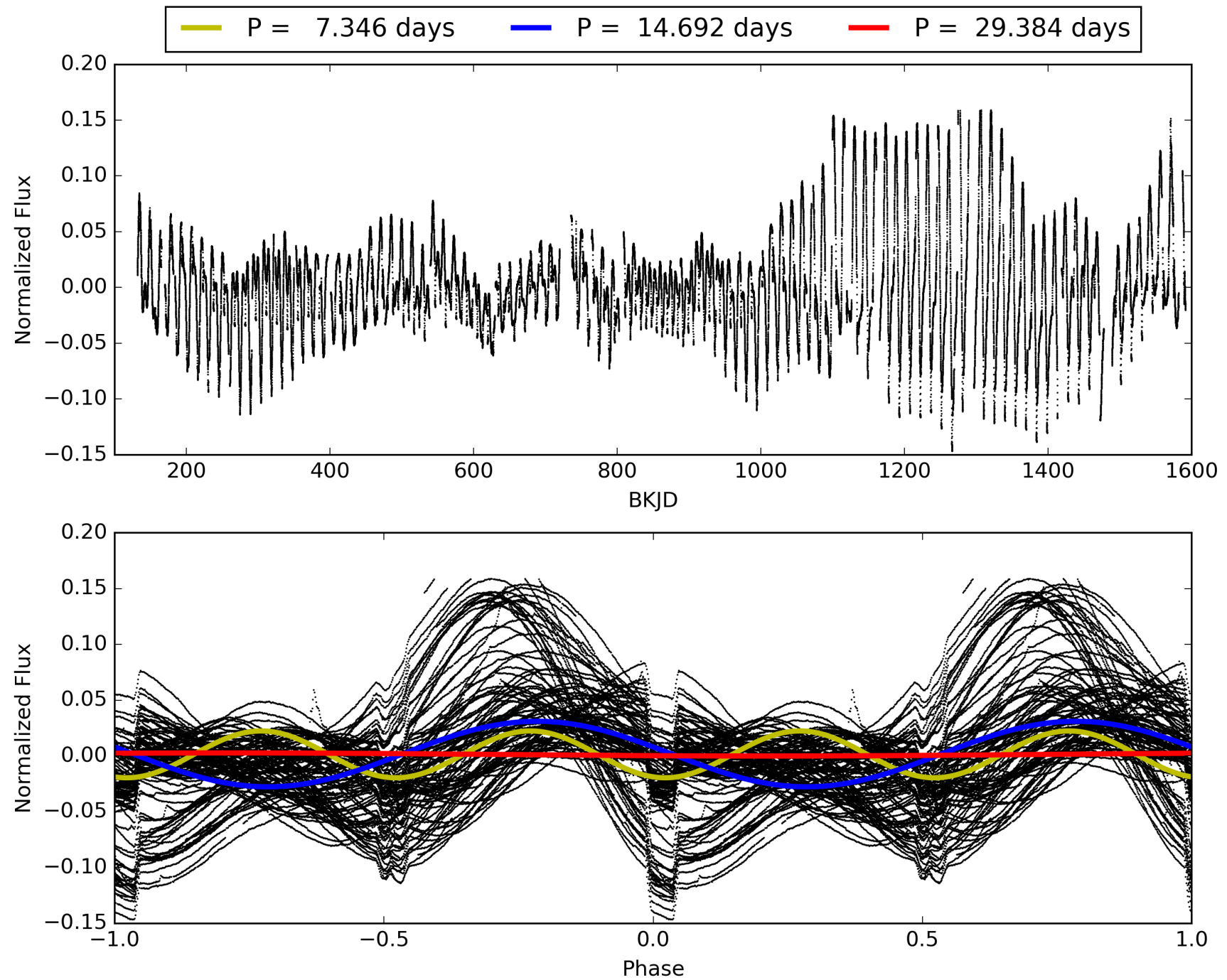
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [84/84]
GhostDiagnostic-chr: 1.107
Centroid-sig: 0.1%
Centroid-so: 0.288 arcsec [78.88σ]
OotOffset-rm: 0.031 arcsec [0.46σ]
KicOffset-rm: 0.258 arcsec [3.73σ]
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]

TCE 007943602-02, PDC Light Curves

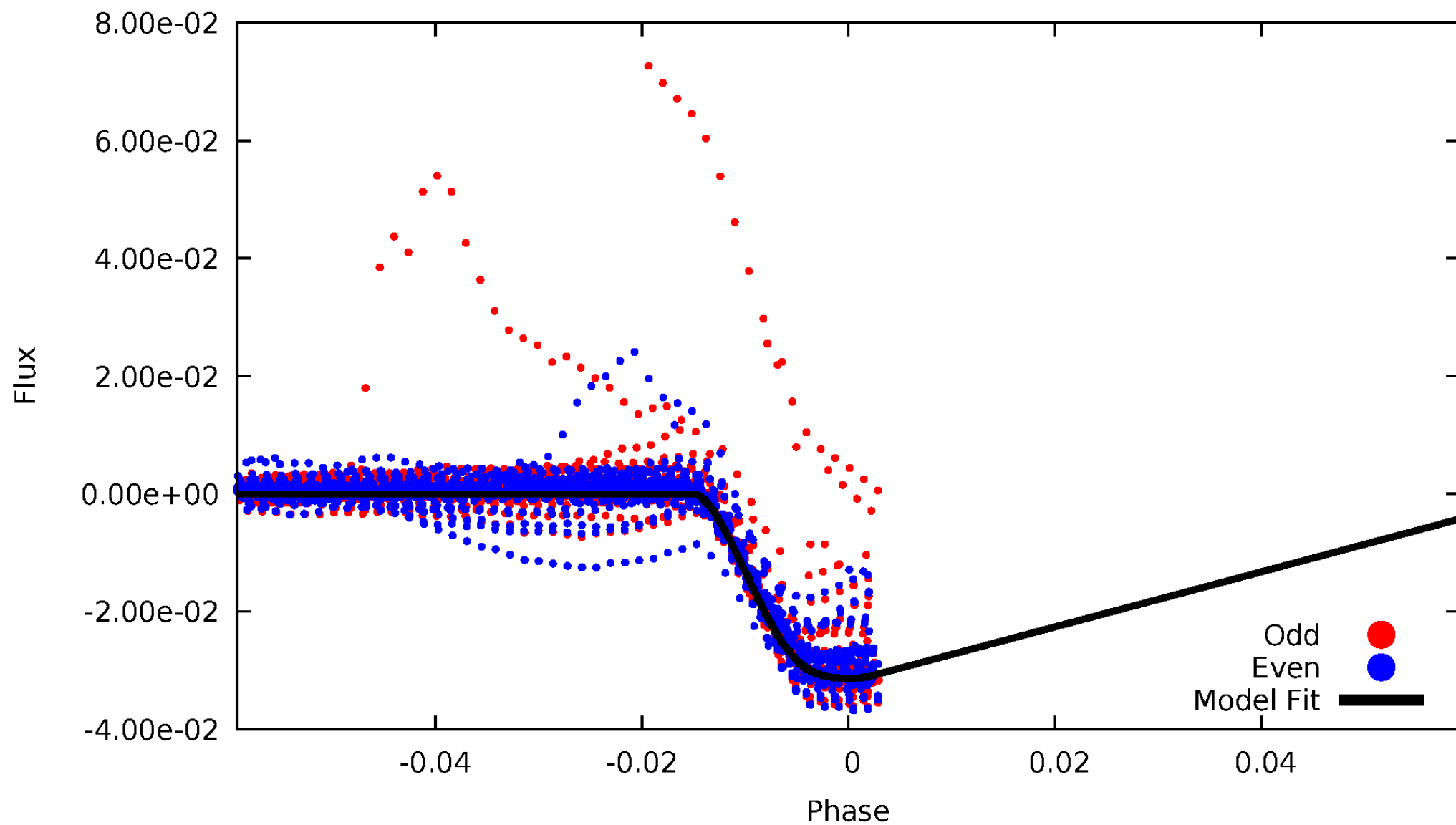


TCE 007943602-02



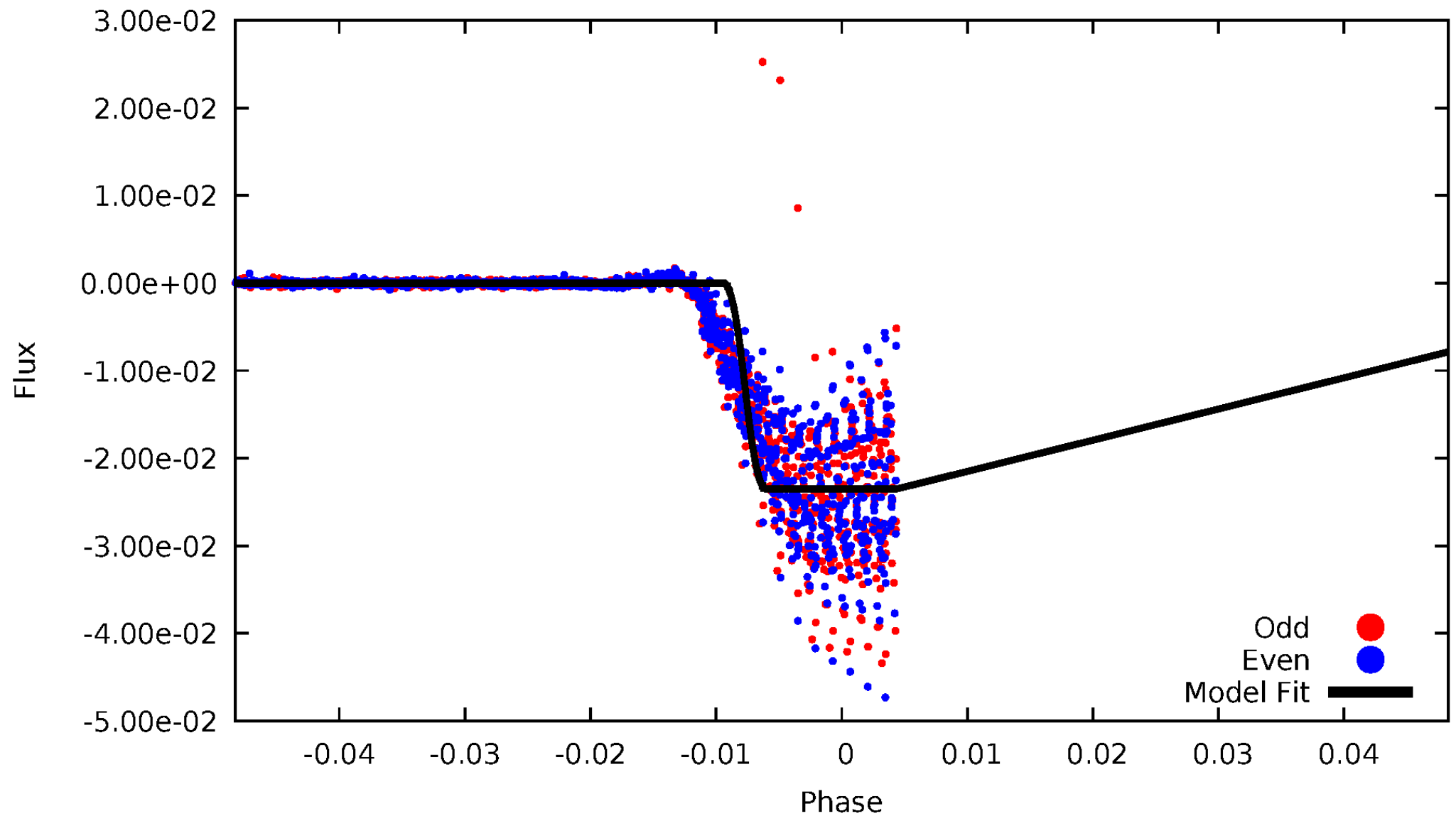
DV Odd/Even

TCE 007943602-02



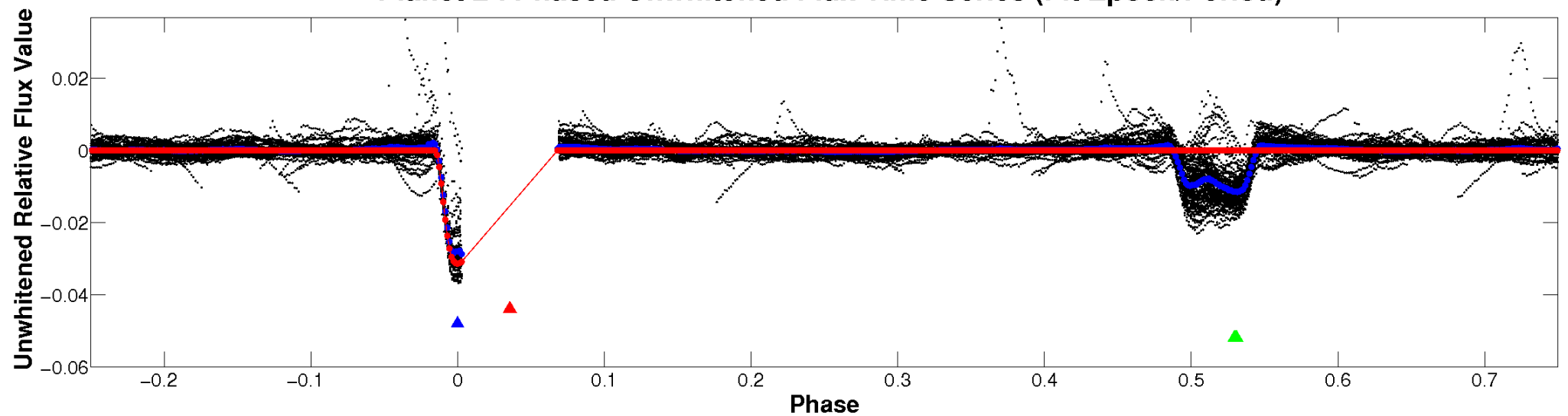
ALT Odd/Even

TCE 007943602-02

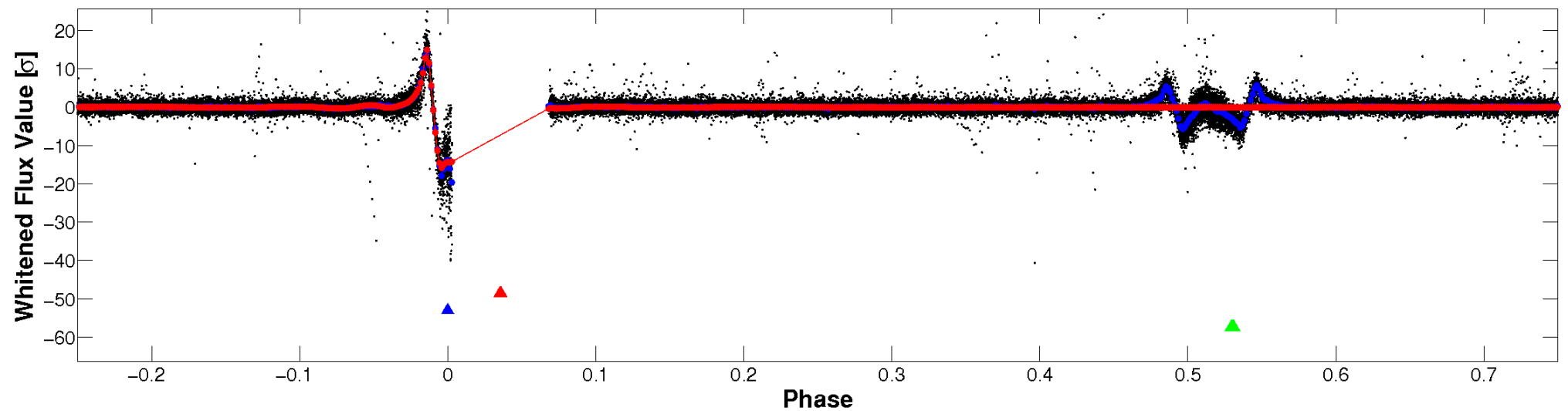


Non-Whitened Vs. Whitened Light Curve

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

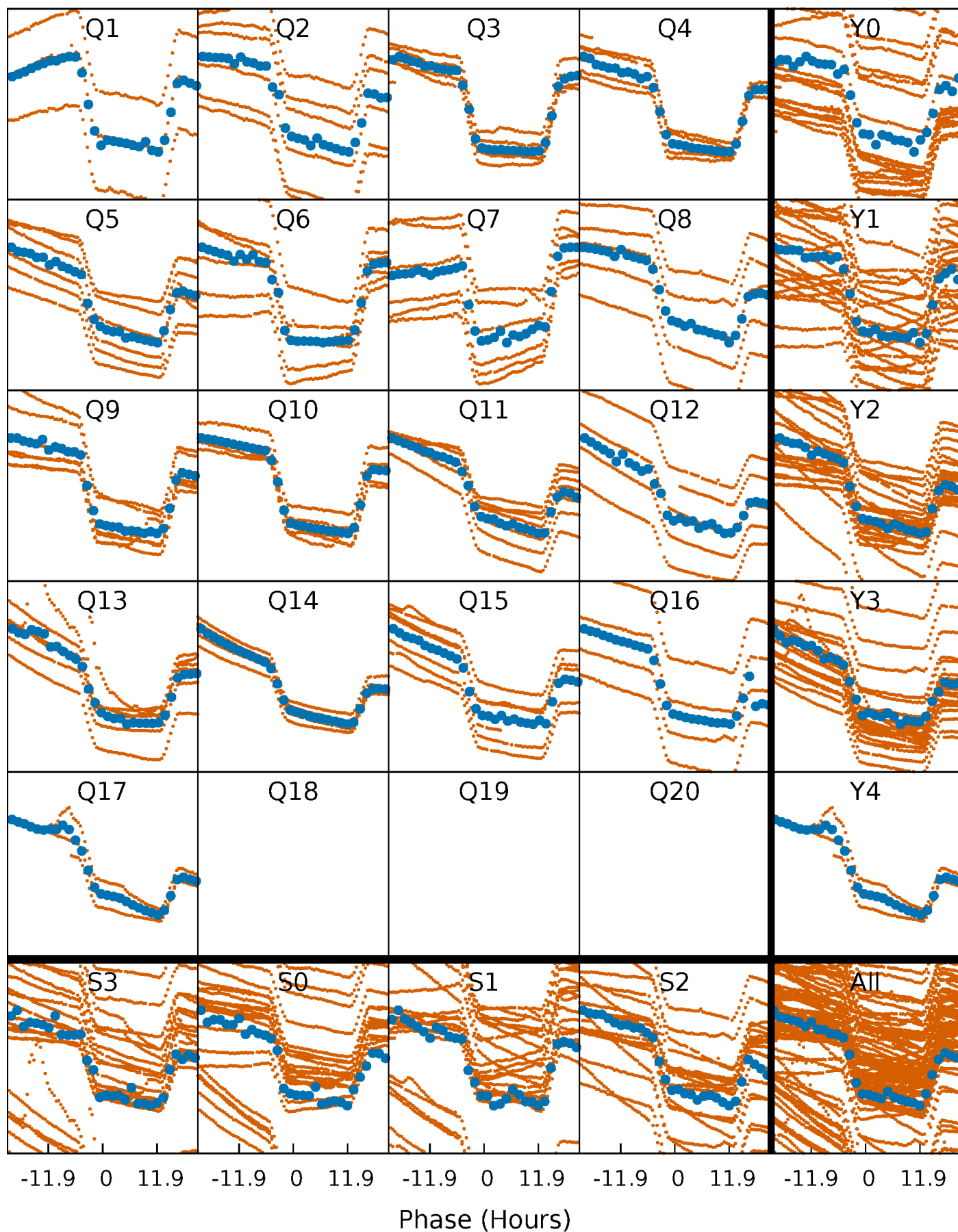


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



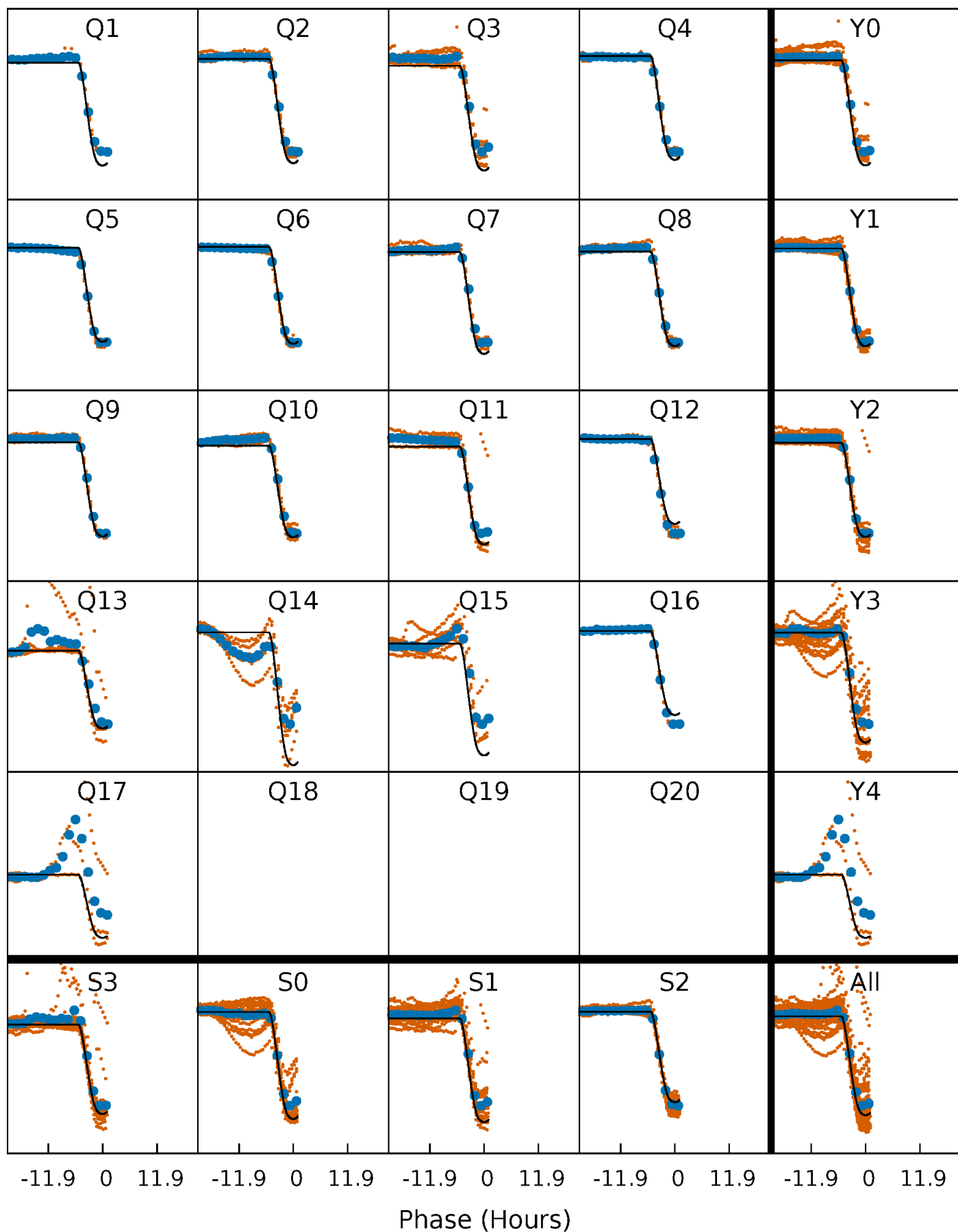
PDC Quarter-Phased Transit Curves

TCE 007943602-02 $P = 14.691965$ Days $T_0 = 134.431090$ (BKJD)



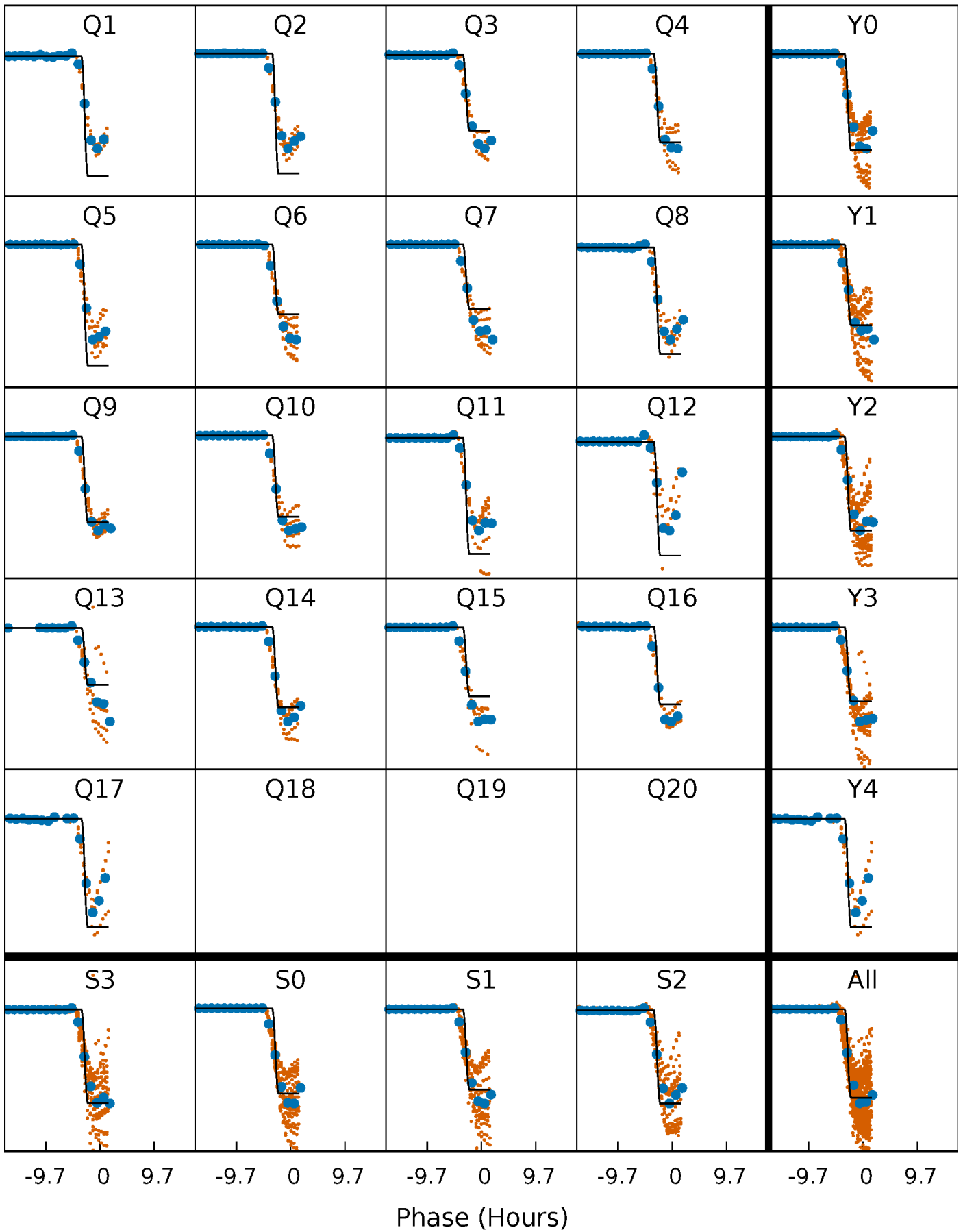
DV Quarter-Phased Transit Curves

TCE 007943602-02 P= 14.691965 Days $T_0=134.431090$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

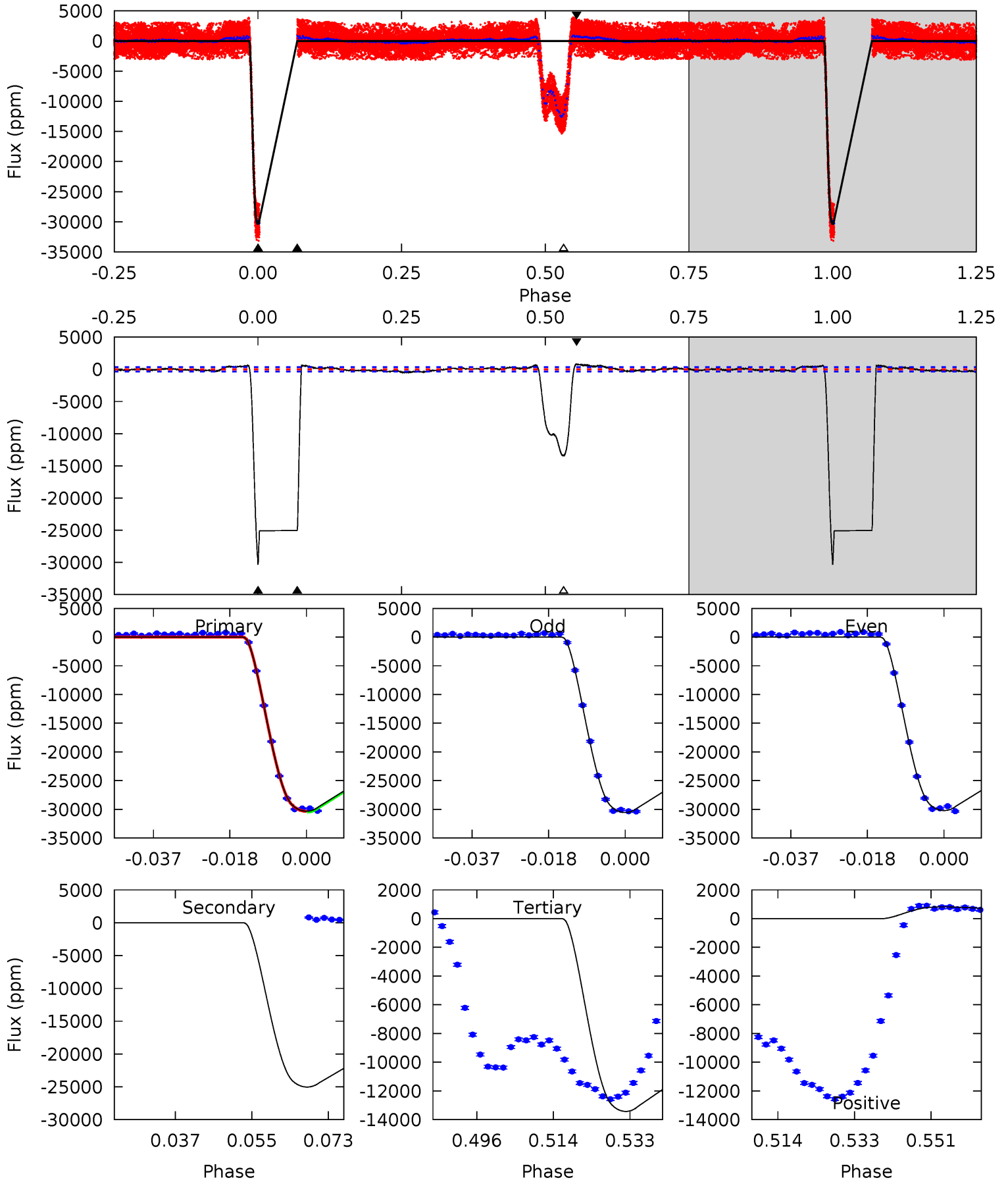
TCE 007943602-02 P= 14.692043 Days $T_0=134.402629$ (BKJD)



DV Model-Shift Uniqueness Test

007943602-02, P = 14.691965 Days, E = 119.739125 Days

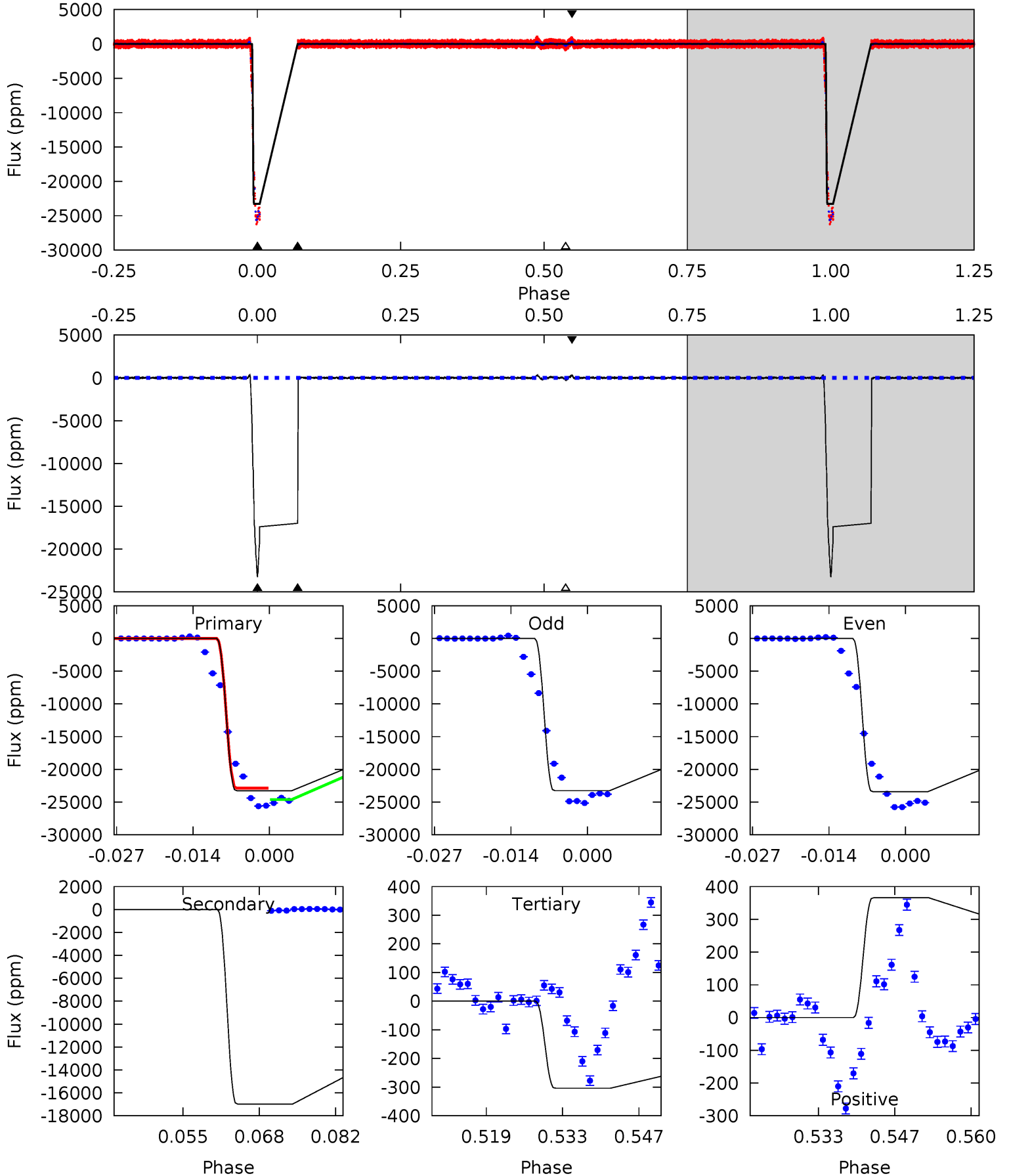
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
423.6	349.5	187.5	11.4	4.91	2.36	26.9	236.1	412.1	162.0	338.1	2.44	0.93	0.03	1.02



Alt Model-Shift Uniqueness Test

007943602-02, P = 14.692043 Days, E = 119.710586 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1242	906.8	16.2	19.5	4.97	2.47	1.96	1226	1223	890.5	887.2	4.59	0.97	0.02	0



Stellar Parameters For KIC 007943602

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5096^{+128}_{-102}	$3.395^{+0.285}_{-0.285}$	$-0.560^{+0.300}_{-0.200}$	$3.086^{+1.592}_{-0.857}$	$0.863^{+0.296}_{-0.106}$	$0.041^{+0.061}_{-0.026}$
	+3%/-2%	+8%/-8%	+54%/-36%	+52%/-28%	+34%/-12%	+148%/-63%
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 007943602-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-25034 ± 72	$62.07^{+17.47}_{-10.41}$	1658^{+205}_{-150}	4822^{+113}_{-94}	46^{+21}_{-16}
Alt.	-16986 ± 19	$51.11^{+13.74}_{-8.22}$	1640^{+201}_{-134}	4772^{+116}_{-89}	46^{+19}_{-16}

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

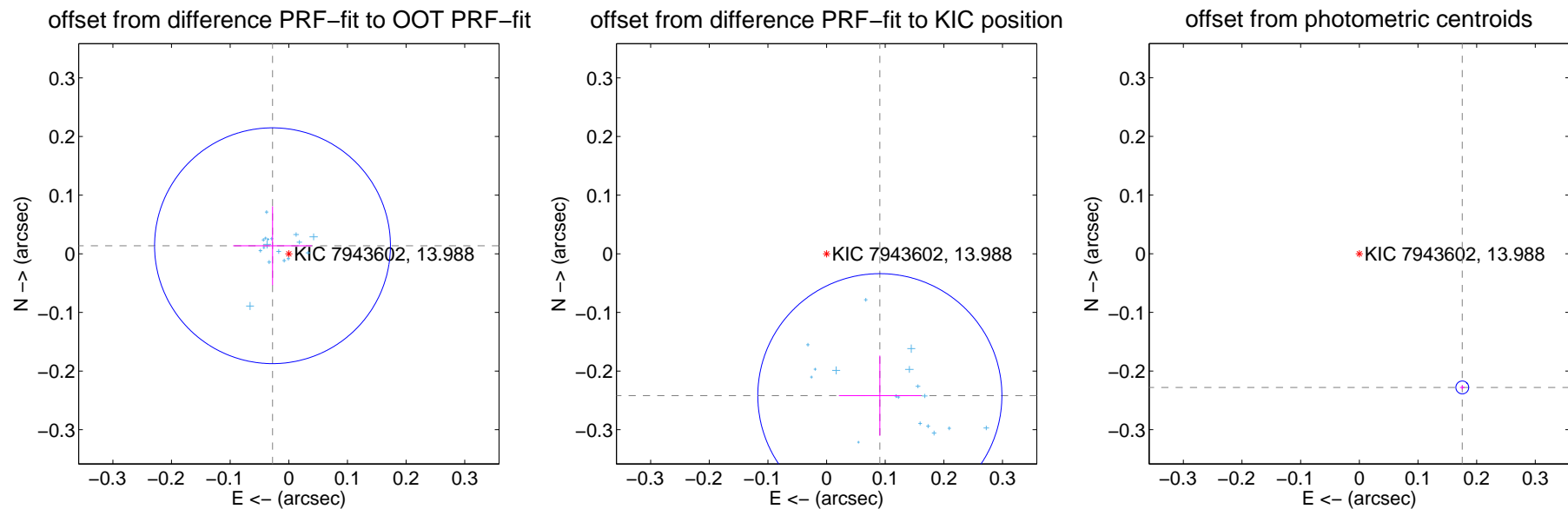
DV Centroid Data

Supplemental centroid analysis for 007943602-02. Kepler magnitude: 13.99. Transit SNR 378.11

There are 17 quarters with good PRF difference image offsets

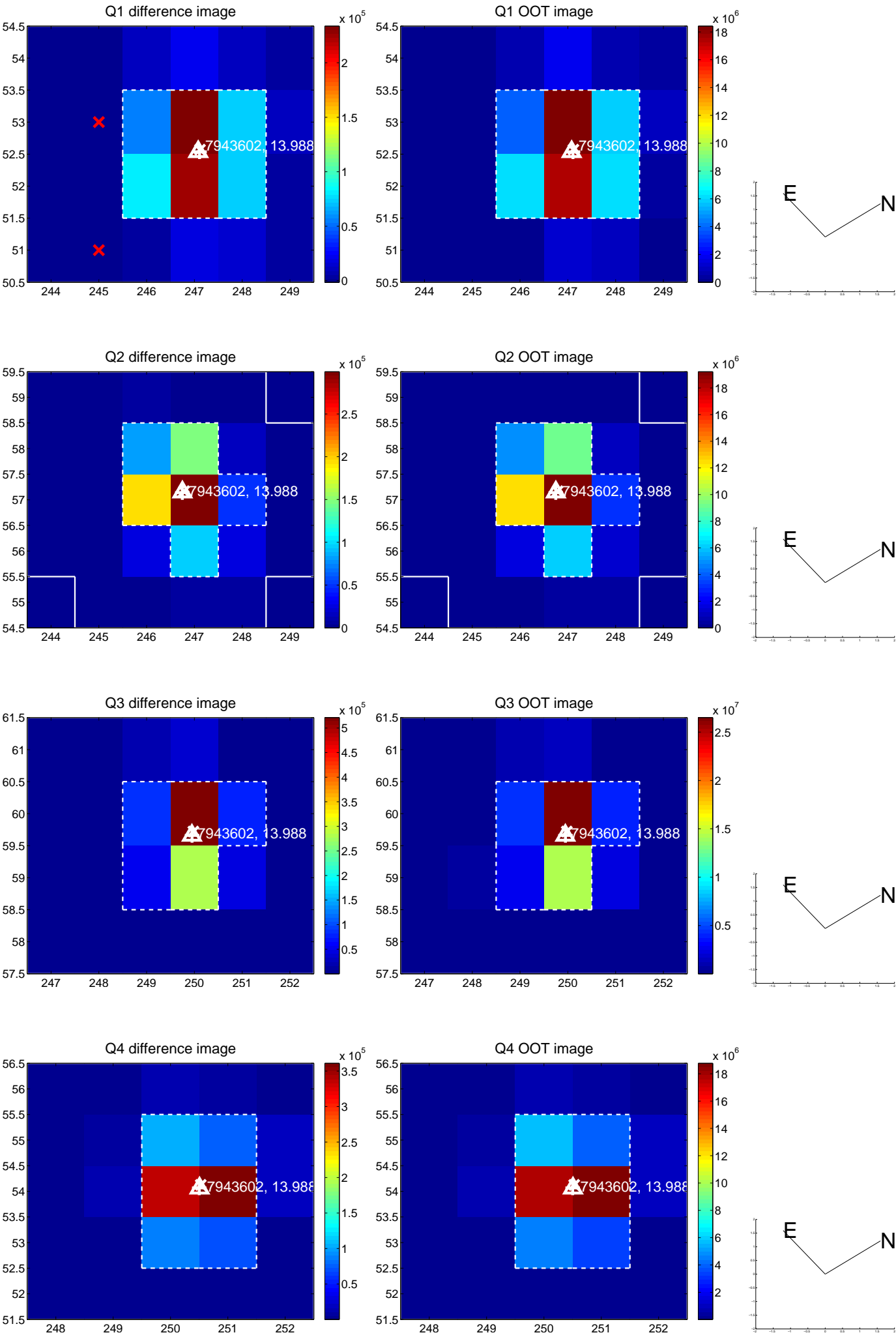
The direct PRF centroid is offset from the target star catalog position by about 0.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.031 ± 0.067	0.46	0.028 ± 0.067	0.014 ± 0.067
PRF-fit source offset from KIC position	0.258 ± 0.069	3.73	-0.091 ± 0.070	-0.242 ± 0.068
photometric centroid source offset	0.29 ± 0.00	78.88	-0.18 ± 0.00	-0.23 ± 0.00

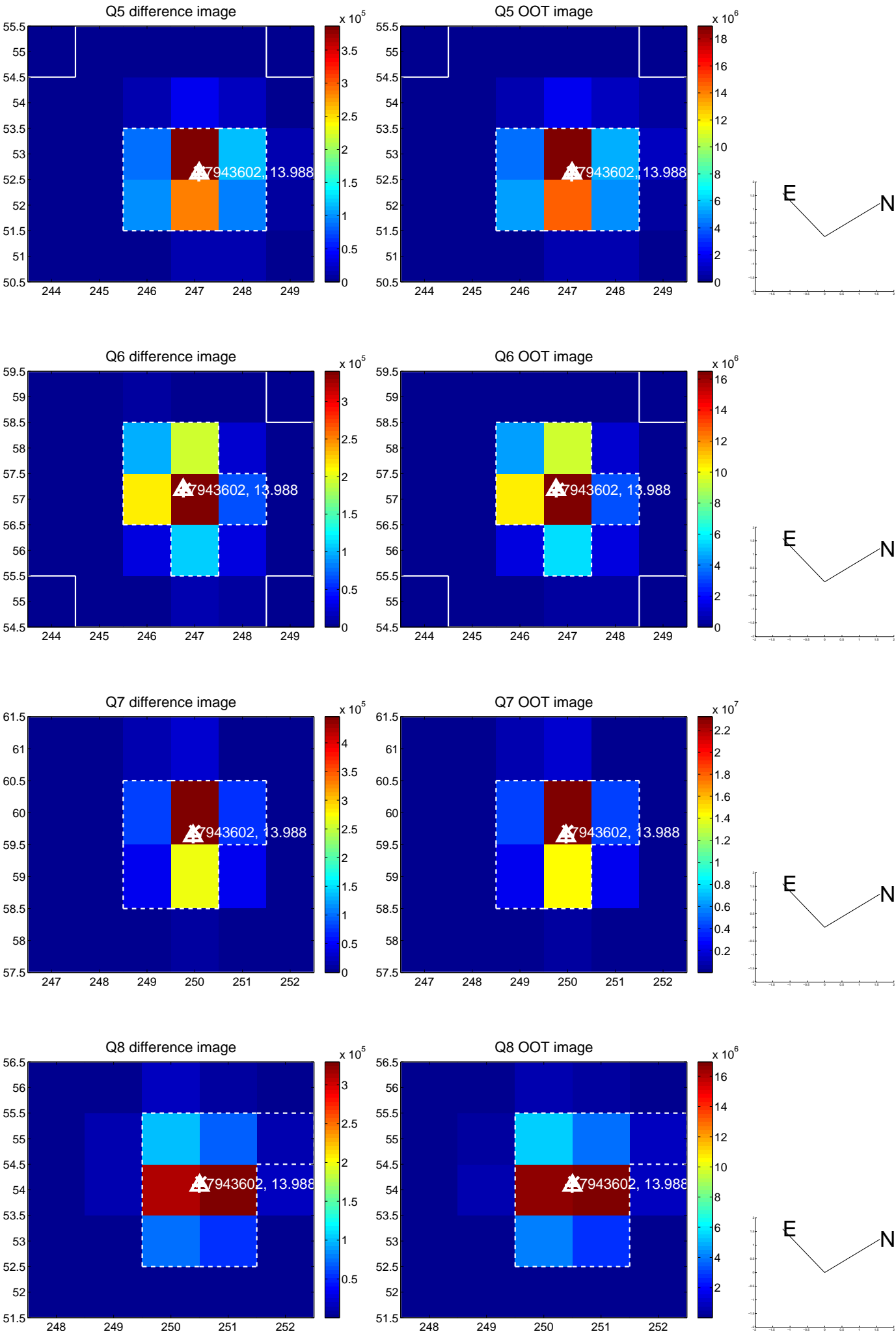


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

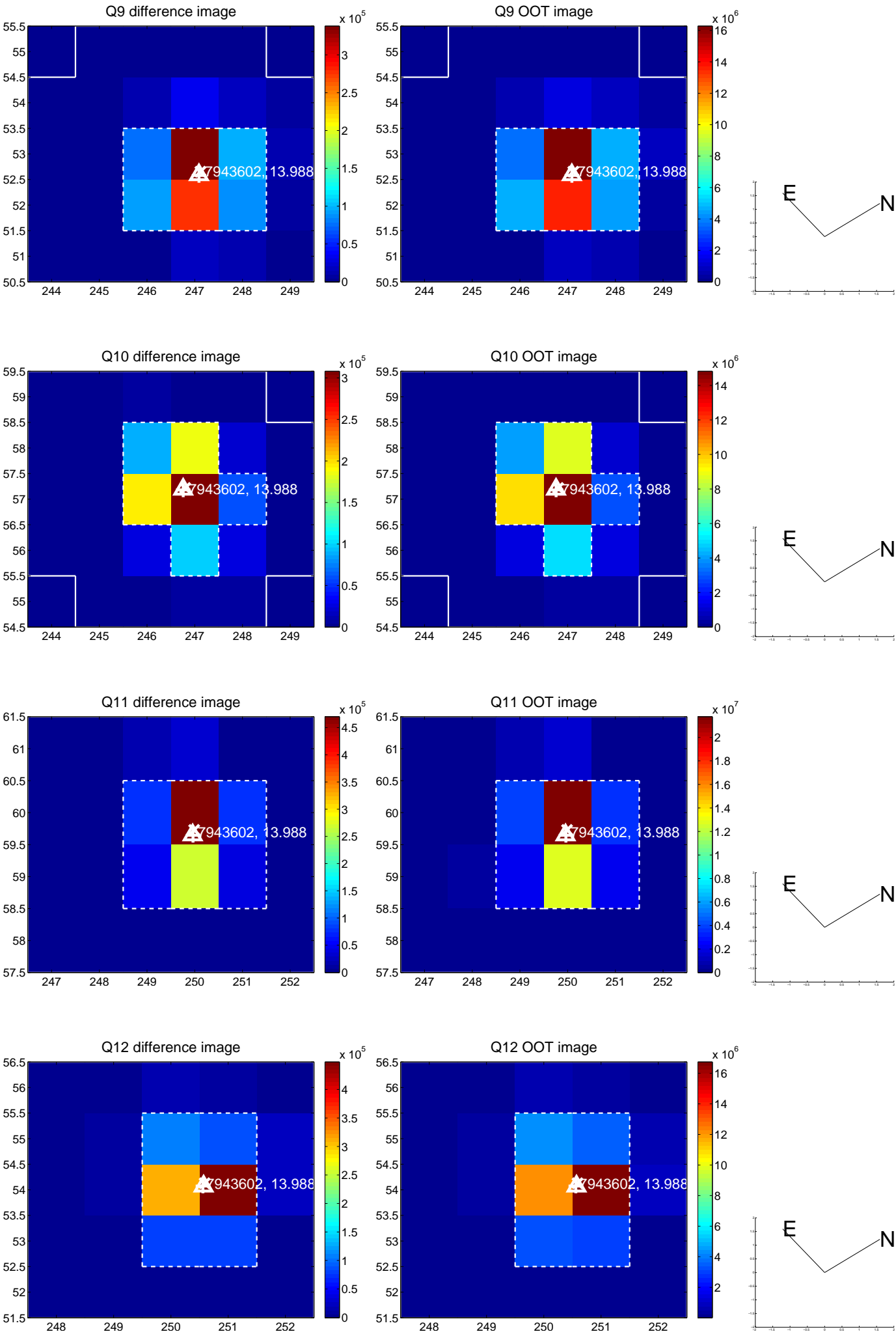
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



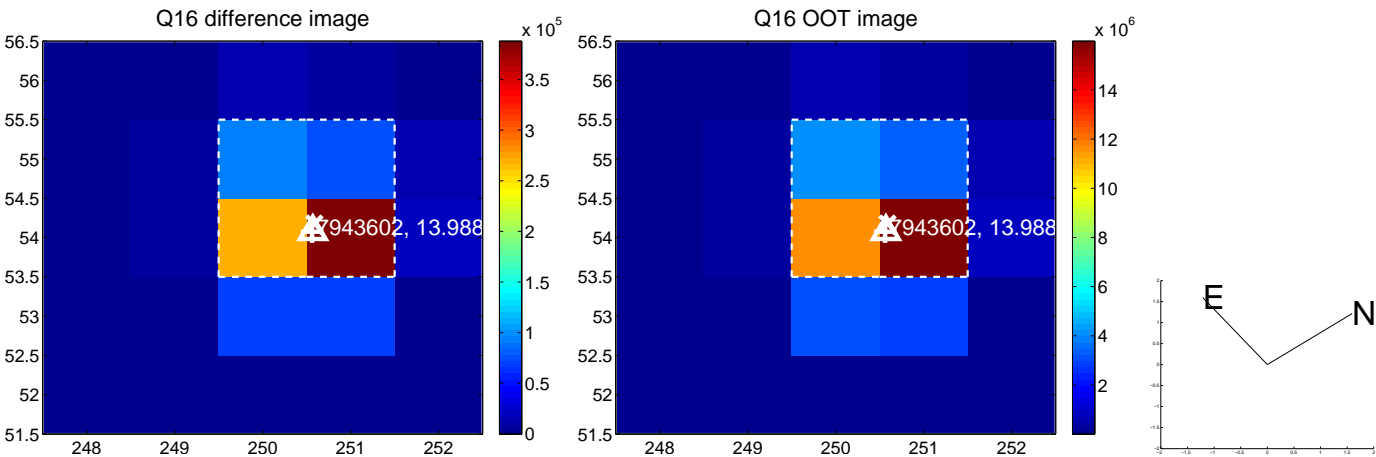
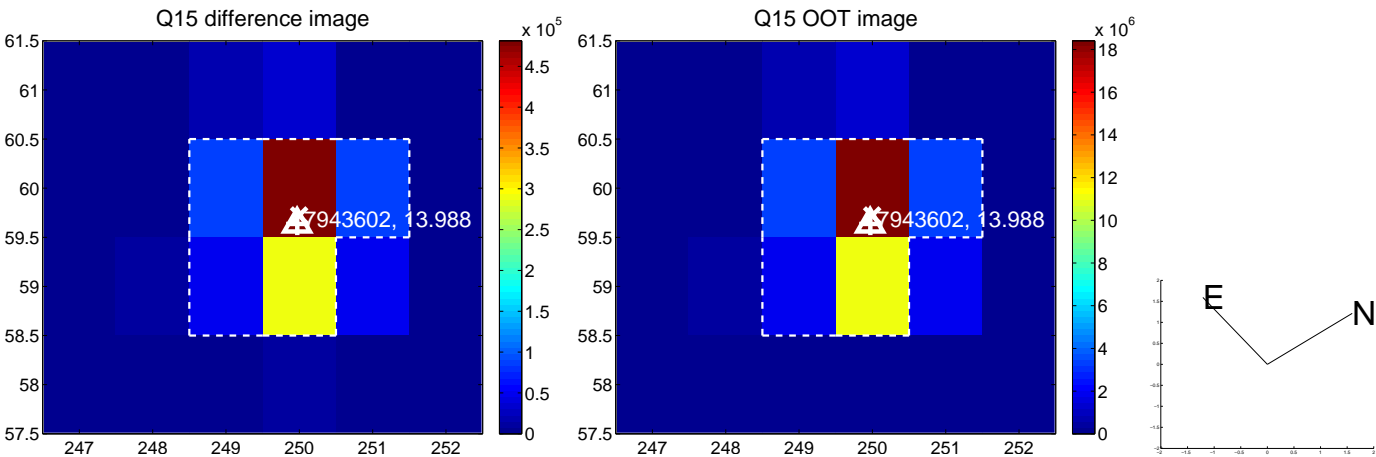
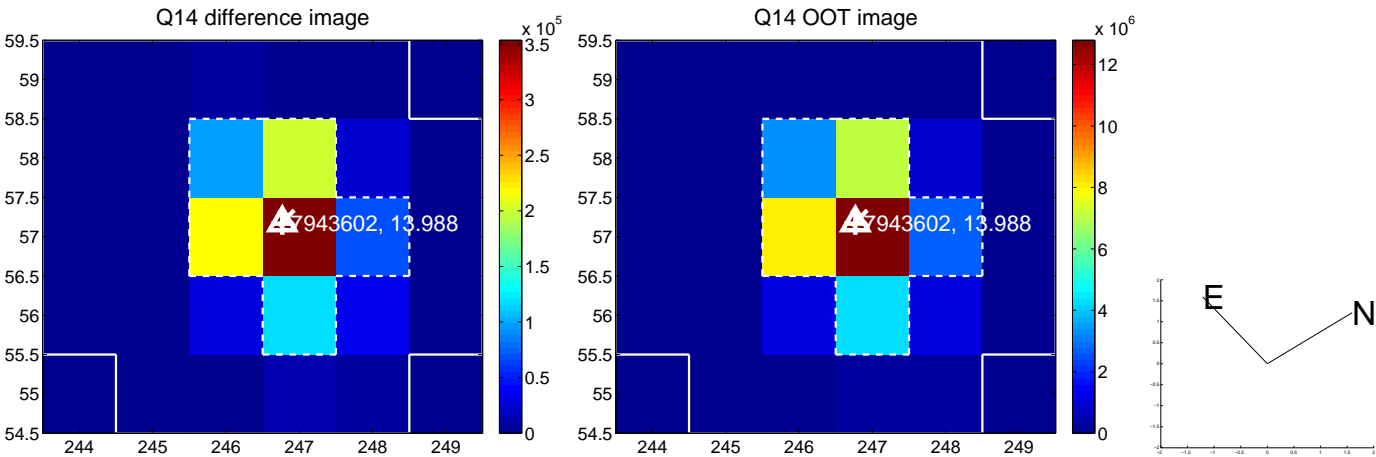
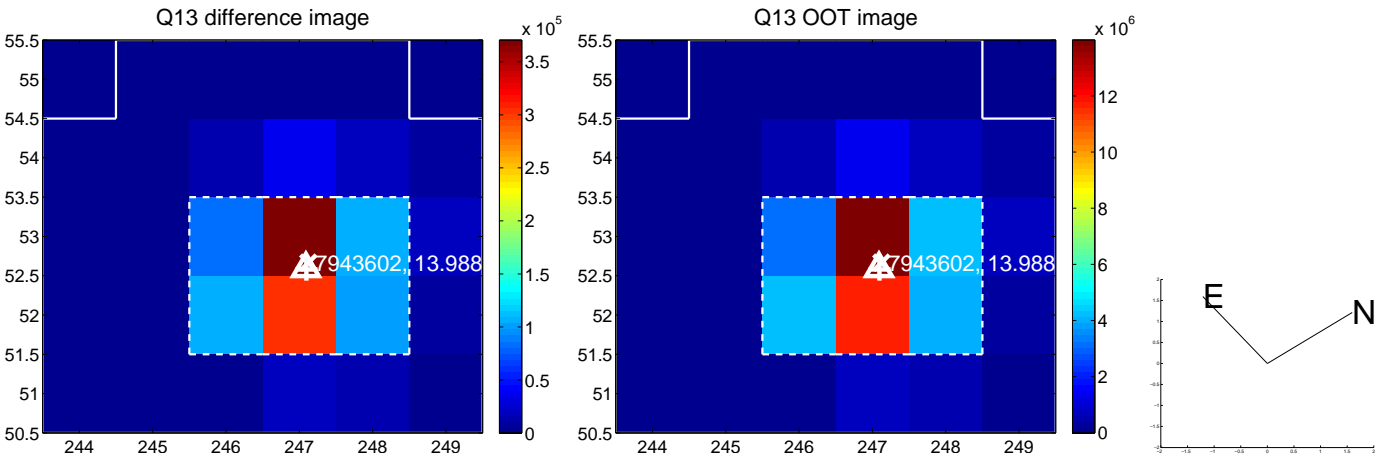
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



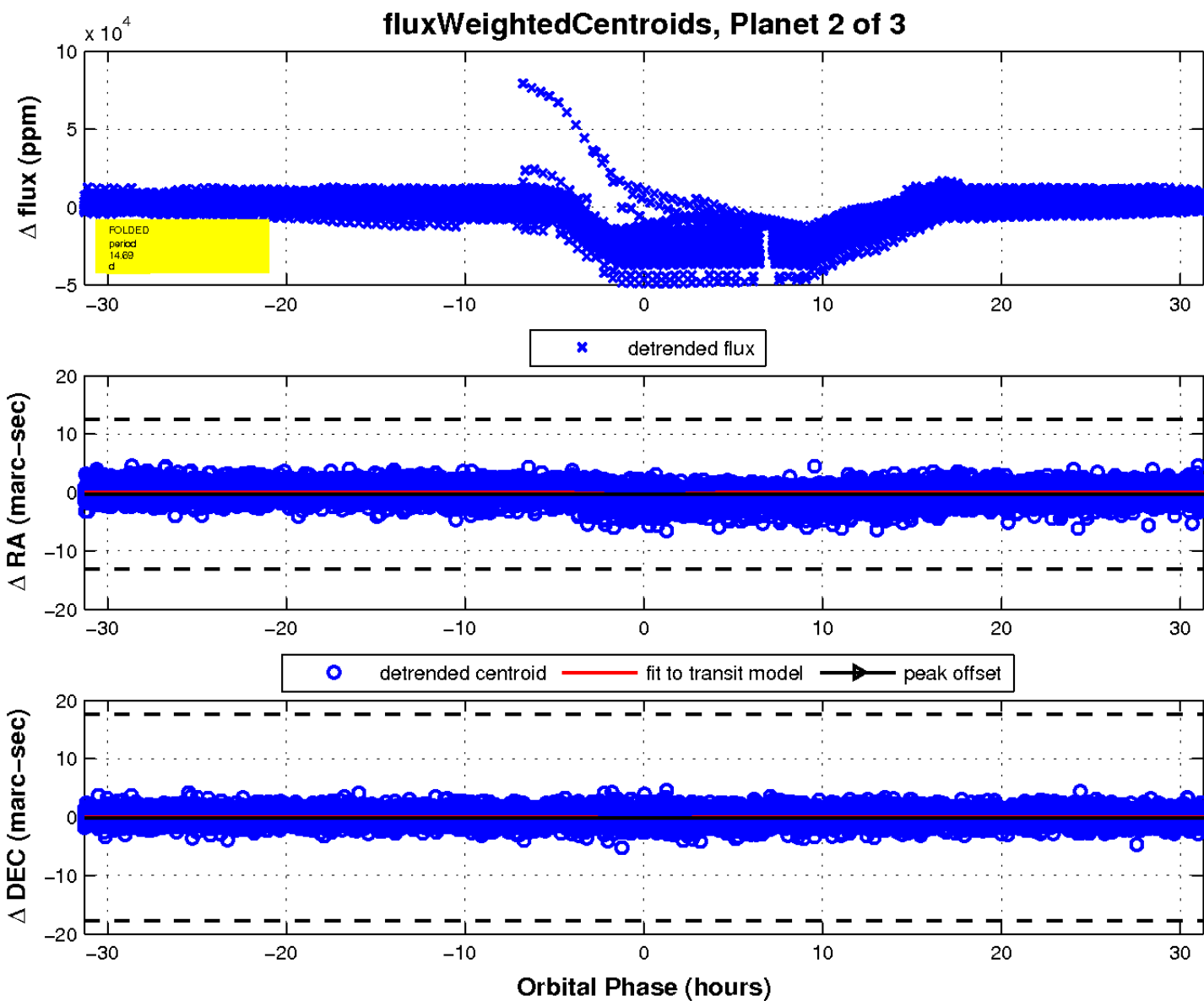
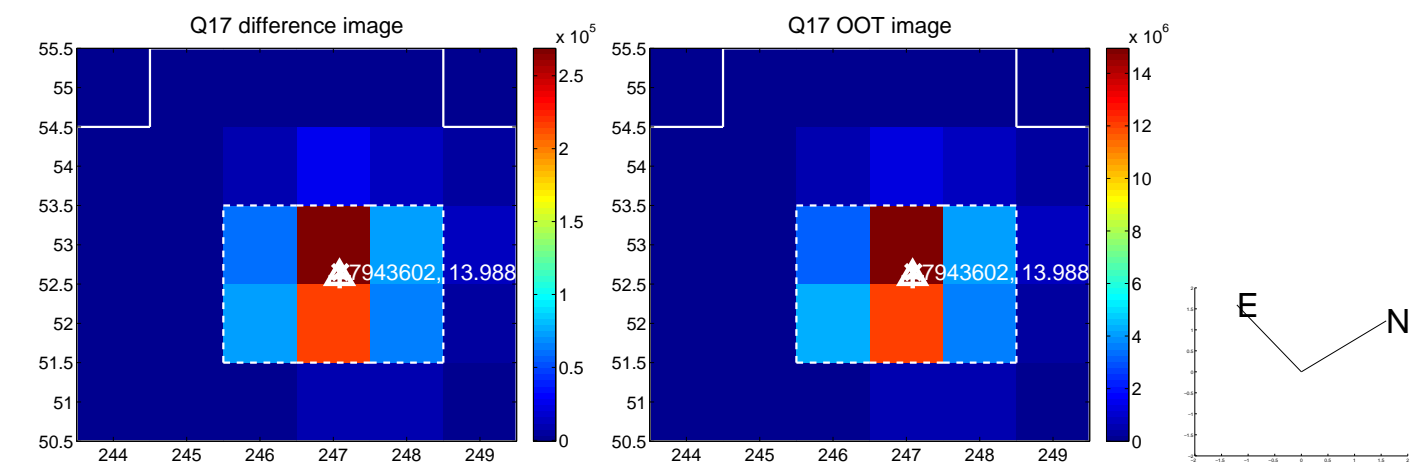
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

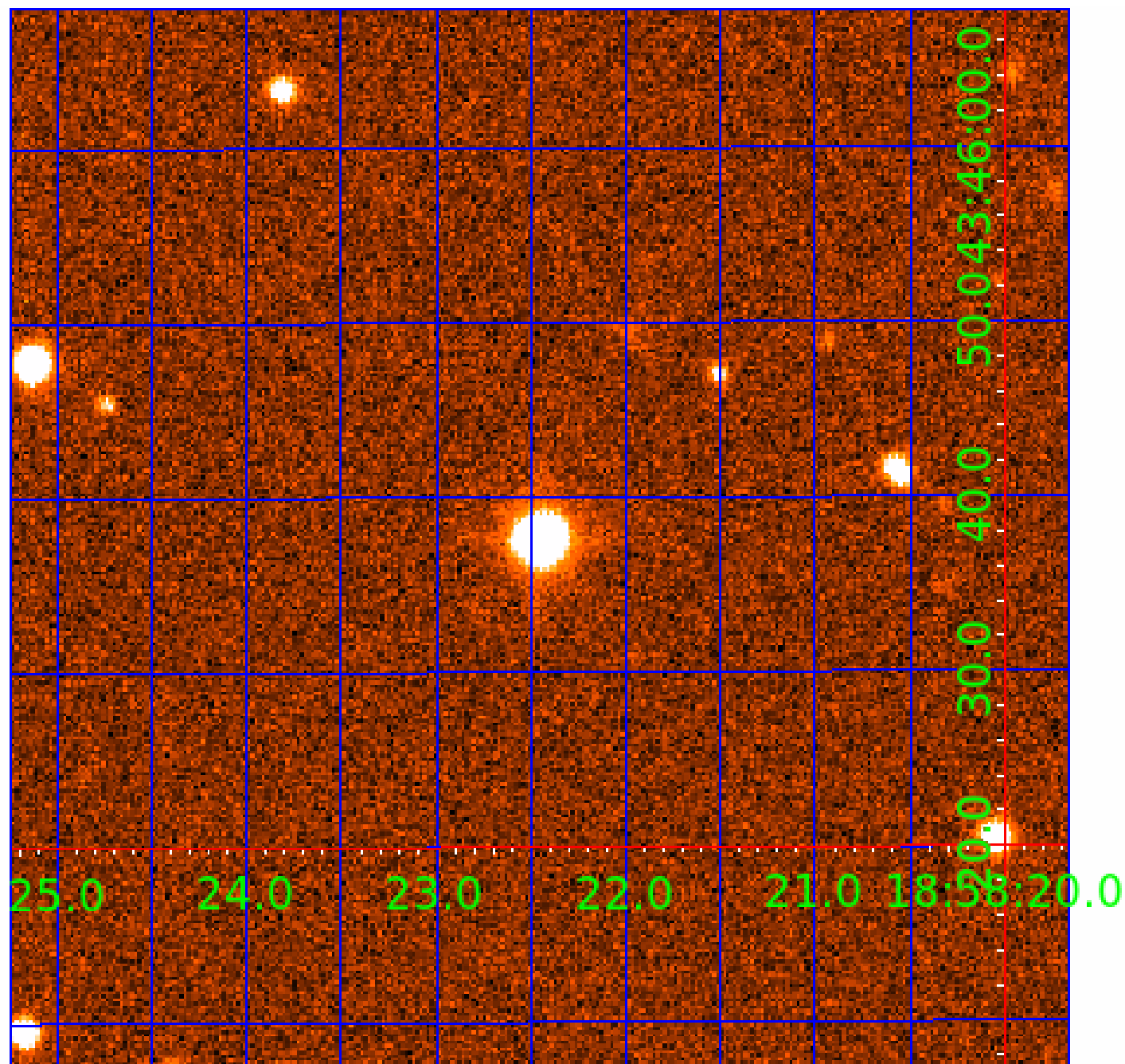


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007943602

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})
007943602-01	OBS	No	14.692055	134.950399	16081.9	7.580	209.7	299.4	3.09	5096	70.53	460.57
007943602-02	OBS	No	14.691965	134.431090	31409.4	10.437	379.8	378.1	3.09	5096	61.24	460.58
007943602-03	OBS	No	14.692236	142.207286	9817.6	11.800	115.5	163.1	3.09	5096	36.35	460.57

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007943602-01	OBS	FP	0.00	1	0	0	0	LPP_DV
007943602-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—SAME_NTL_PERIOD
007943602-03	OBS	FP	0.00	1	0	0	0	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.

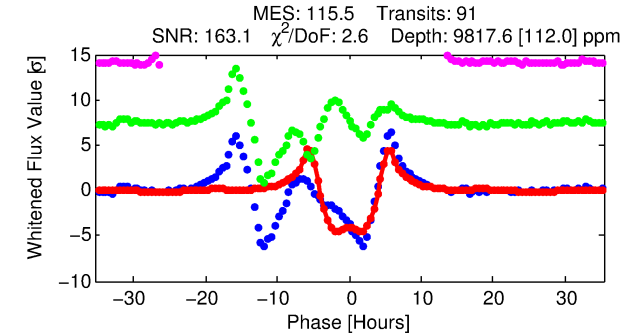
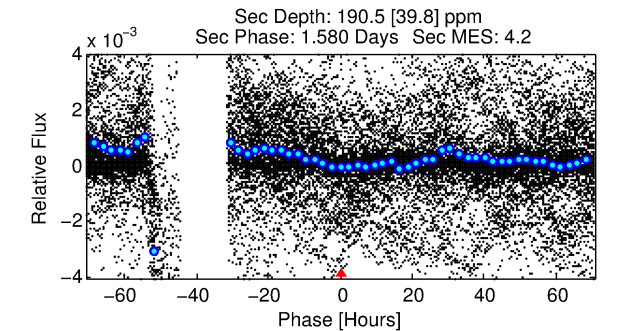
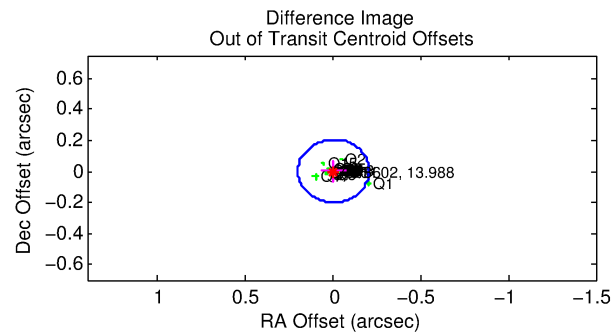
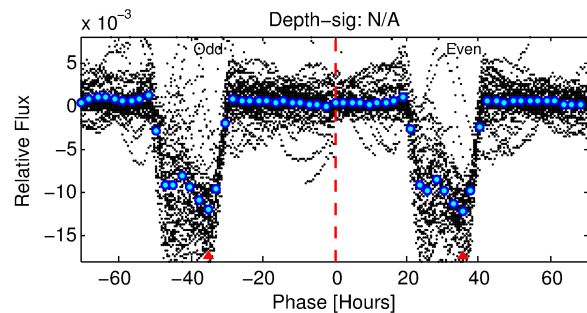
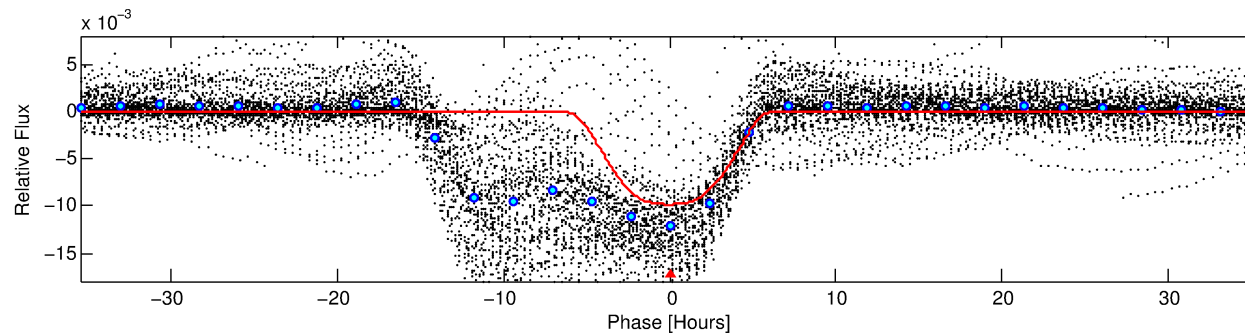
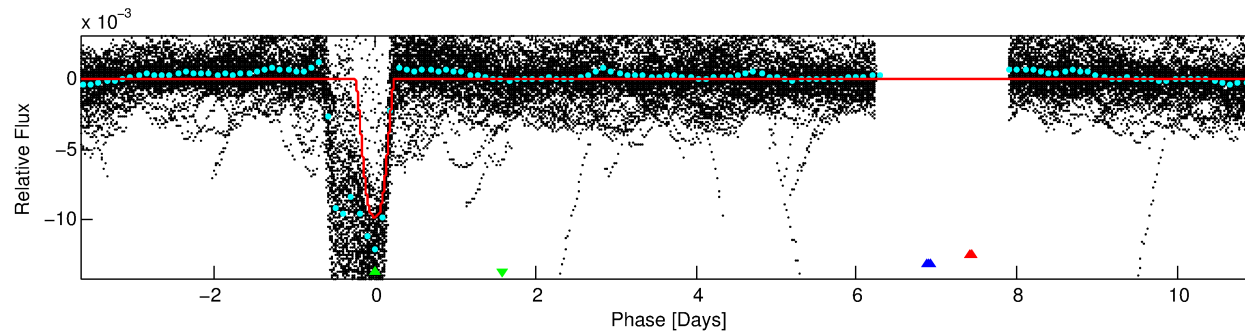
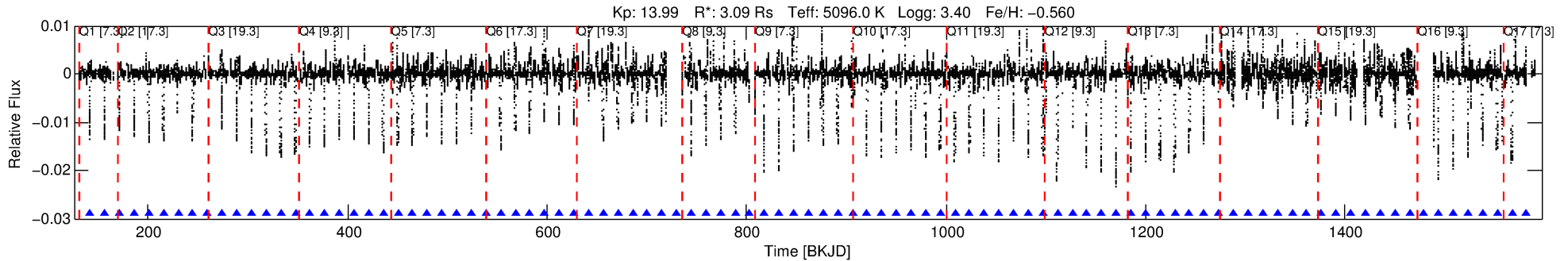
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007943602-03

No Significant Match Found

DV One-Page Summary

KIC: 7943602 Candidate: 3 of 3 Period: 14.692 d



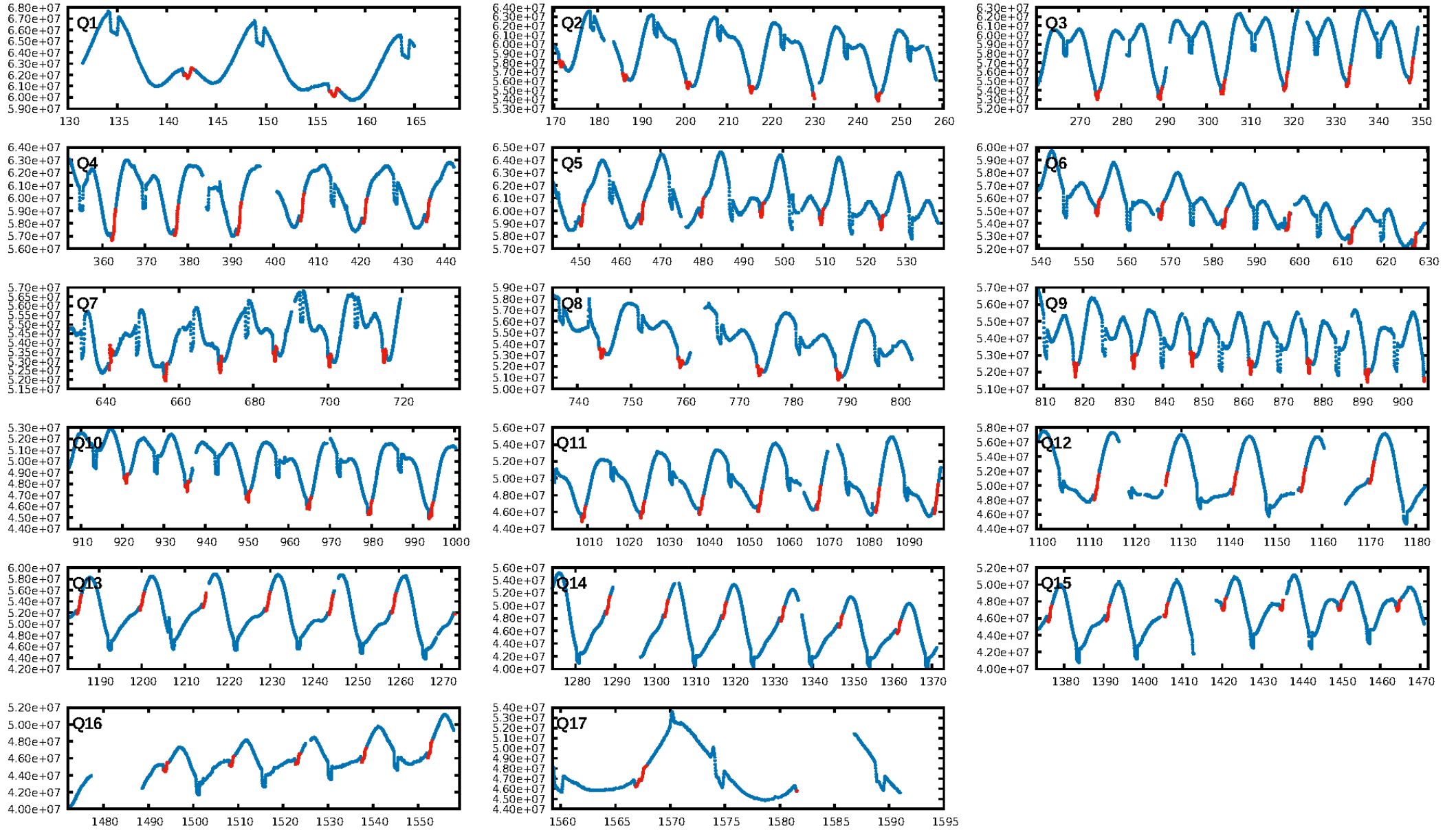
DV Fit Results:

Period = 14.69224 [0.00003] d
Epoch = 142.2073 [0.0013] BKJD
Rp/R* = 0.1080 [0.0007]
a/R* = 6.50 [0.04]
b = 0.88 [0.00]
Seff = 460.57 [260.44]
Teq = 1181 [167] K
Rp = 36.35 [18.76] Re
a = 0.1118 [0.0456] AU
Ag = 0.99 [0.59] [-0.02σ]
Teffp = 1822 [106] K [3.24σ]

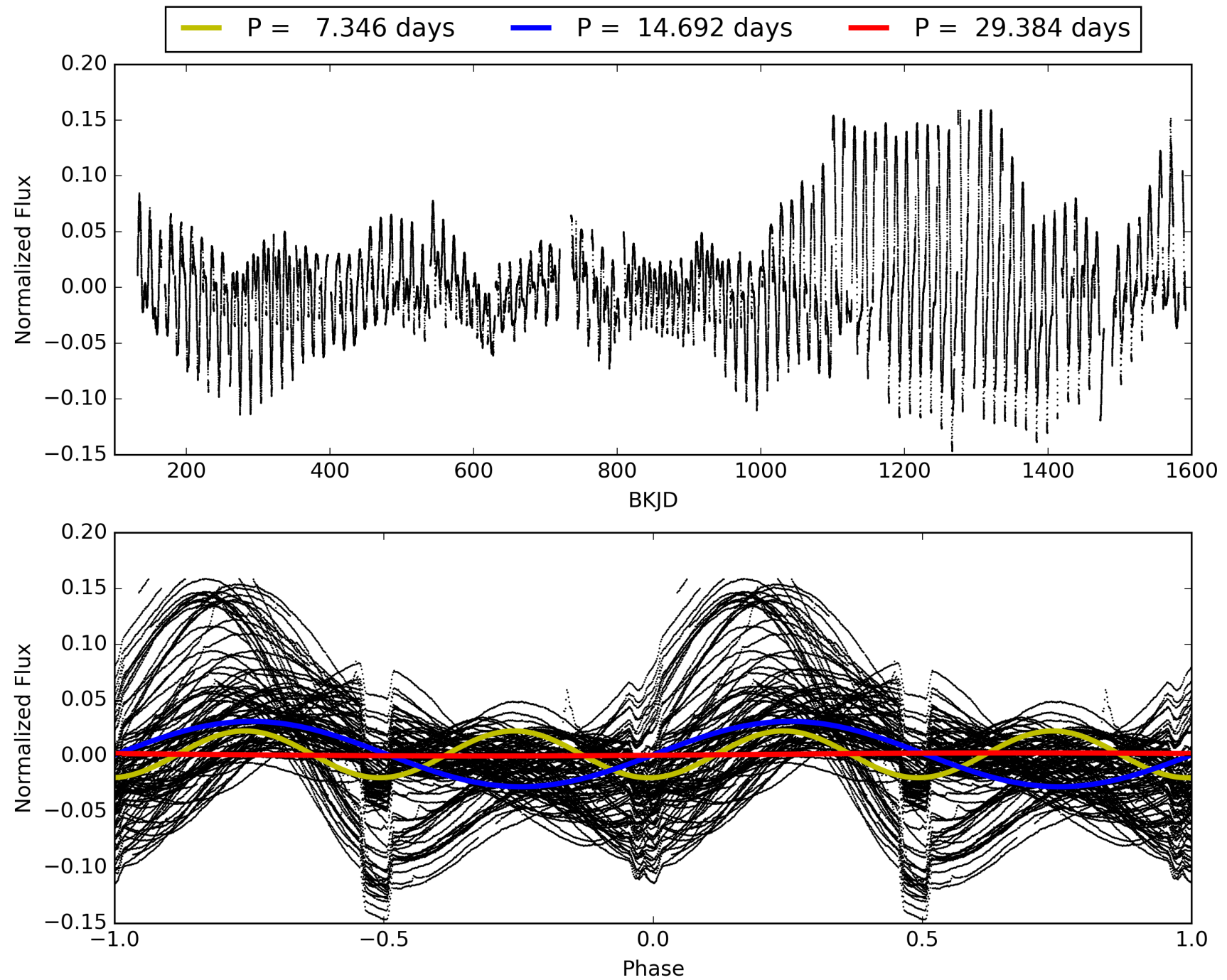
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [88/88]
GhostDiagnostic-chr: 1.006
Centroid-sig: 7.9%
Centroid-so: 0.282 arcsec [25.17σ]
OotOffset-rm: 0.005 arcsec [0.08σ]
KicOffset-rm: 0.283 arcsec [4.07σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 007943602-03, PDC Light Curves

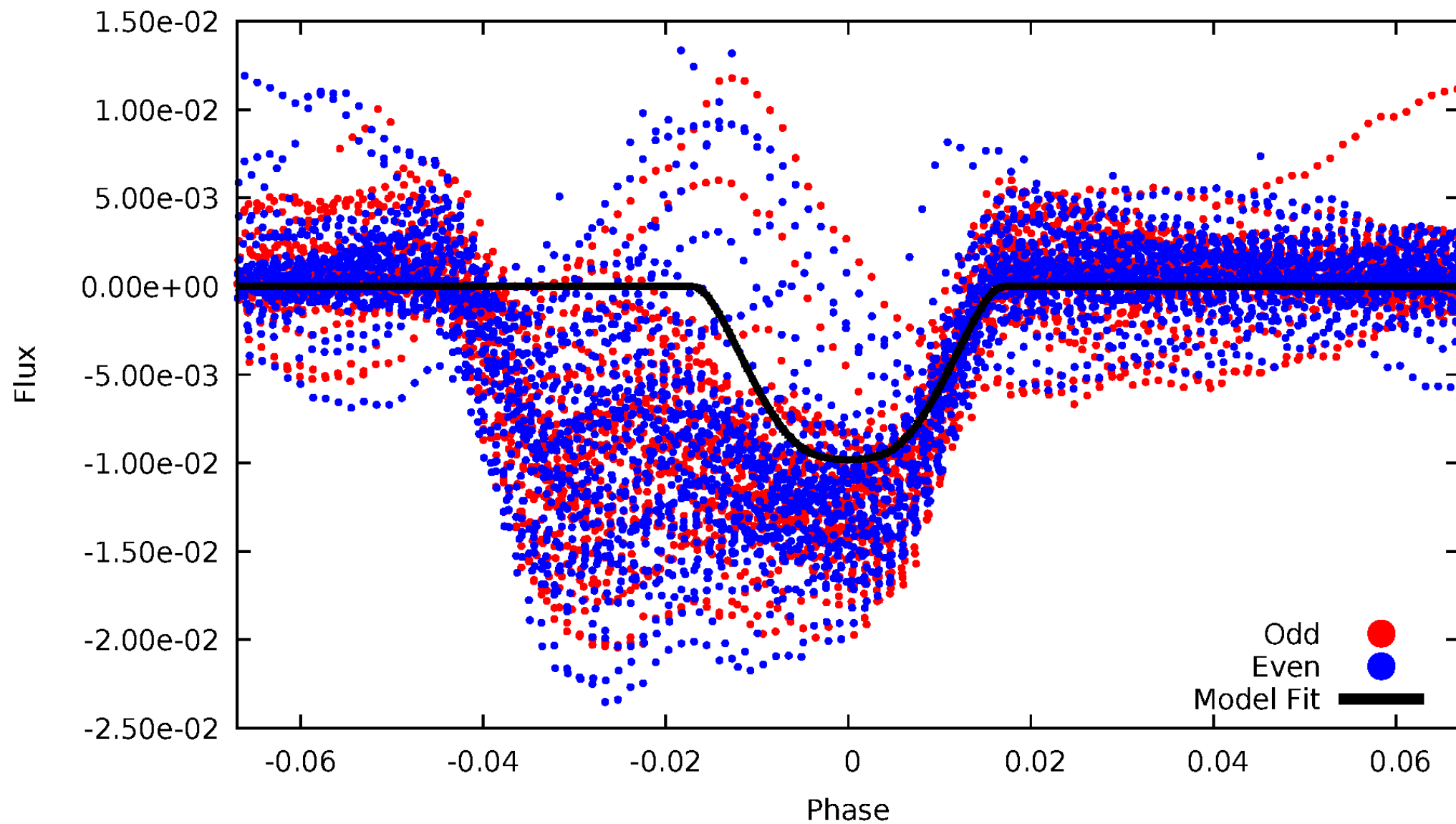


TCE 007943602-03



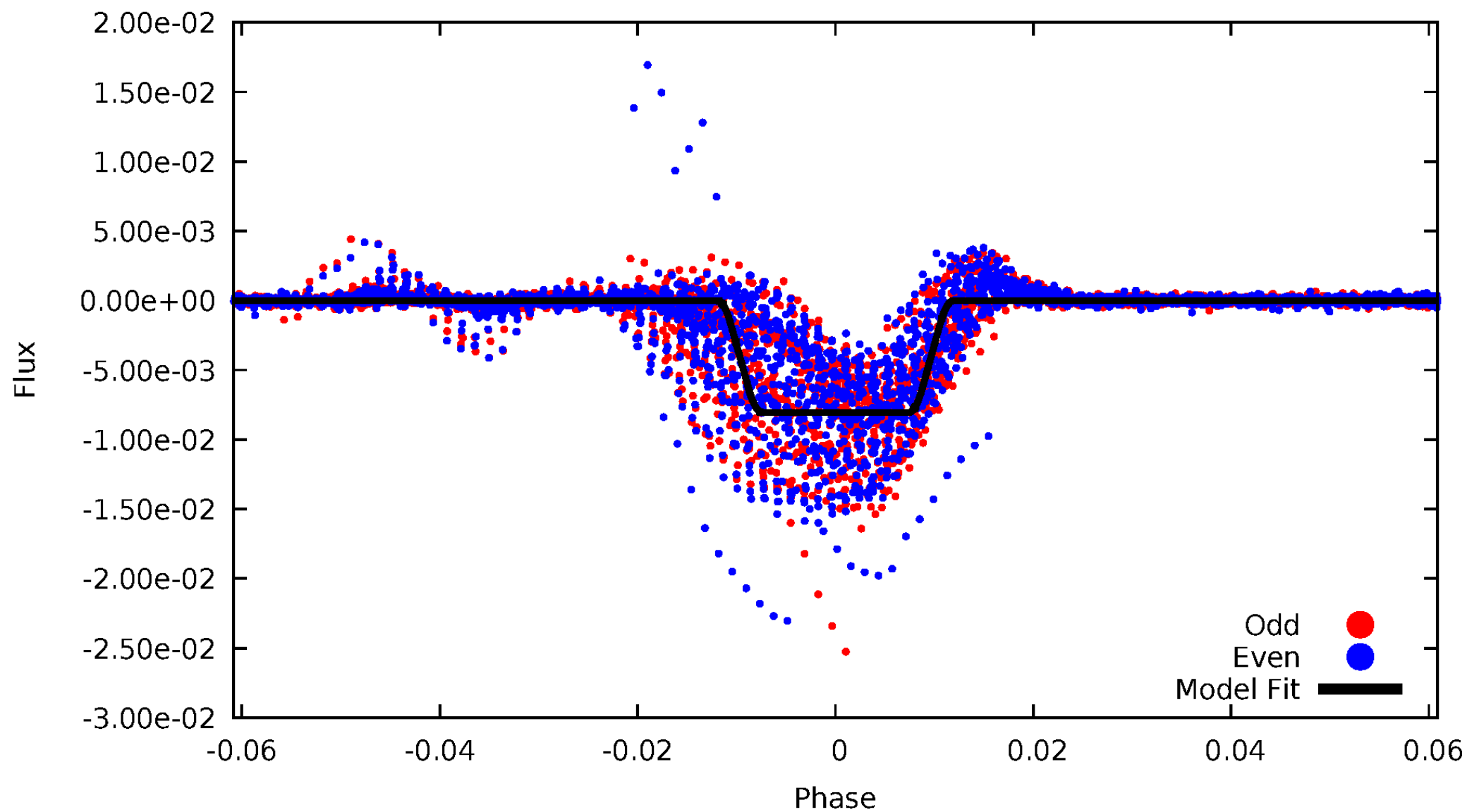
DV Odd/Even

TCE 007943602-03



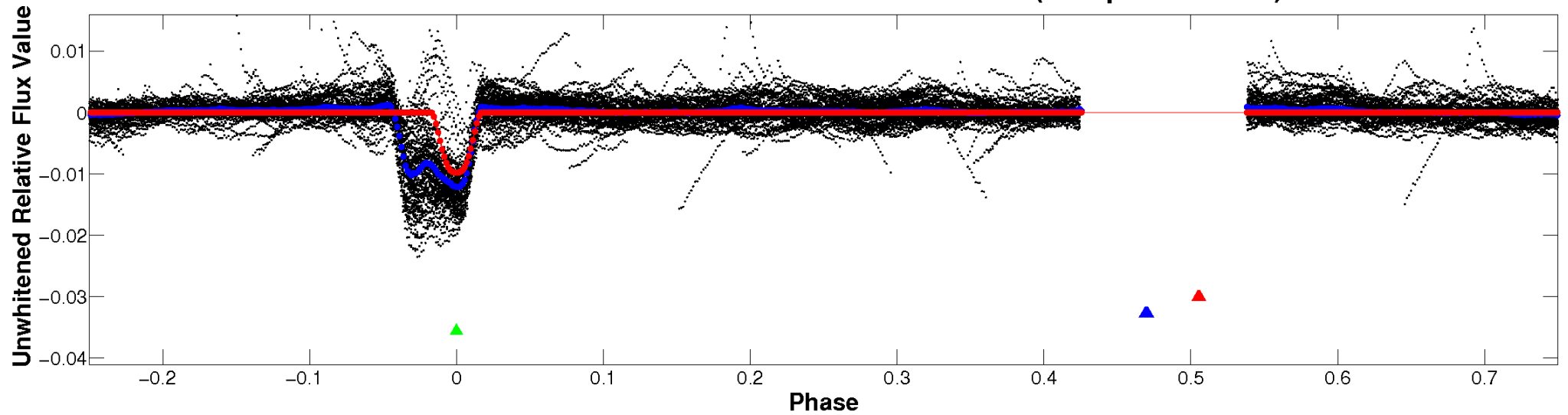
ALT Odd/Even

TCE 007943602-03

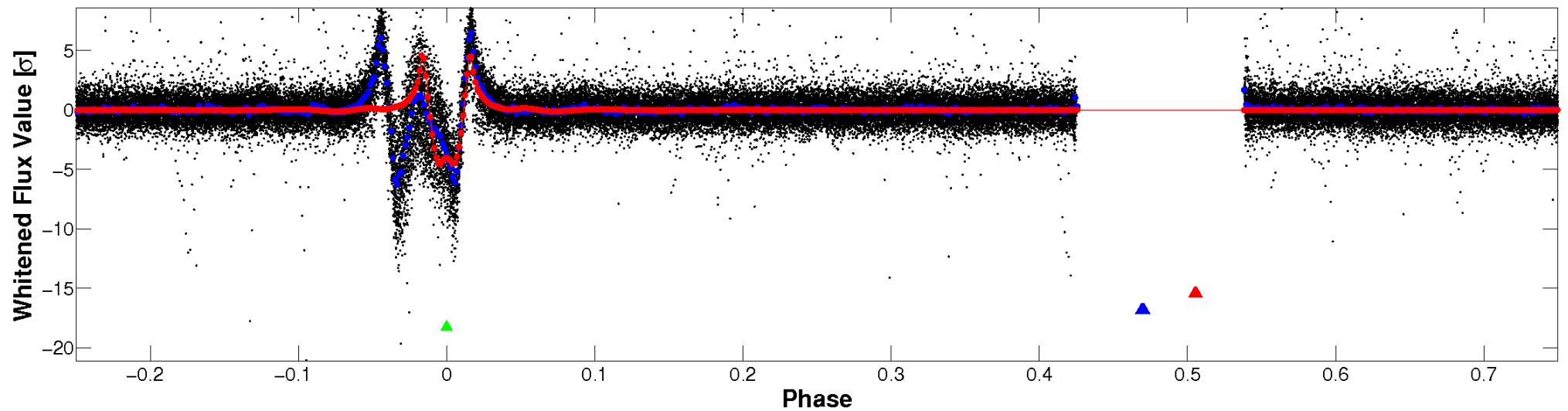


Non-Whitened Vs. Whitened Light Curve

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

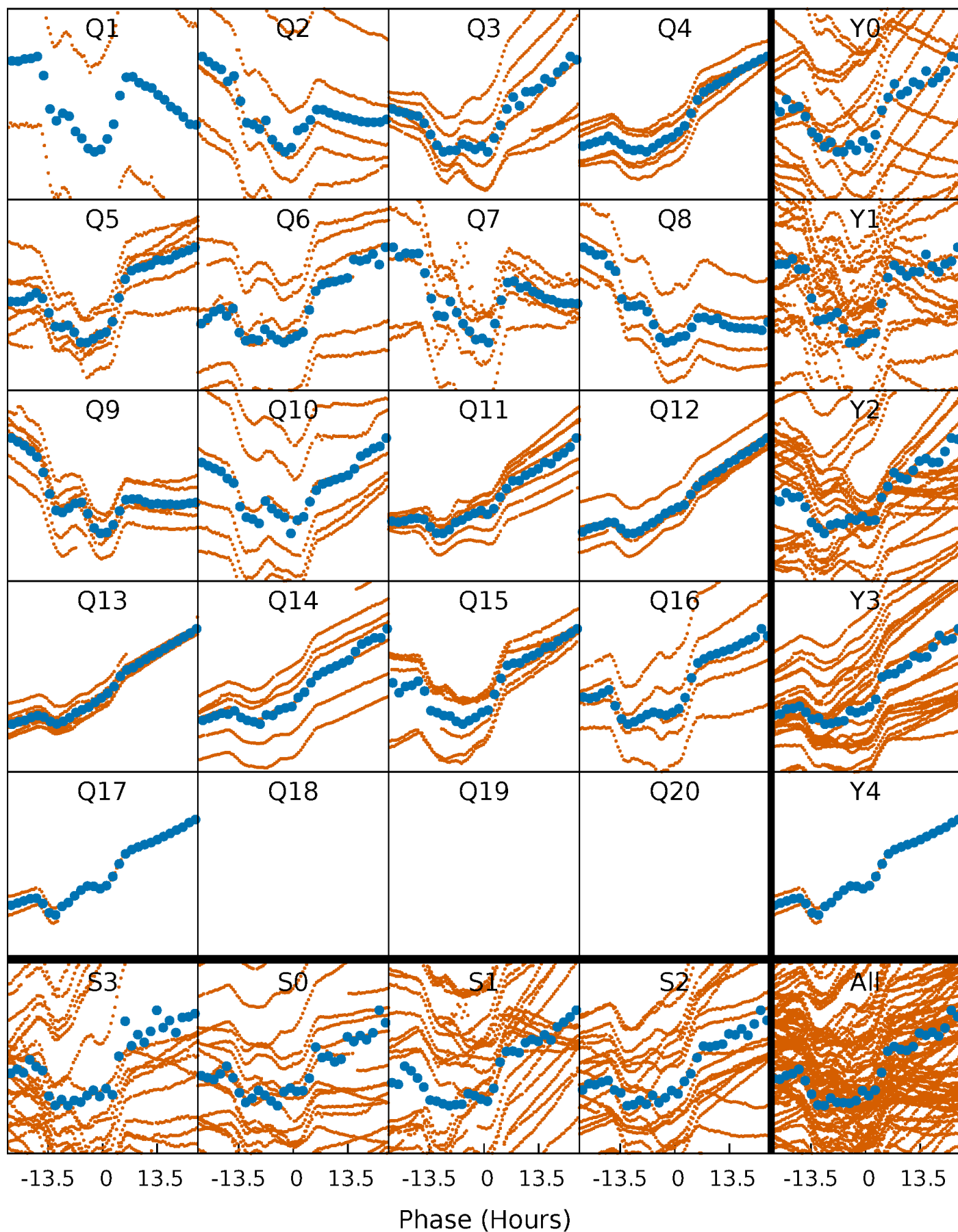


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



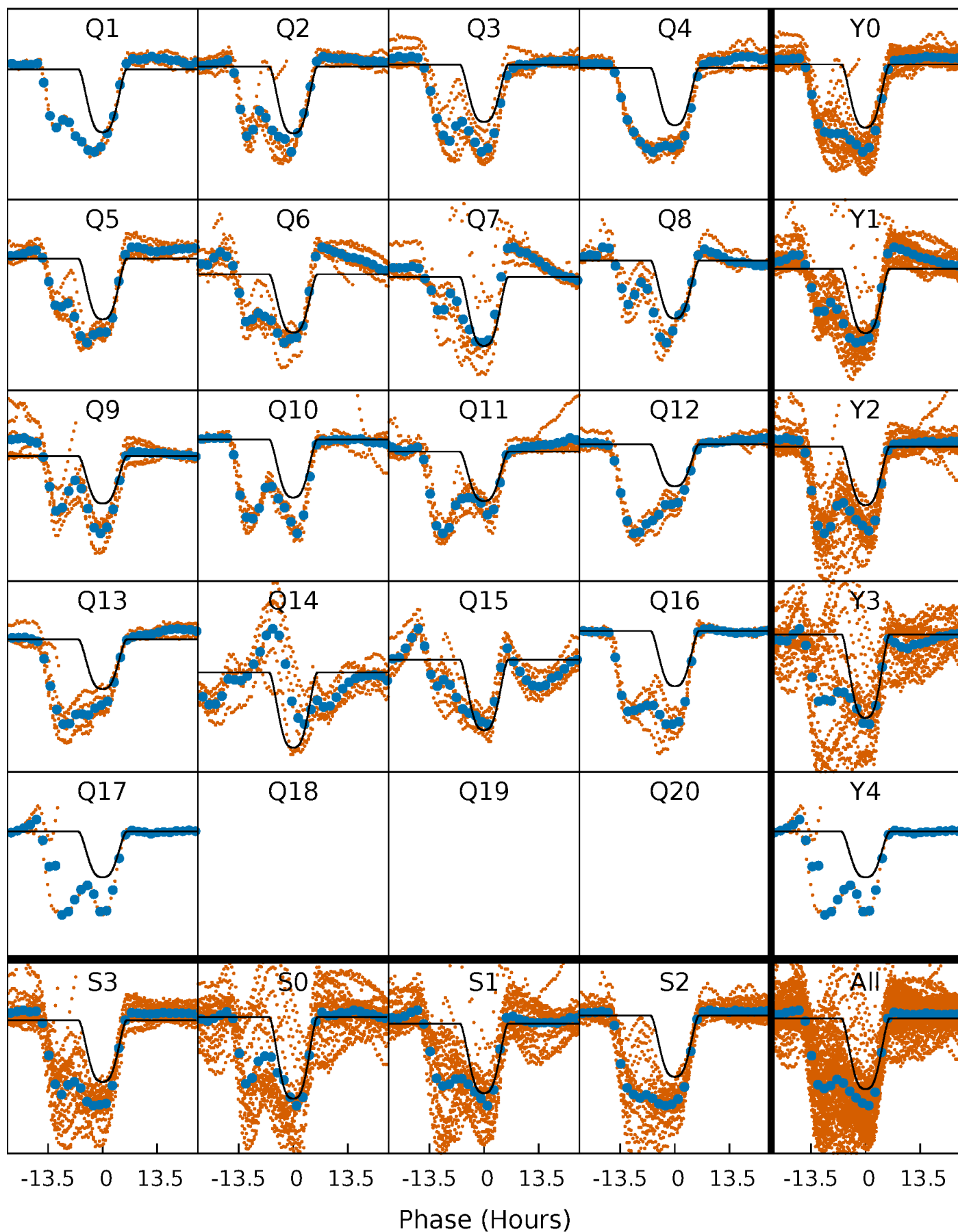
PDC Quarter-Phased Transit Curves

TCE 007943602-03 $P = 14.692236$ Days $T_0 = 142.207286$ (BKJD)



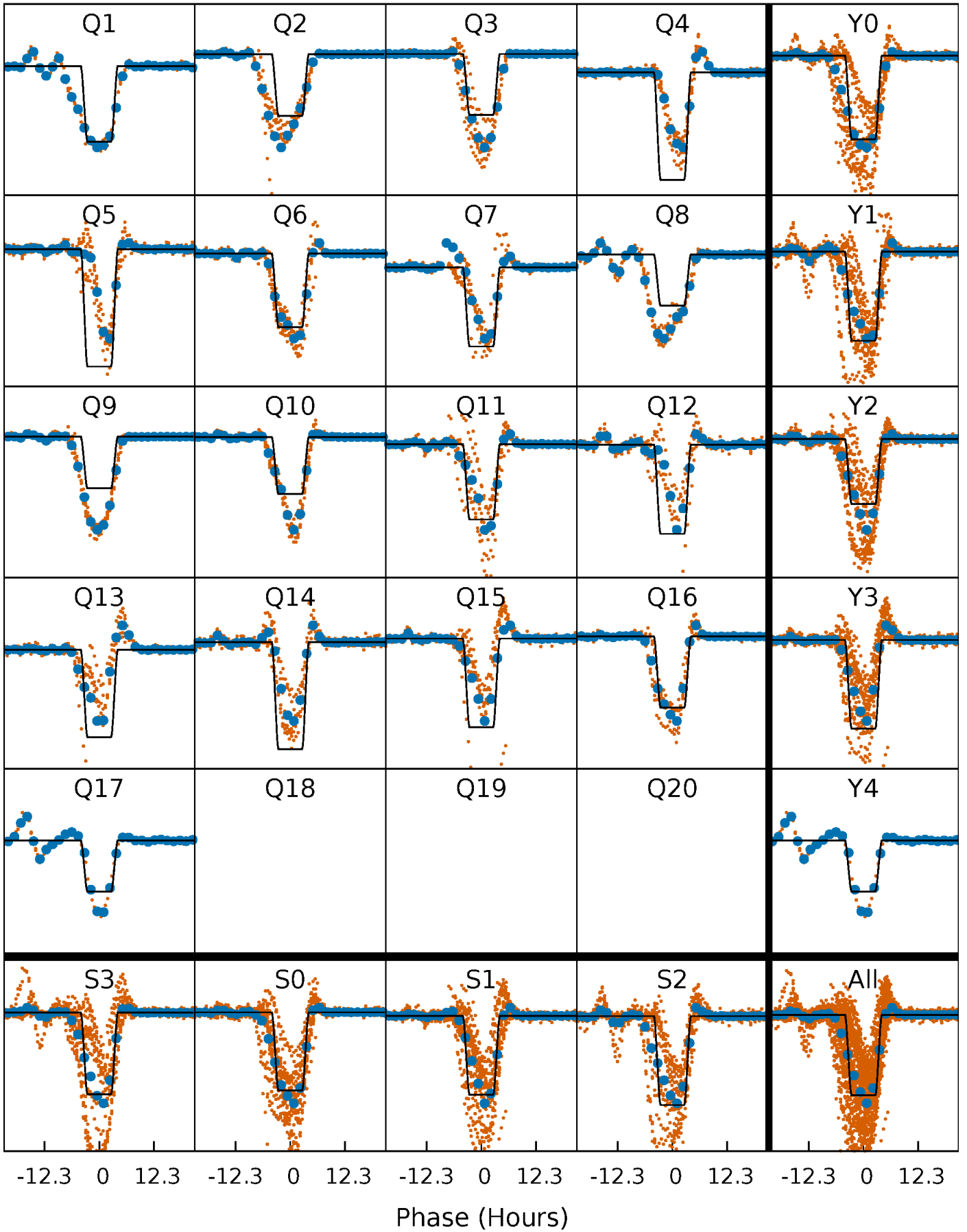
DV Quarter-Phased Transit Curves

TCE 007943602-03 $P = 14.692236$ Days $T_0 = 142.207286$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

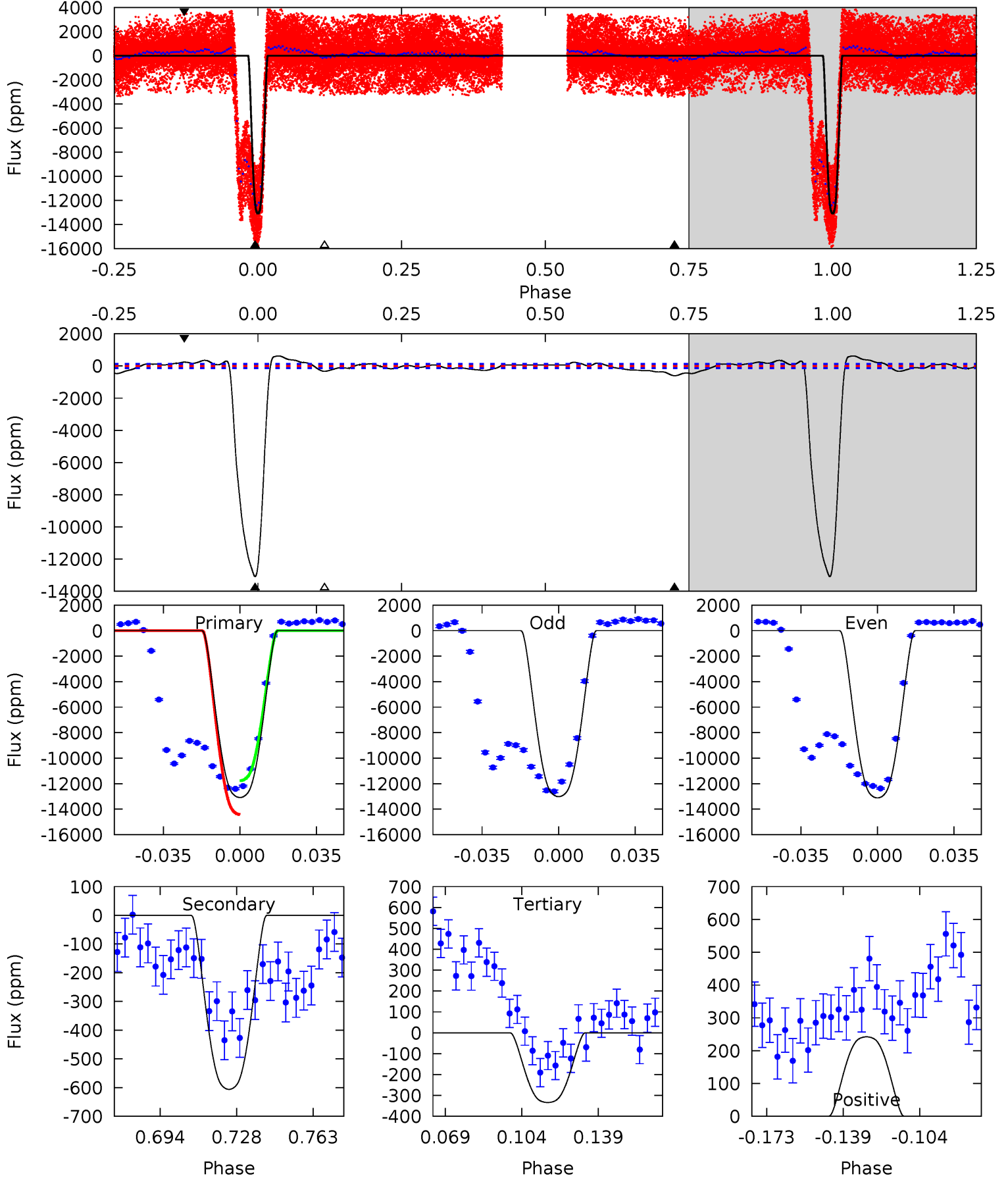
TCE 007943602-03 P= 14.692562 Days $T_0=142.205930$ (BKJD)



DV Model-Shift Uniqueness Test

007943602-03, P = 14.692236 Days, E = 127.515050 Days

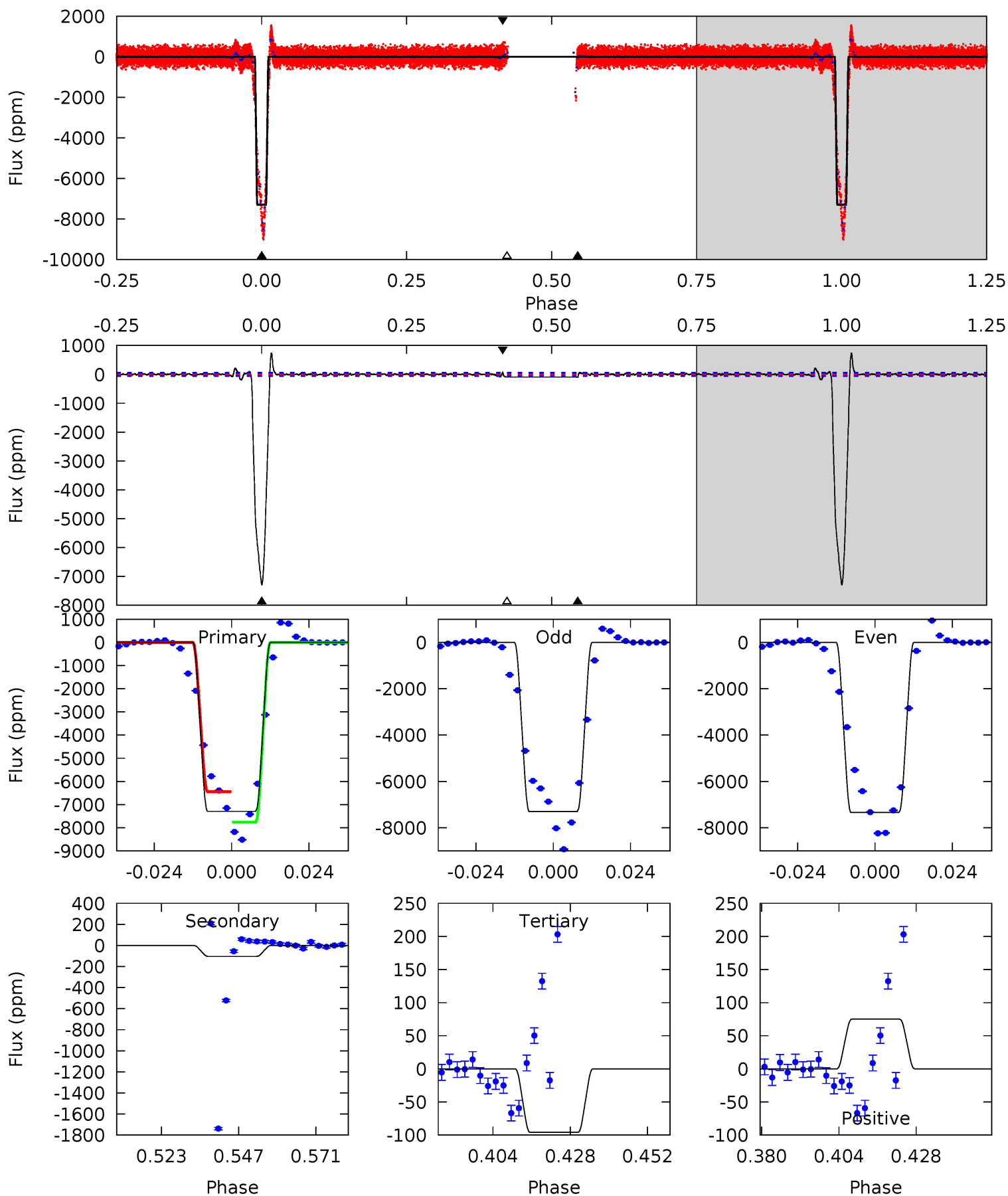
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
475.3	22.0	12.1	8.80	4.78	2.11	12.8	463.1	466.5	9.88	13.2	1.81	0.96	0.05	45.8



Alt Model-Shift Uniqueness Test

007943602-03, P = 14.692562 Days, E = 127.513368 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
628.4	9.03	8.27	6.47	4.86	2.26	2.02	620.1	621.9	0.76	2.57	1.77	1.06	0.09	0



Stellar Parameters For KIC 007943602

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5096^{+128}_{-102}	$3.395^{+0.285}_{-0.285}$	$-0.560^{+0.300}_{-0.200}$	$3.086^{+1.592}_{-0.857}$	$0.863^{+0.296}_{-0.106}$	$0.041^{+0.061}_{-0.026}$
	+3%/-2%	+8%/-8%	+54%/-36%	+52%/-28%	+34%/-12%	+148%/-63%
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 007943602-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-606 ± 28	$36.36^{+11.65}_{-5.73}$	1662^{+203}_{-158}	3006^{+53}_{-55}	$3.186^{+1.366}_{-1.227}$
Alt.	-105 ± 12	$29.97^{+9.61}_{-5.03}$	1658^{+205}_{-169}	2391^{+84}_{-136}	$0.789^{+0.378}_{-0.307}$

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

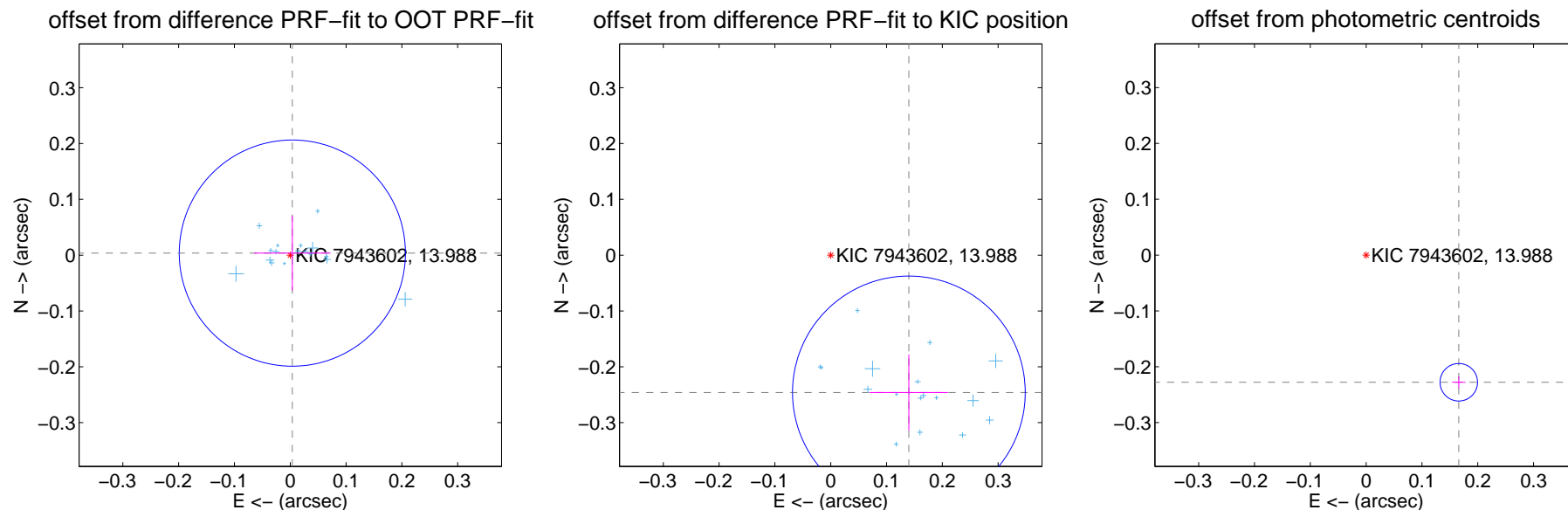
DV Centroid Data

Supplemental centroid analysis for 007943602-03. Kepler magnitude: 13.99. Transit SNR 163.07

There are 17 quarters with good PRF difference image offsets

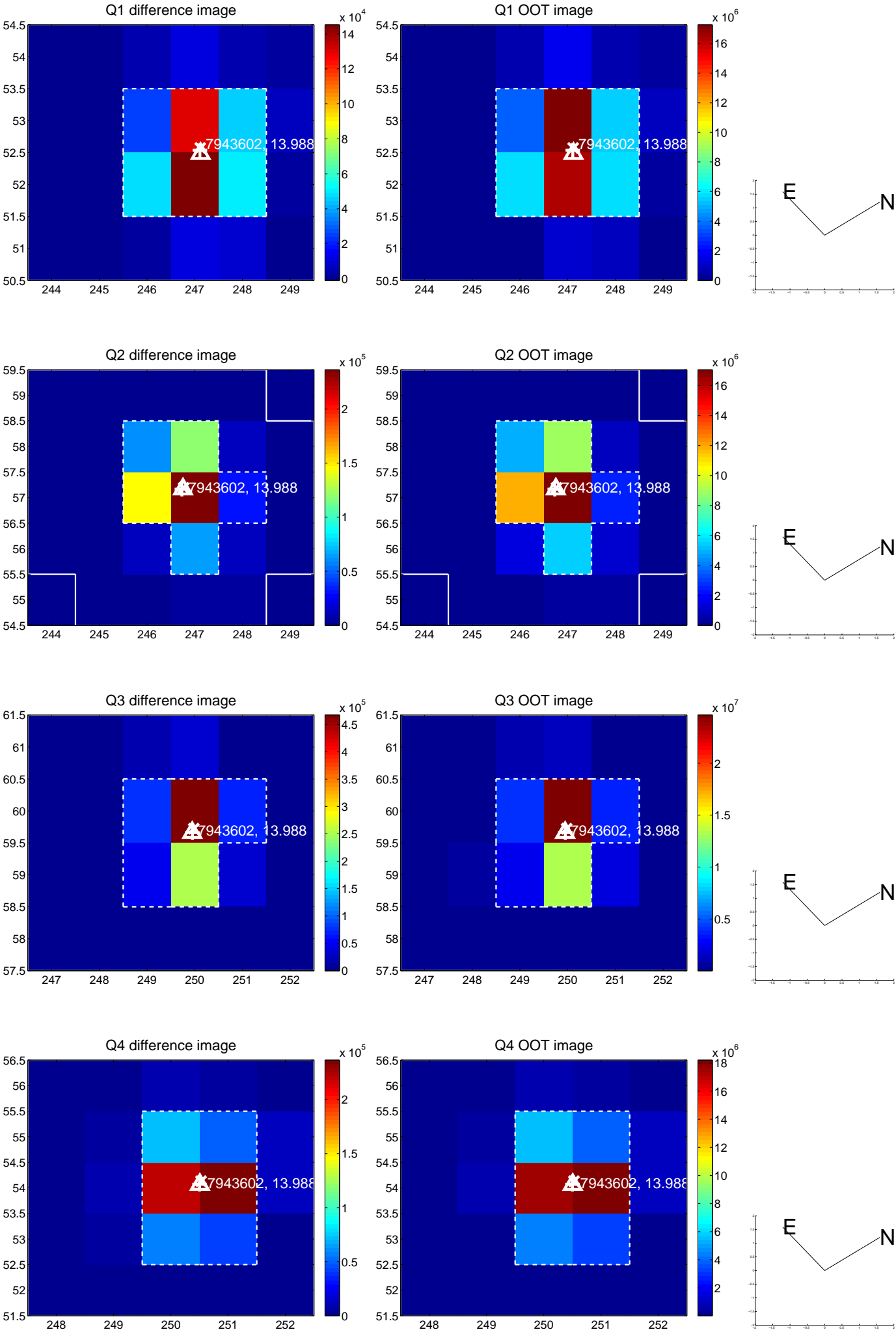
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.005 ± 0.068	0.08	-0.004 ± 0.068	0.004 ± 0.067
PRF-fit source offset from KIC position	0.283 ± 0.069	4.07	-0.140 ± 0.070	-0.246 ± 0.068
photometric centroid source offset	0.28 ± 0.01	25.17	-0.17 ± 0.01	-0.23 ± 0.01

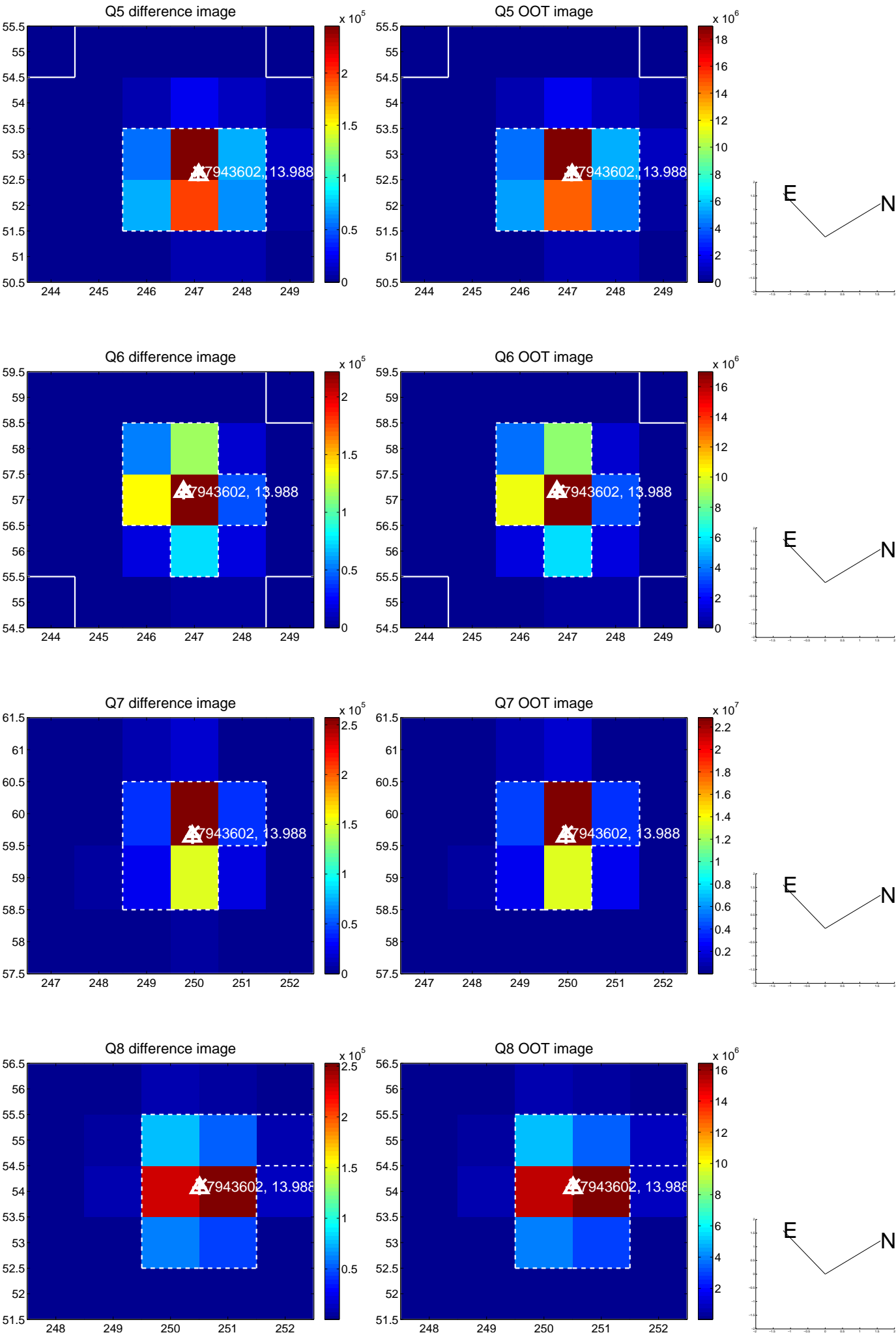


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

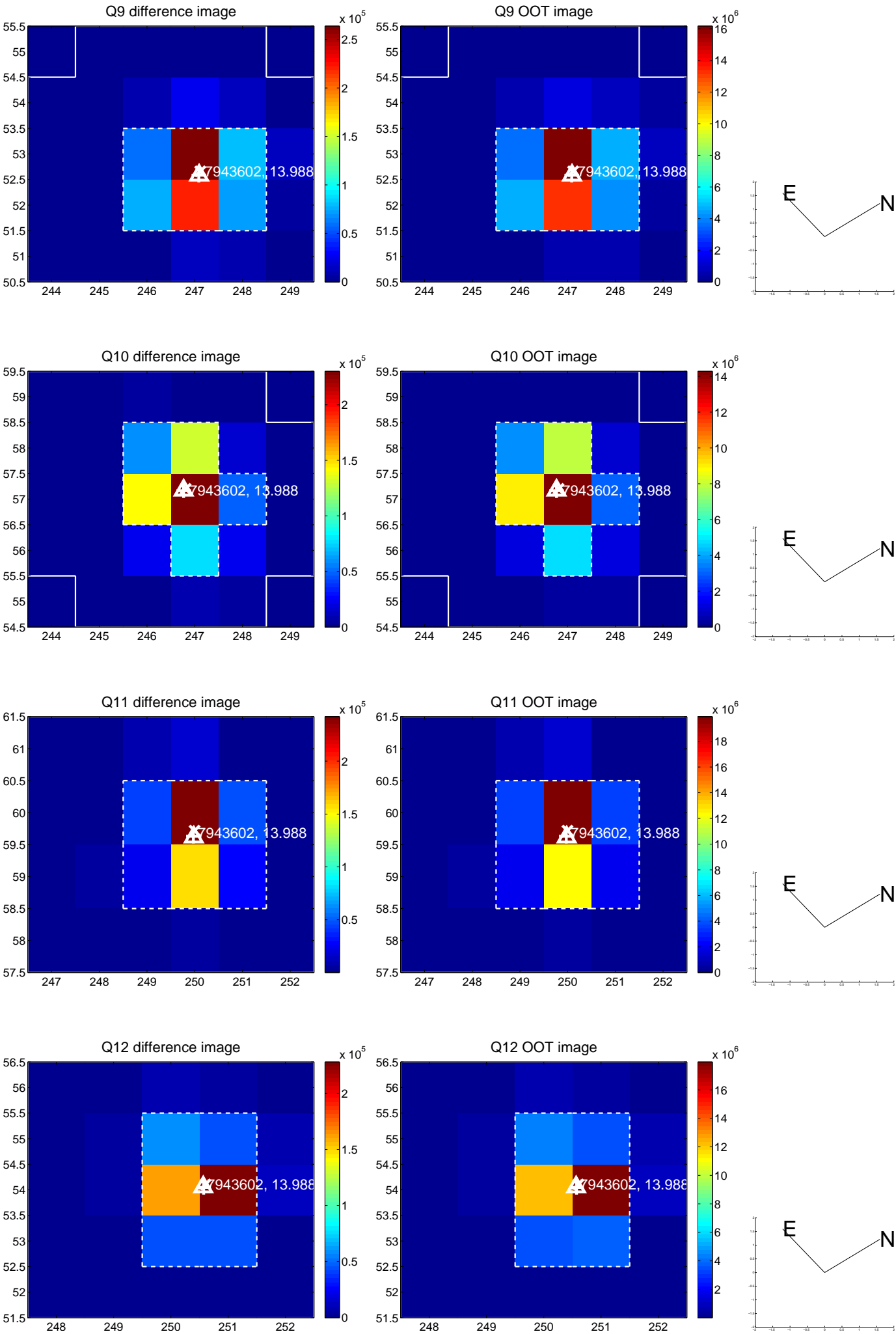
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



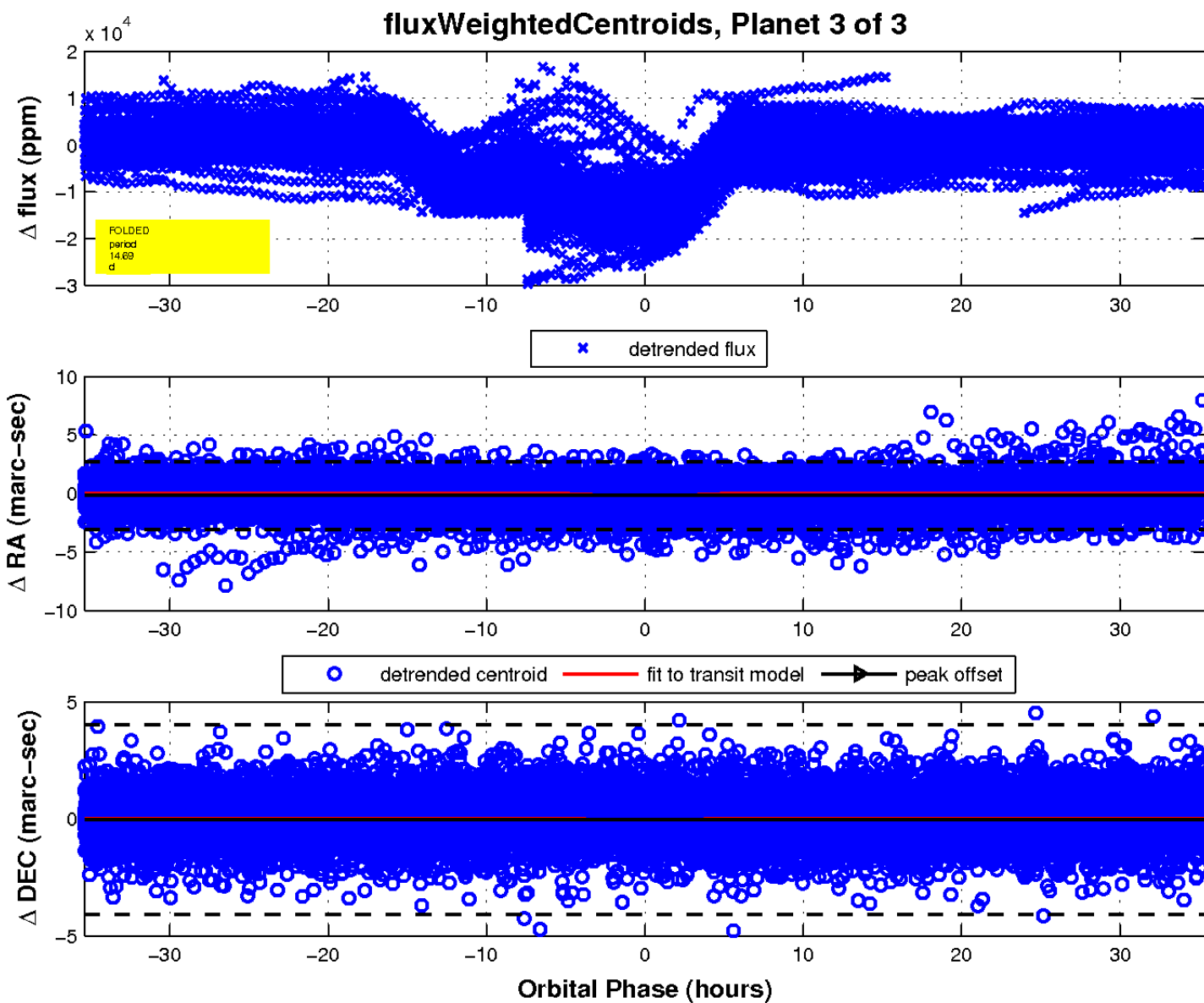
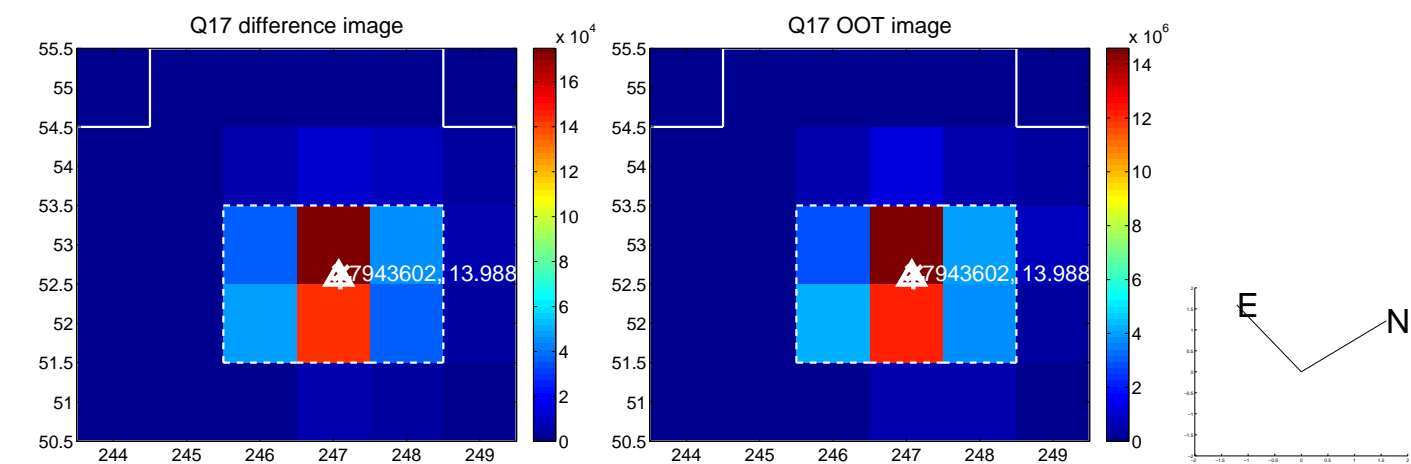
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

Declination

