

KIC 010973664

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})
010973664-01	OBS	0601.01	5.404273	134.355483	787.0	2.539	57.0	61.3	0.96	6122	2.96	313.48
010973664-02	OBS	0601.02	11.678940	143.191115	1242.3	1.442	43.0	49.9	0.96	6122	4.38	112.20
010973664-03	OBS	0601.03	1.208463	132.468353	225.1	1.605	29.0	33.6	0.96	6122	1.70	2309.62

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010973664-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010973664-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010973664-03	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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.

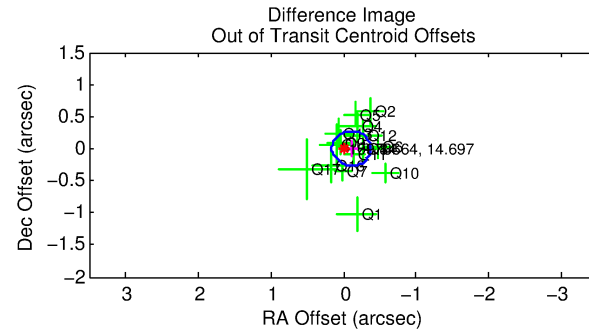
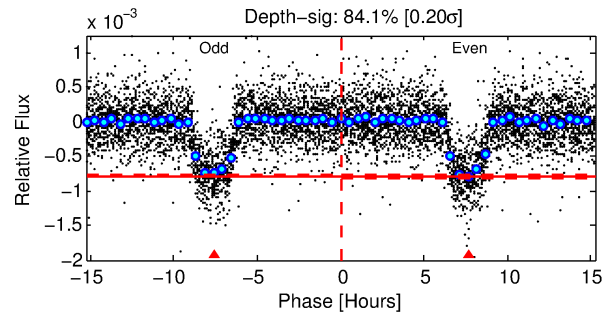
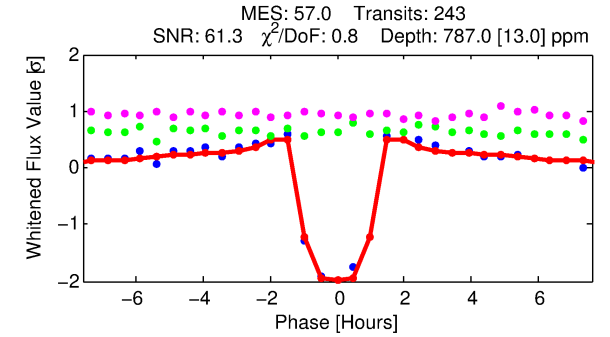
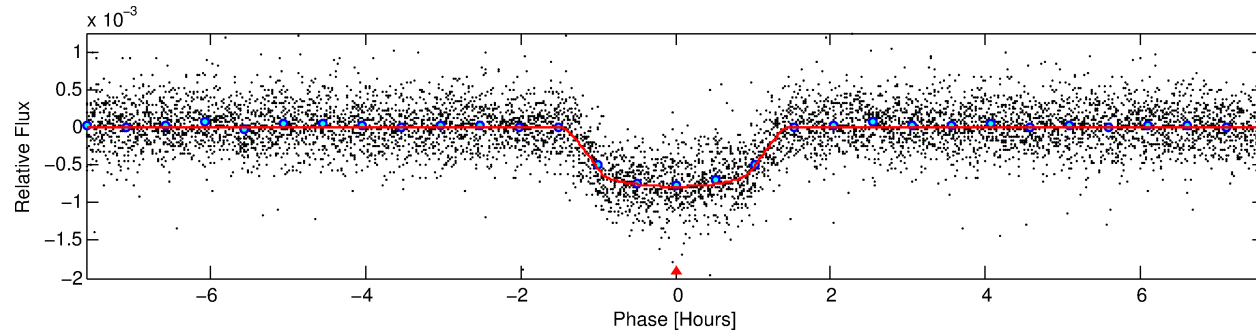
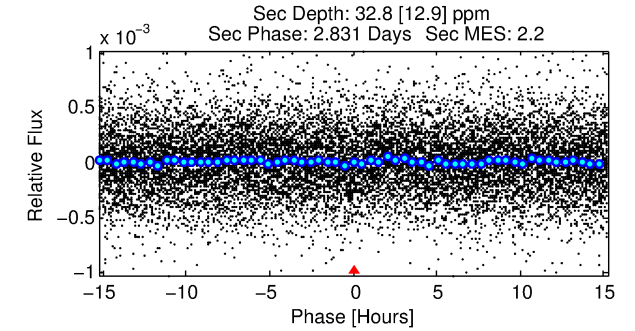
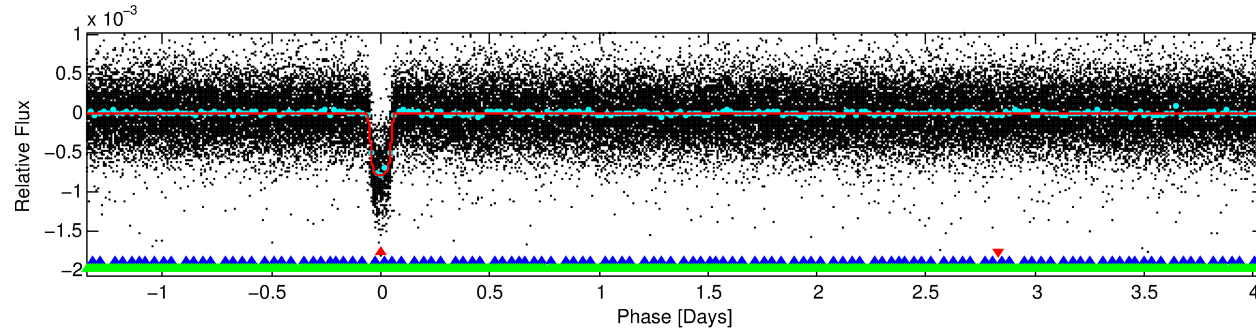
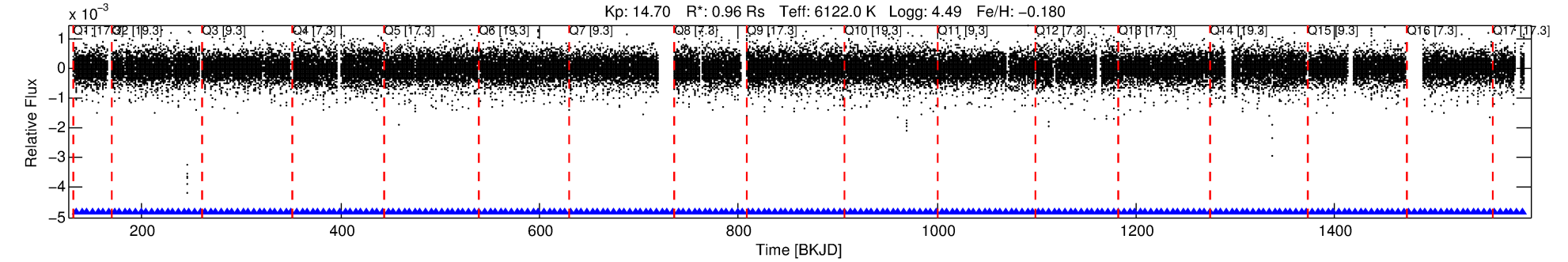
Ephemeris Match Information For 010973664-01

No Significant Match Found

DV One-Page Summary

KIC: 10973664 Candidate: 1 of 3 Period: 5.404 d

KOI: K00601.01 Corr: 0.987



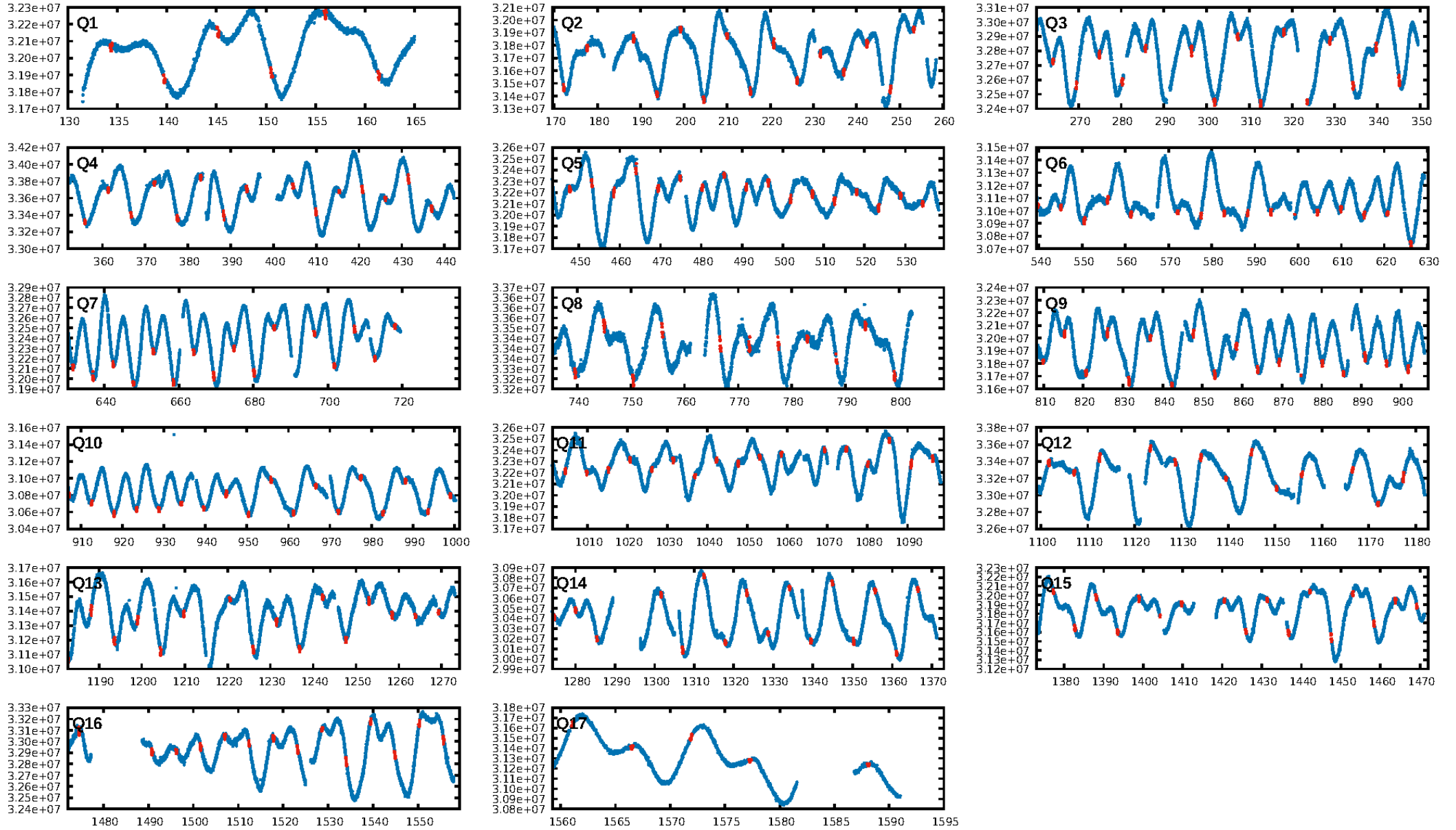
DV Fit Results:

Period = 5.40427 [0.00000] d
Epoch = 134.3555 [0.0006] BKJD
Rp/R* = 0.0282 [0.0027]
a/R* = 11.06 [5.30]
b = 0.77 [0.25]
Seff = 313.47 [125.89]
Teff = 1073 [108] K
Rp = 2.96 [0.97] Re
a = 0.0611 [0.0161] AU
Ag = 7.67 [4.46] [1.50σ]
Teffp = 2761 [315] K [5.08σ]

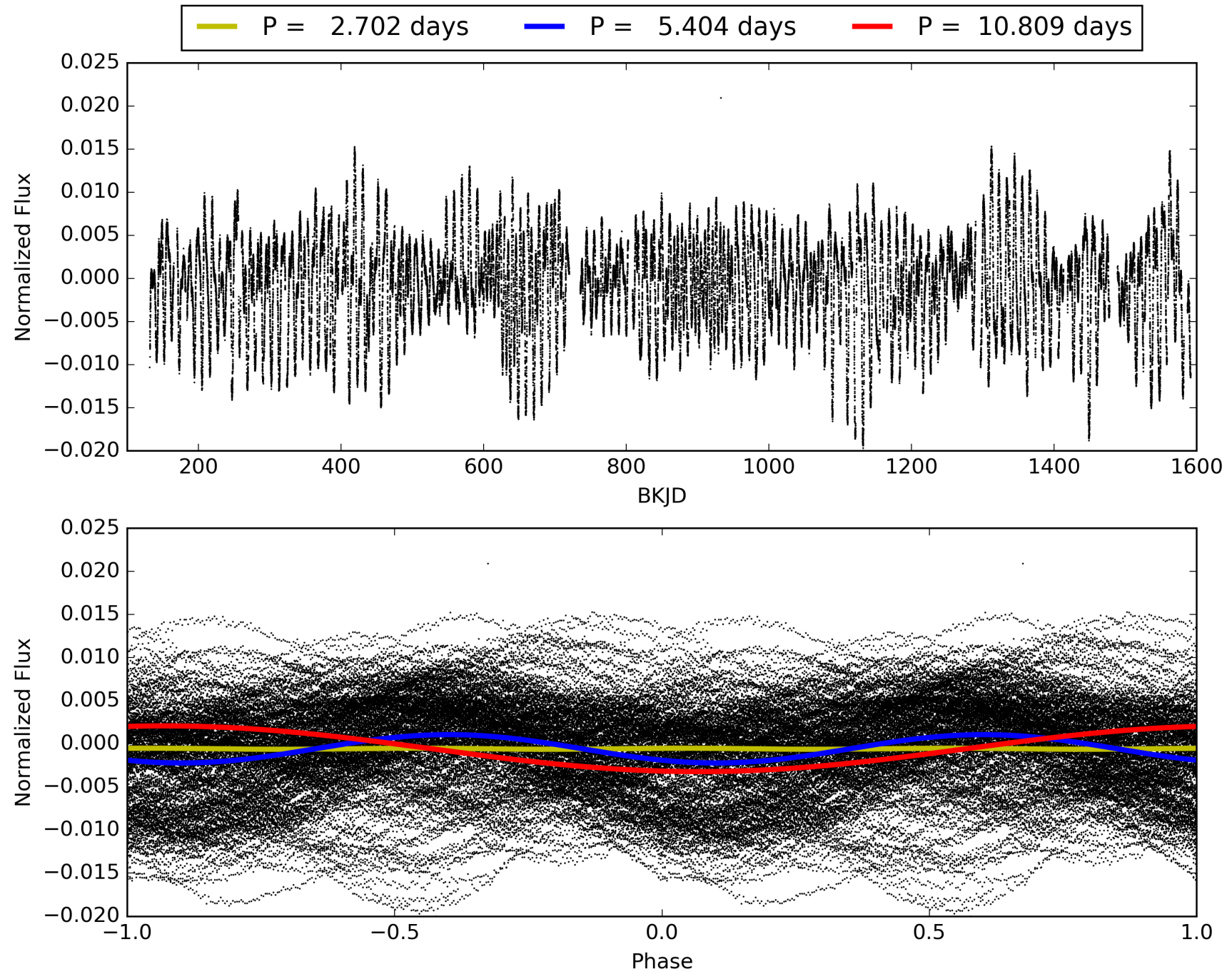
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [33.52σ]
LongPeriod-sig: 100.0% [51.58σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [232/232]
GhostDiagnostic-chr: 1.934
Centroid-sig: 1.1%
Centroid-so: 0.407 arcsec [2.63σ]
OotOffset-rm: 0.110 arcsec [1.23σ]
KicOffset-rm: 0.047 arcsec [0.44σ]
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 010973664-01, PDC Light Curves

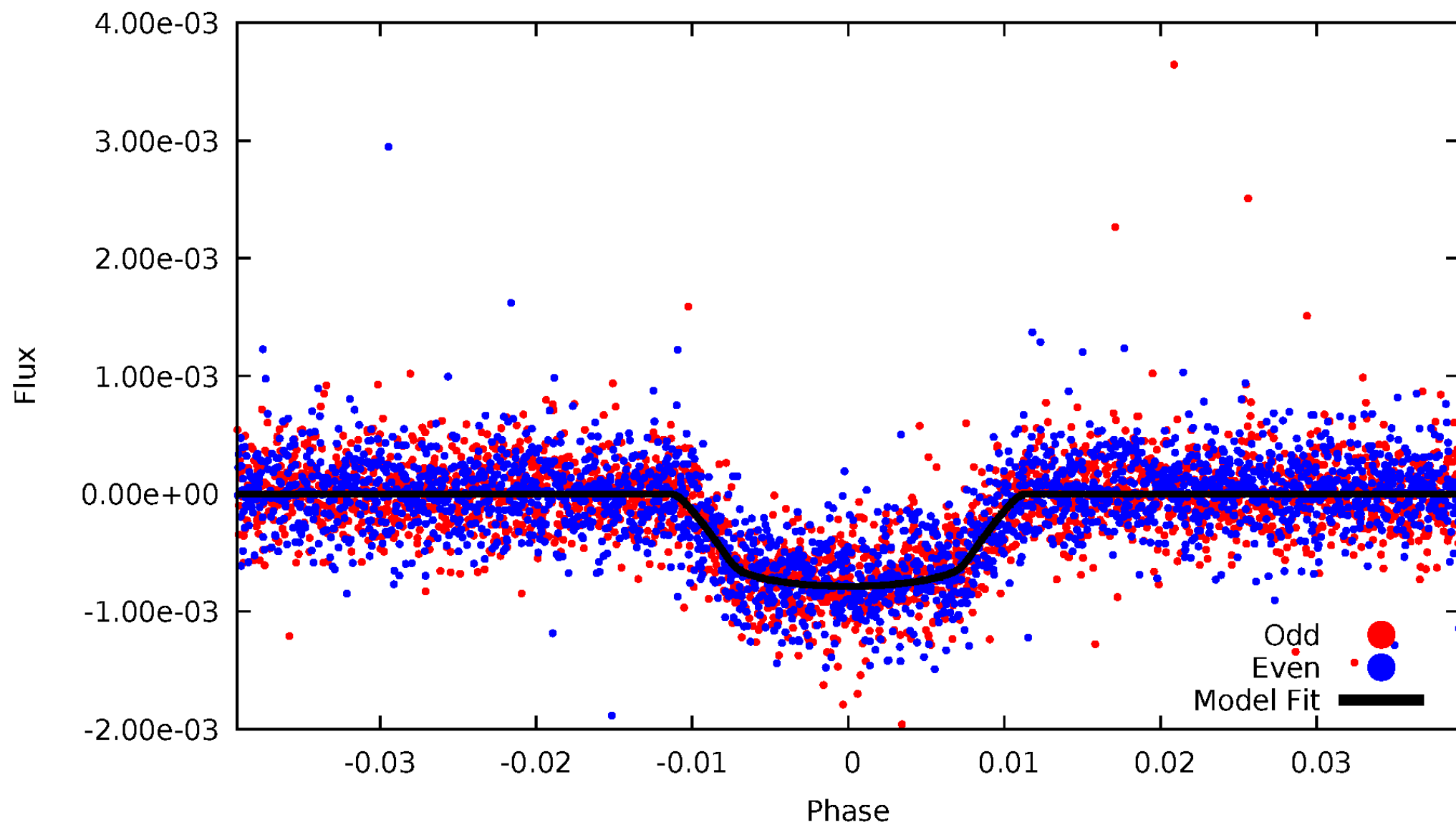


TCE 010973664-01



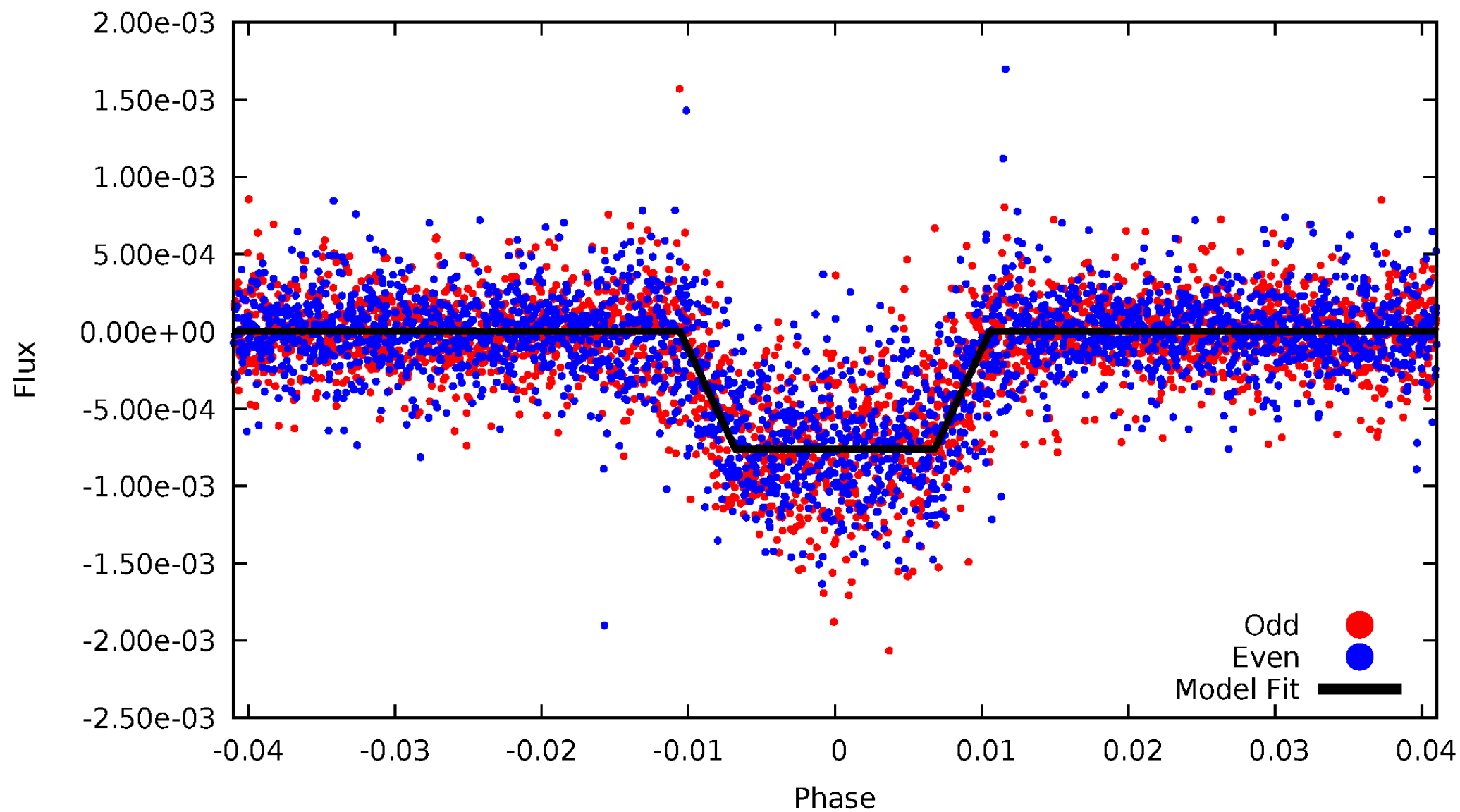
DV Odd/Even

TCE 010973664-01



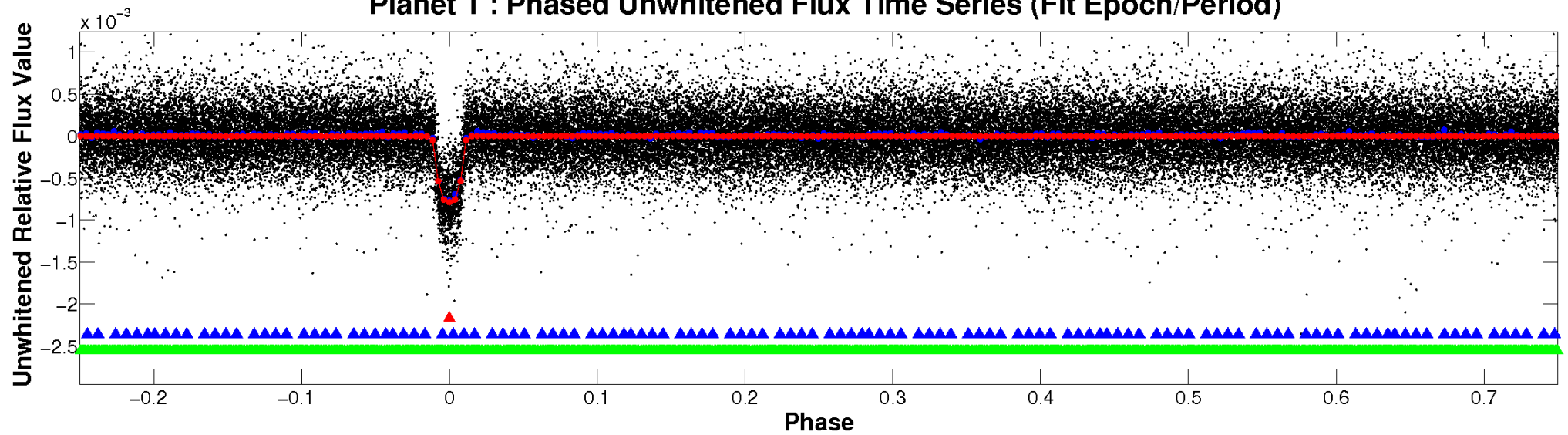
ALT Odd/Even

TCE 010973664-01

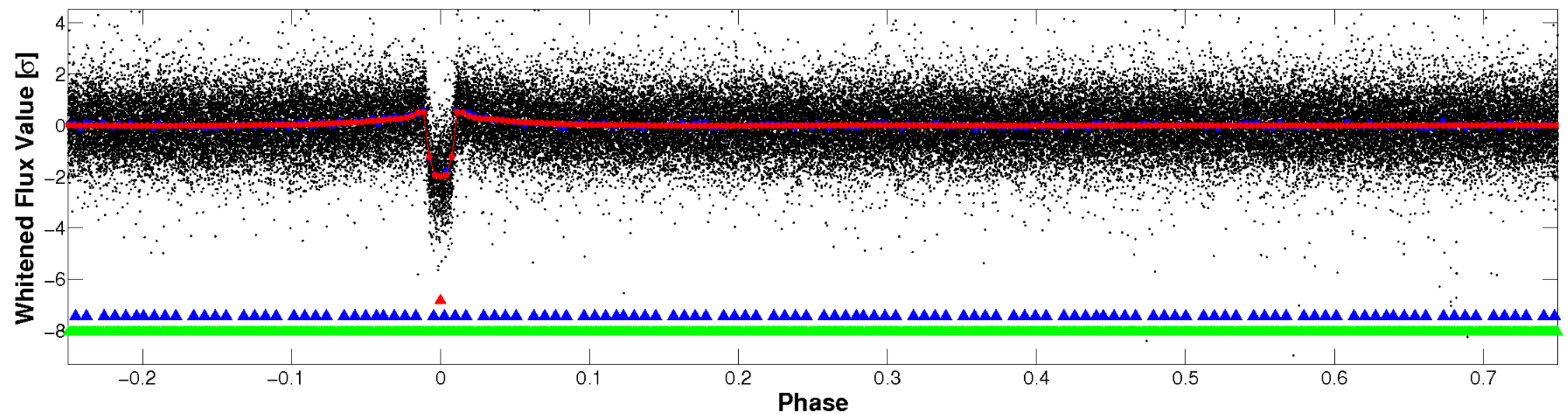


Non-Whitened Vs. Whitened Light Curve

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

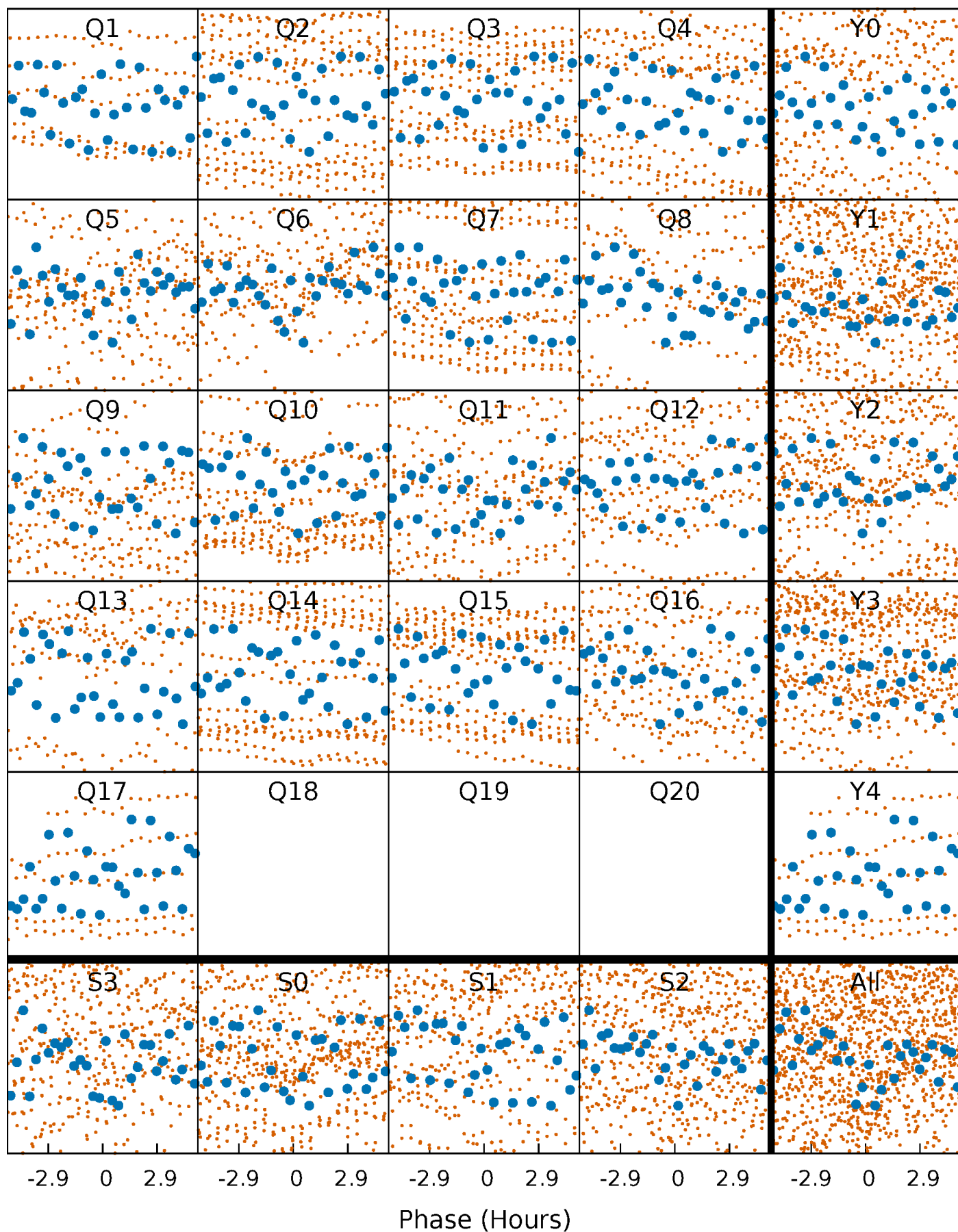


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



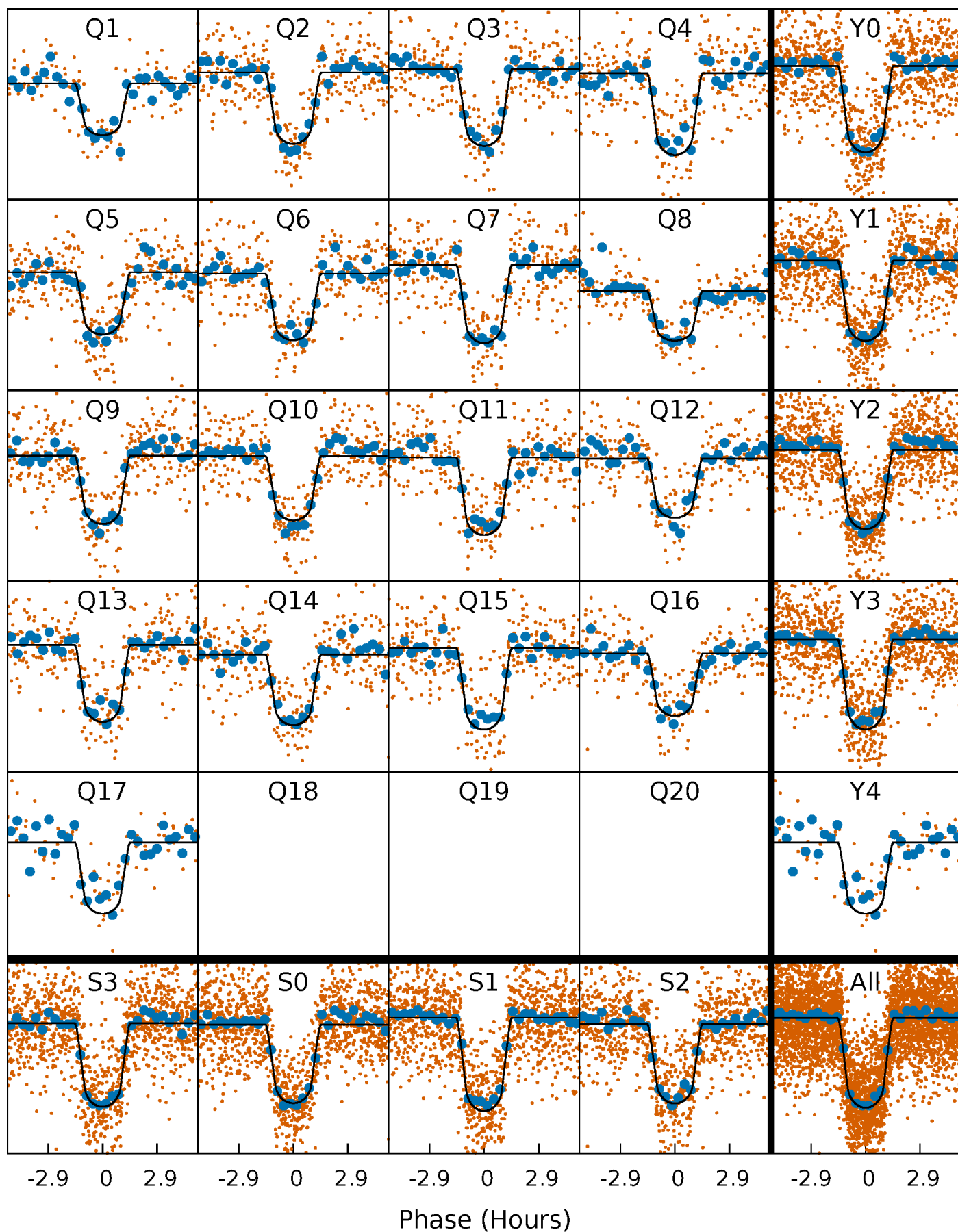
PDC Quarter-Phased Transit Curves

TCE 010973664-01 P= 5.404273 Days $T_0=134.355483$ (BKJD)



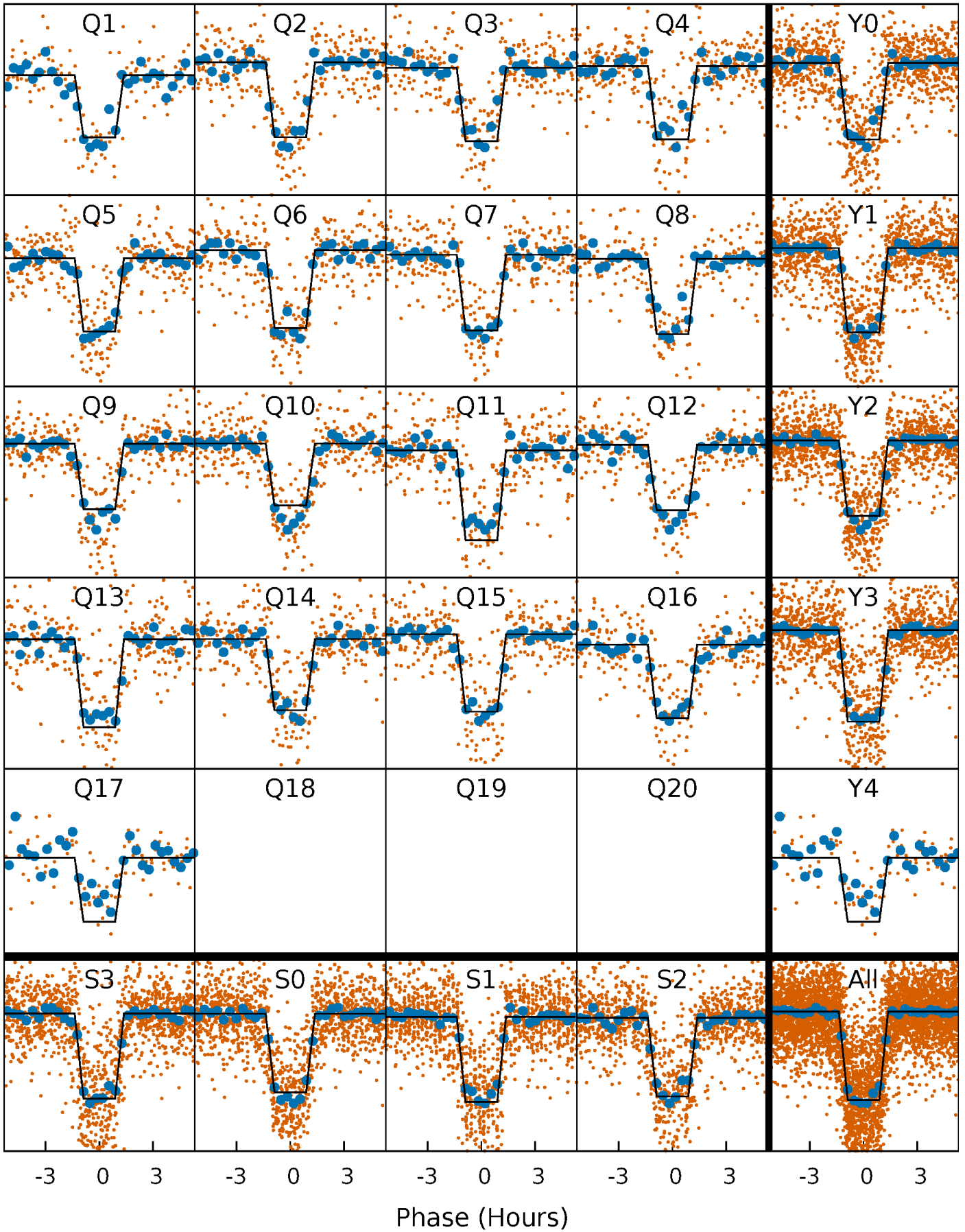
DV Quarter-Phased Transit Curves

TCE 010973664-01 P= 5.404273 Days $T_0=134.355483$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

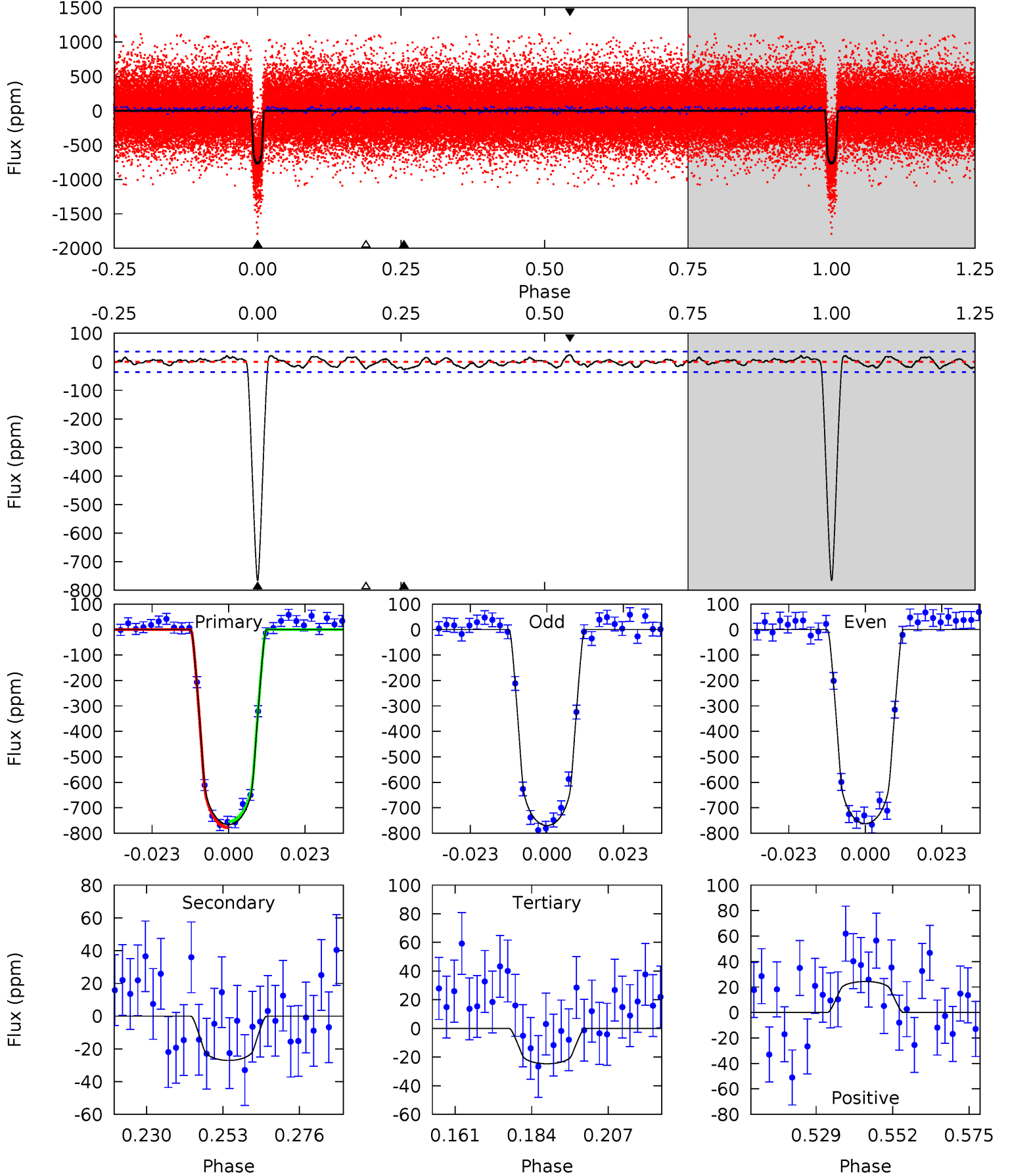
TCE 010973664-01 P= 5.404236 Days $T_0=134.360696$ (BKJD)



DV Model-Shift Uniqueness Test

010973664-01, P = 5.404273 Days, E = 128.951210 Days

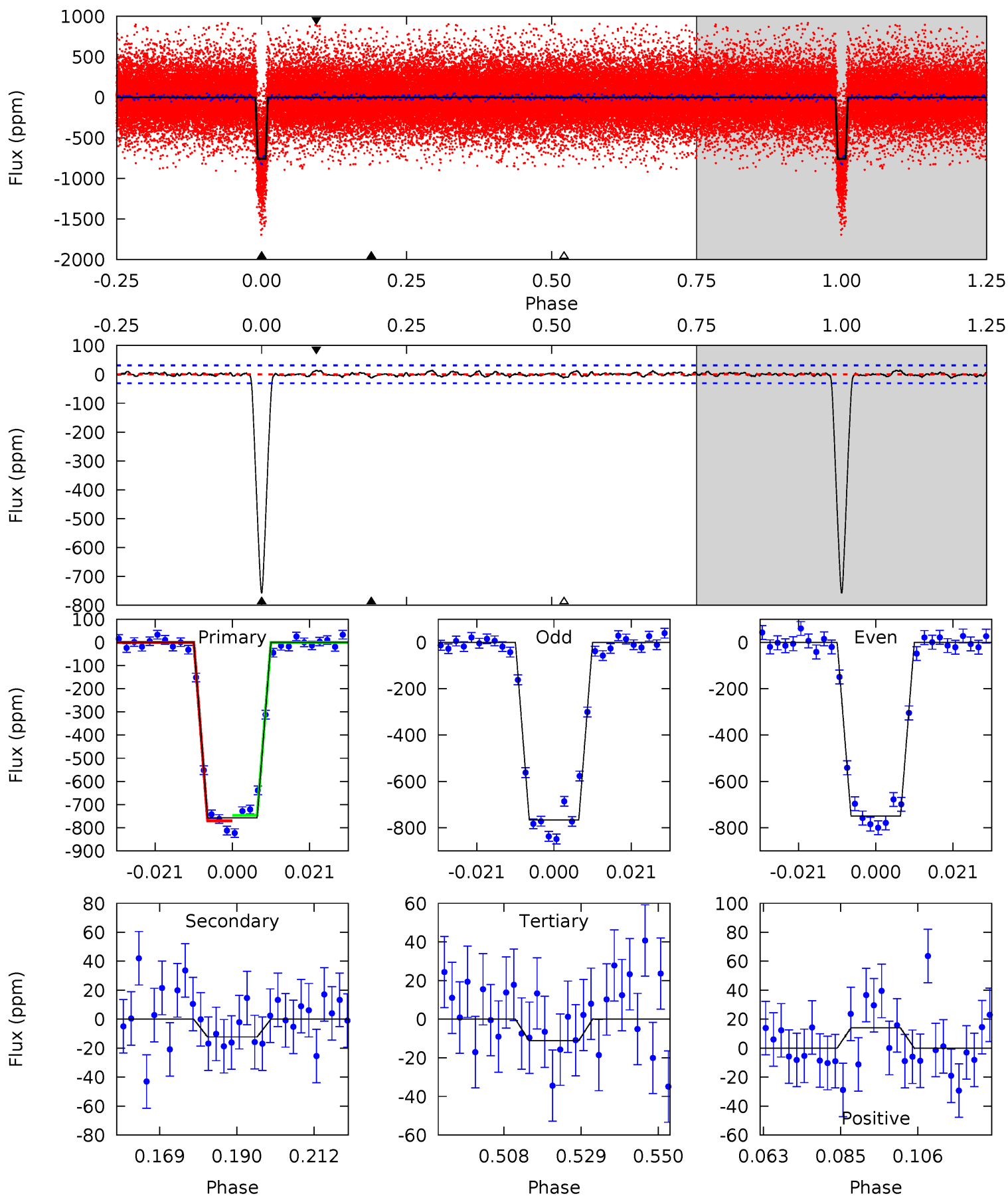
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
103.9	3.67	3.35	3.30	4.86	2.27	1.37	100.5	100.6	0.32	0.37	0.51	1.00	0.03	1.62



Alt Model-Shift Uniqueness Test

010973664-01, P = 5.404236 Days, E = 128.956460 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
119.1	1.93	1.76	2.20	4.88	2.31	0.73	117.3	116.9	0.17	-0.27	1.35	0.99	0.02	1.89



Stellar Parameters For KIC 010973664

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6122^{+169}_{-190}	$4.487^{+0.052}_{-0.208}$	$-0.180^{+0.250}_{-0.350}$	$0.964^{+0.303}_{-0.101}$	$1.041^{+0.139}_{-0.139}$	$1.635^{+0.361}_{-0.863}$
	+3%/-3%	+1%/-5%	+139%/-194%	+31%/-10%	+13%/-13%	+22%/-53%
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 010973664-01 / KOI 0601.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-27 ± 7	$3.08^{+0.58}_{-0.41}$	1533^{+114}_{-71}	3187^{+171}_{-174}	$5.523^{+2.552}_{-1.831}$
Alt.	-12 ± 6	$3.04^{+0.58}_{-0.42}$	1533^{+111}_{-70}	2819^{+231}_{-316}	$2.423^{+1.798}_{-1.229}$

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

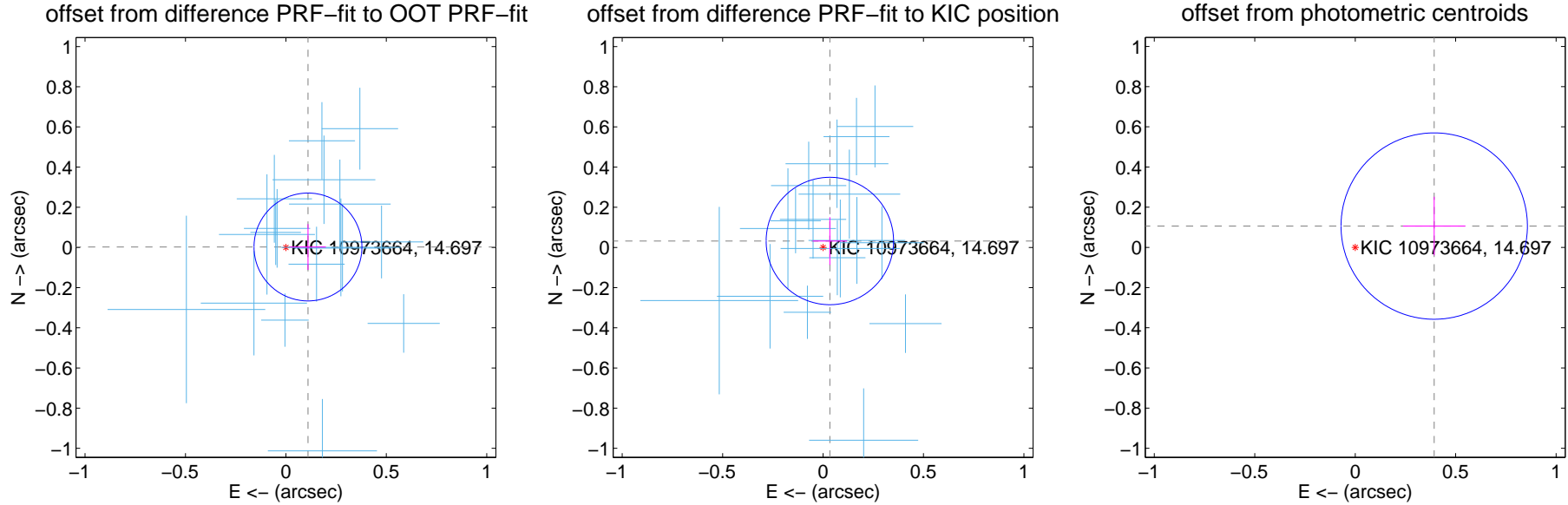
DV Centroid Data

Supplemental centroid analysis for 010973664-01. Kepler magnitude: 14.70. Transit SNR 61.26

There are 17 quarters with good PRF difference image offsets

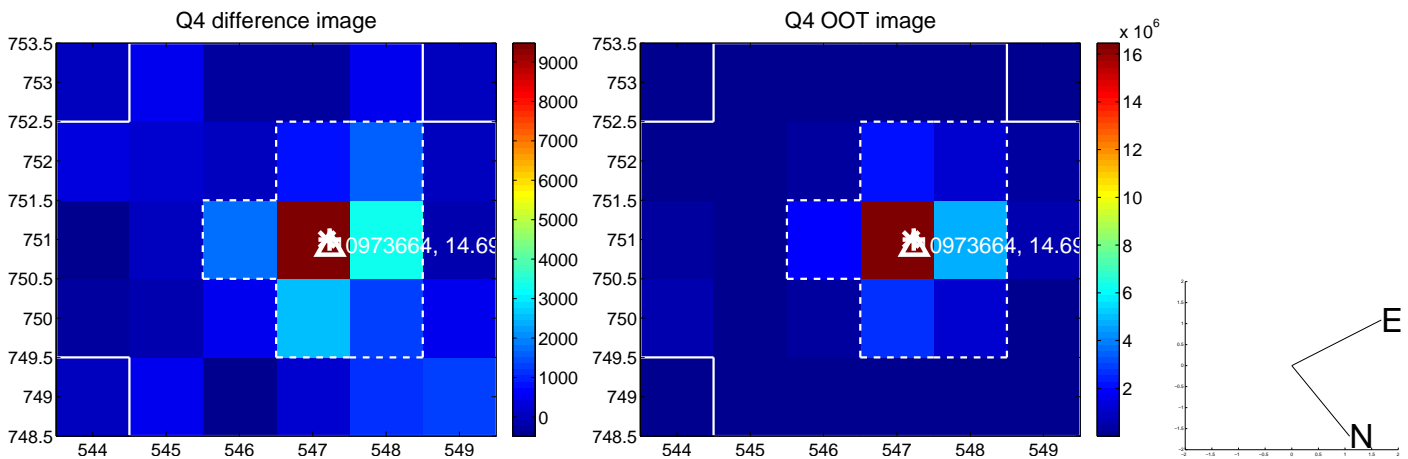
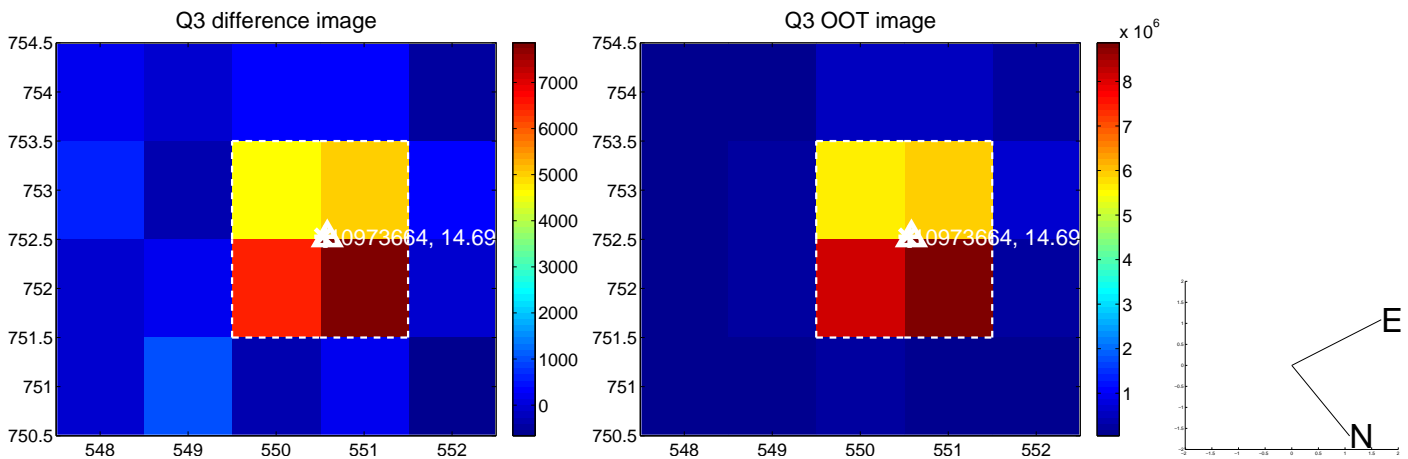
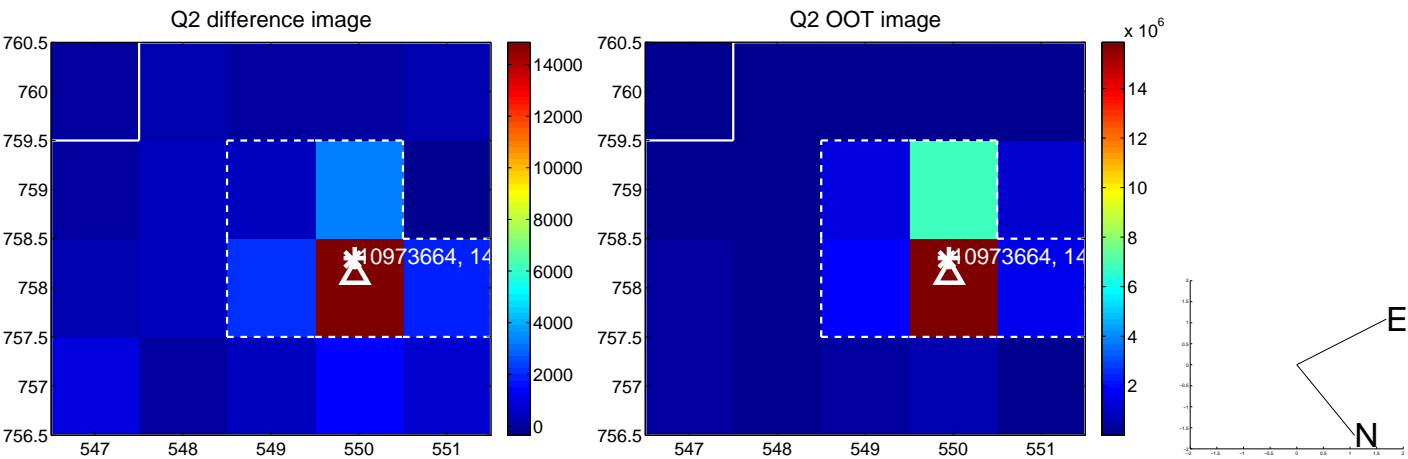
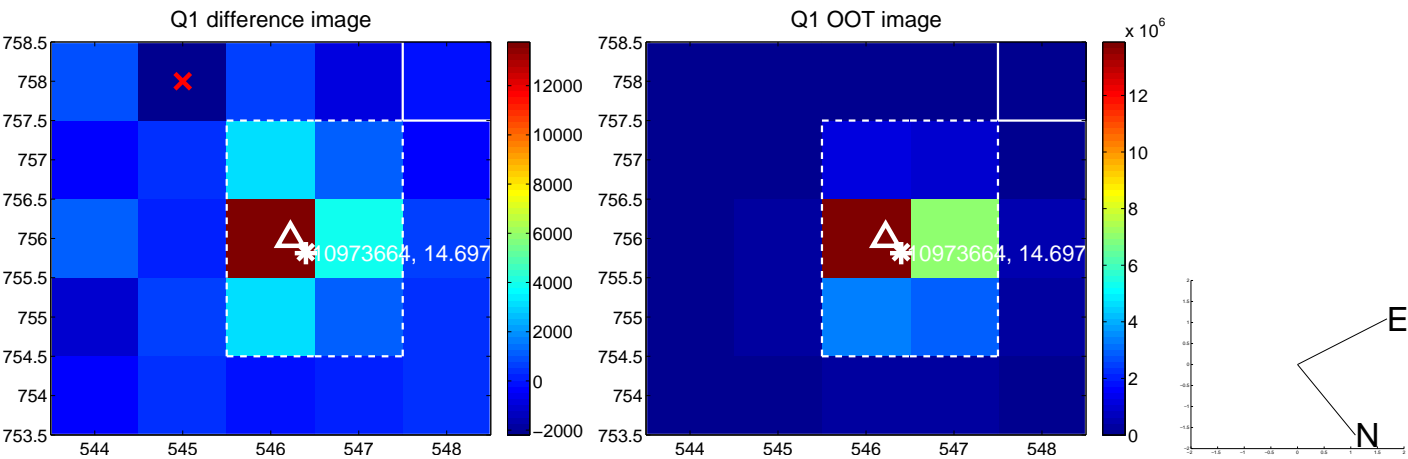
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.110 ± 0.090	1.23	-0.110 ± 0.089	0.002 ± 0.114
PRF-fit source offset from KIC position	0.047 ± 0.106	0.44	-0.034 ± 0.086	0.032 ± 0.118
photometric centroid source offset	0.41 ± 0.15	2.63	-0.39 ± 0.16	0.11 ± 0.15

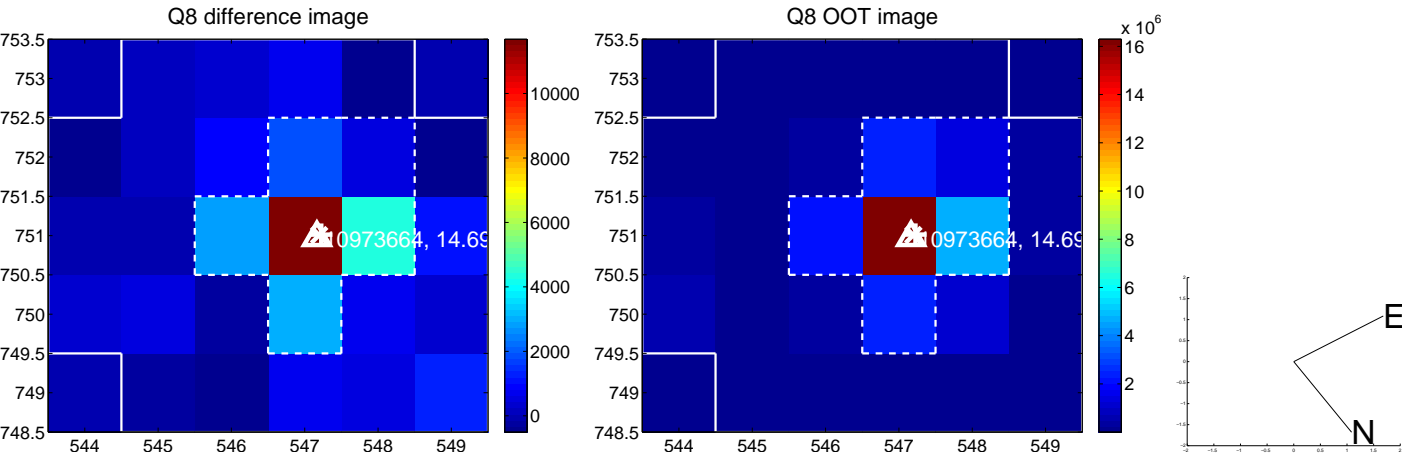
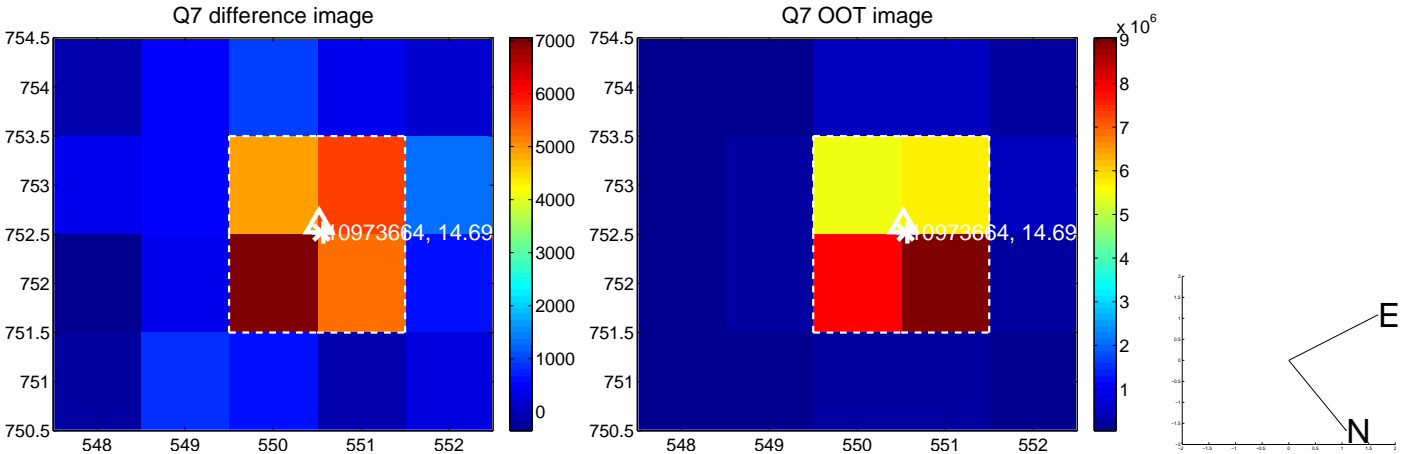
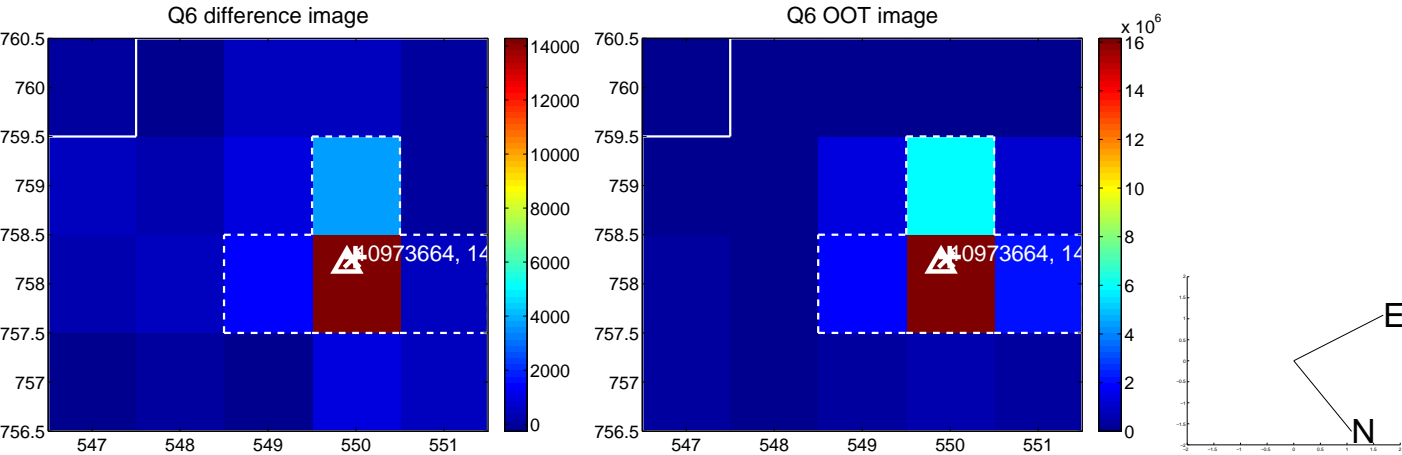
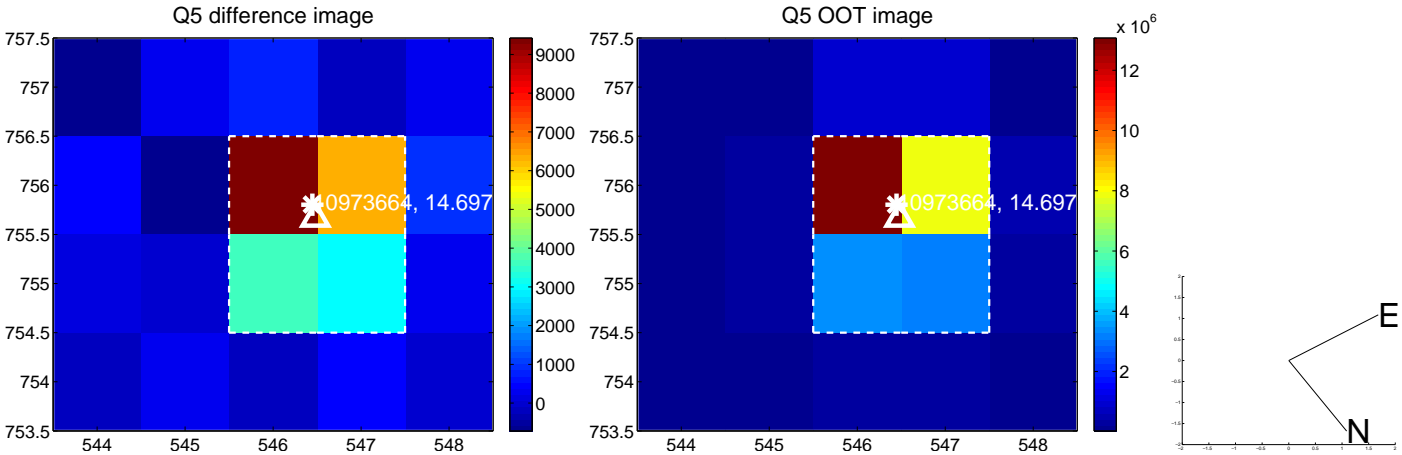


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

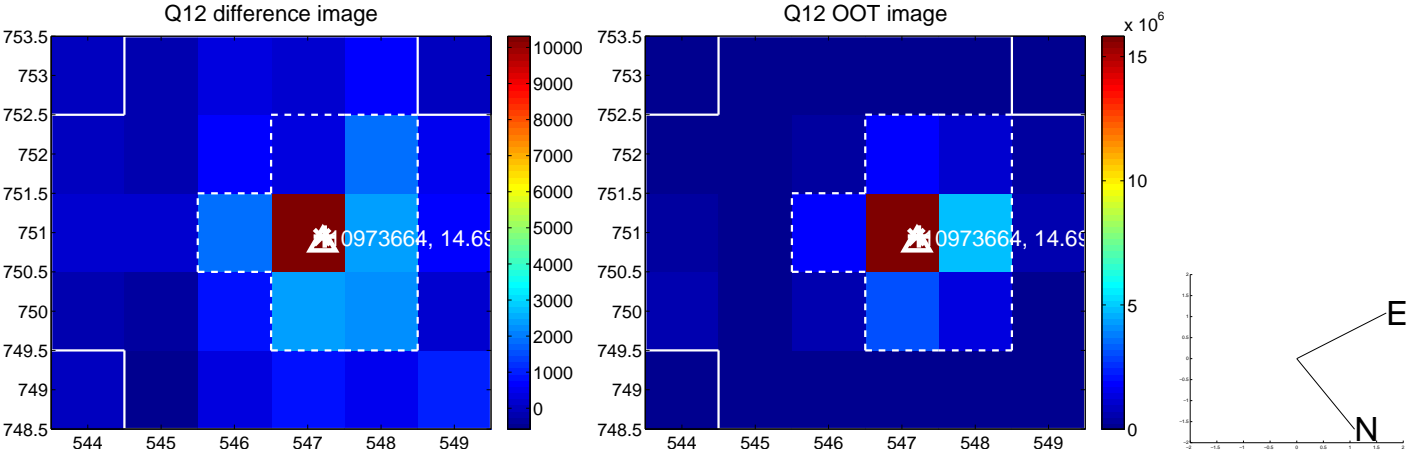
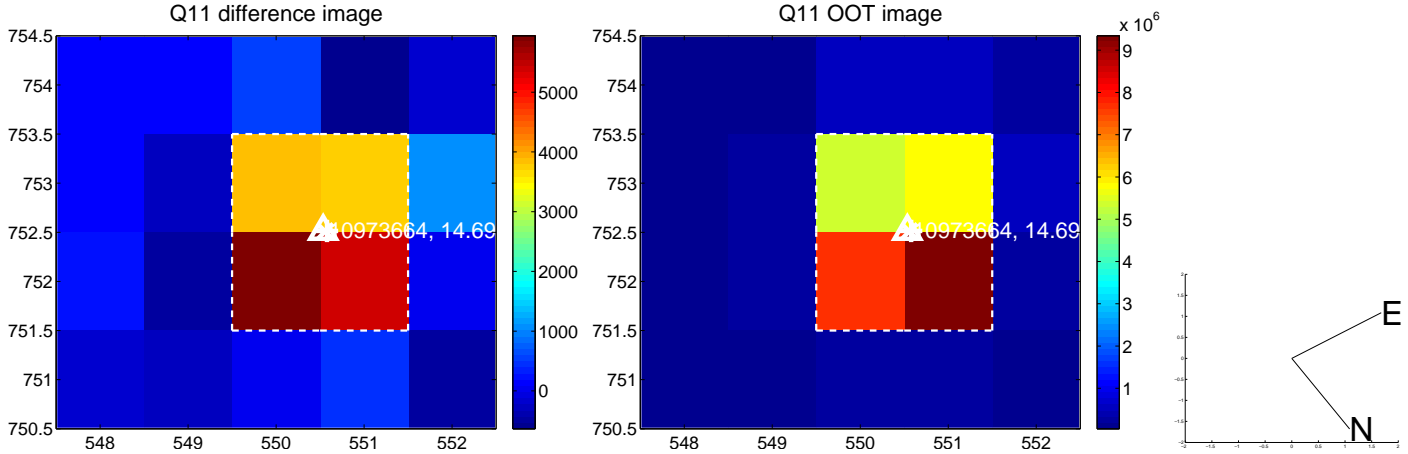
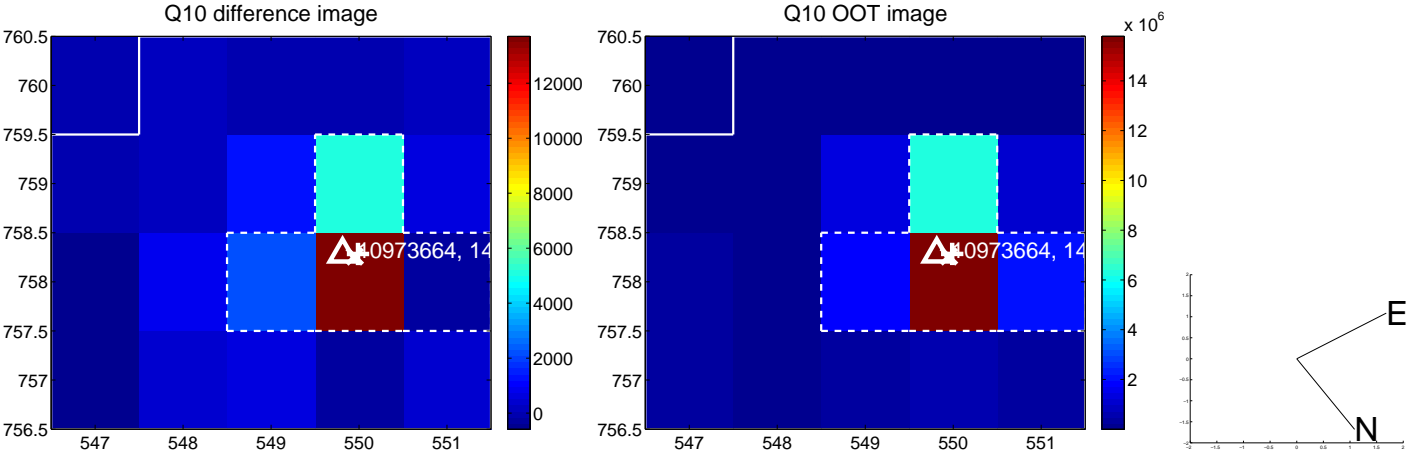
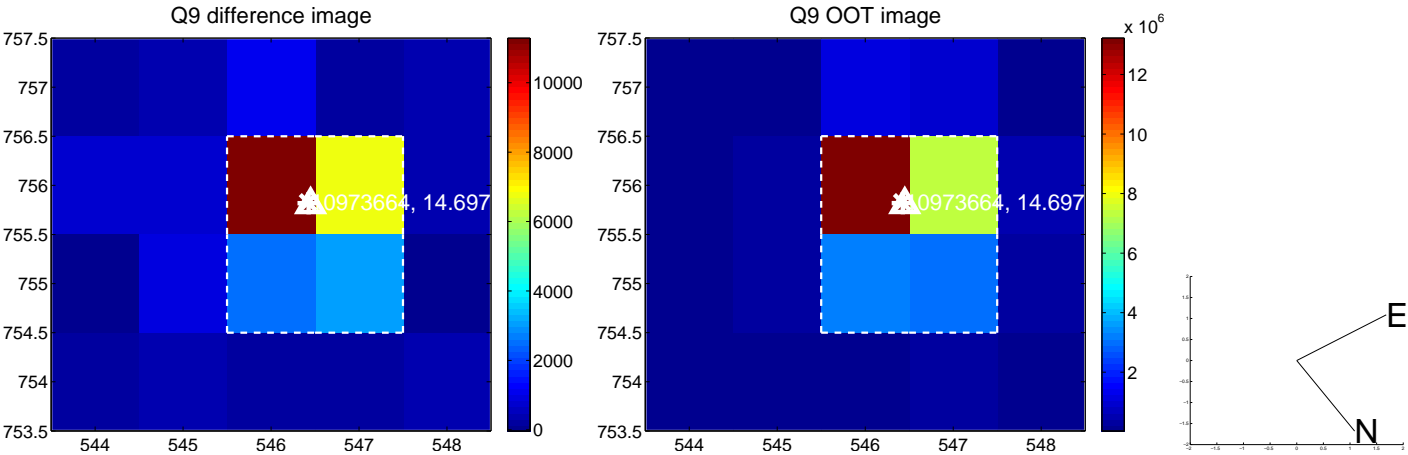
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



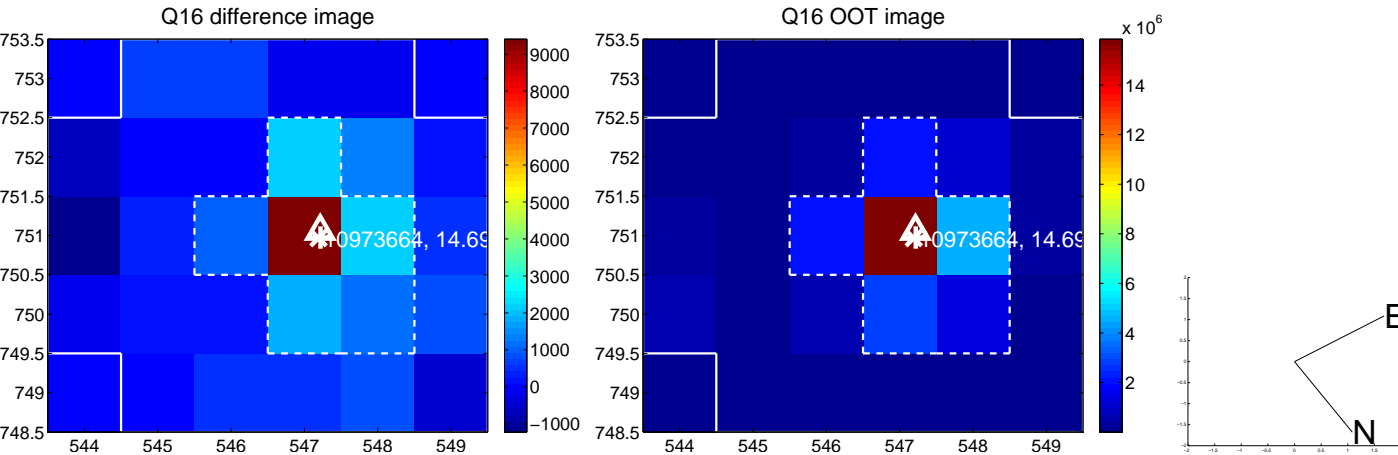
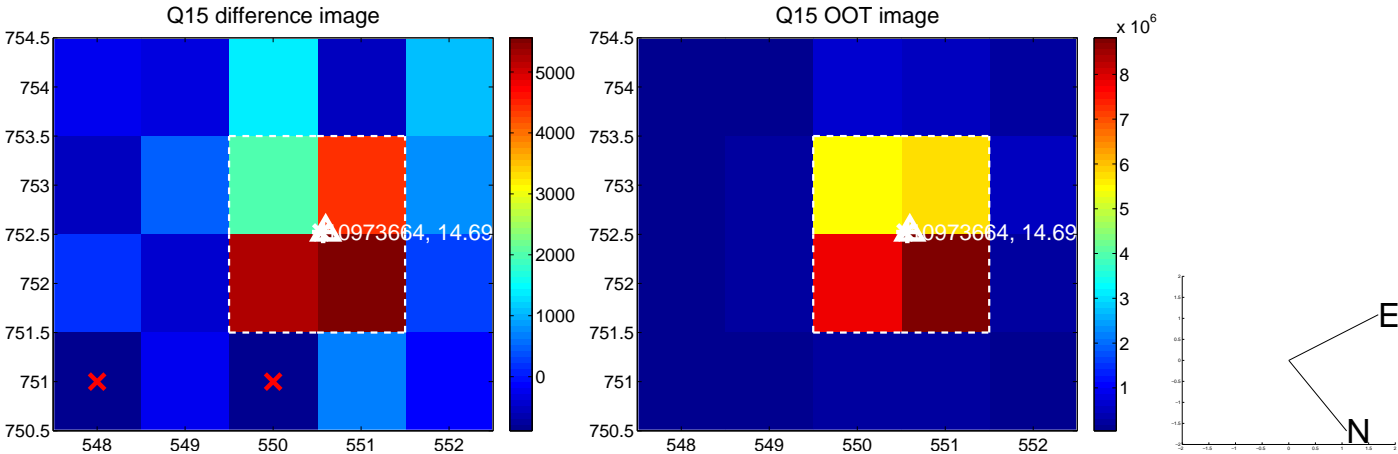
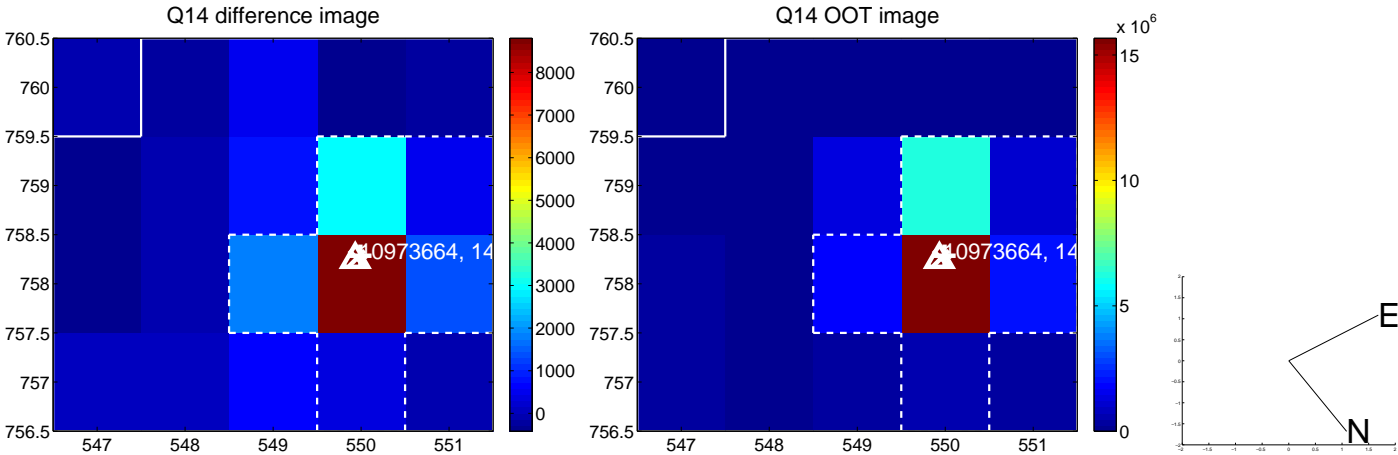
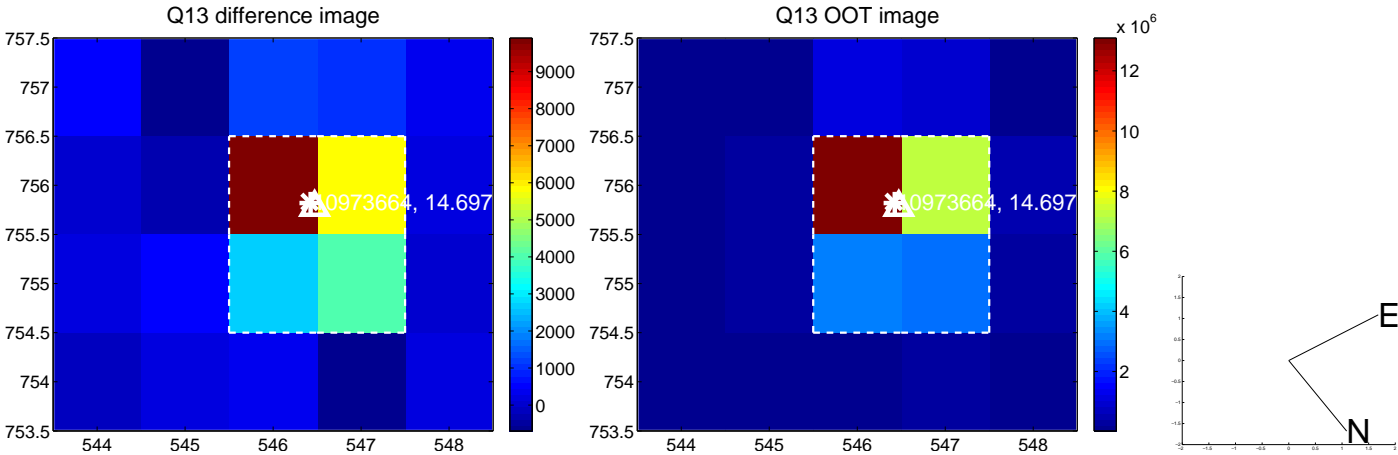
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



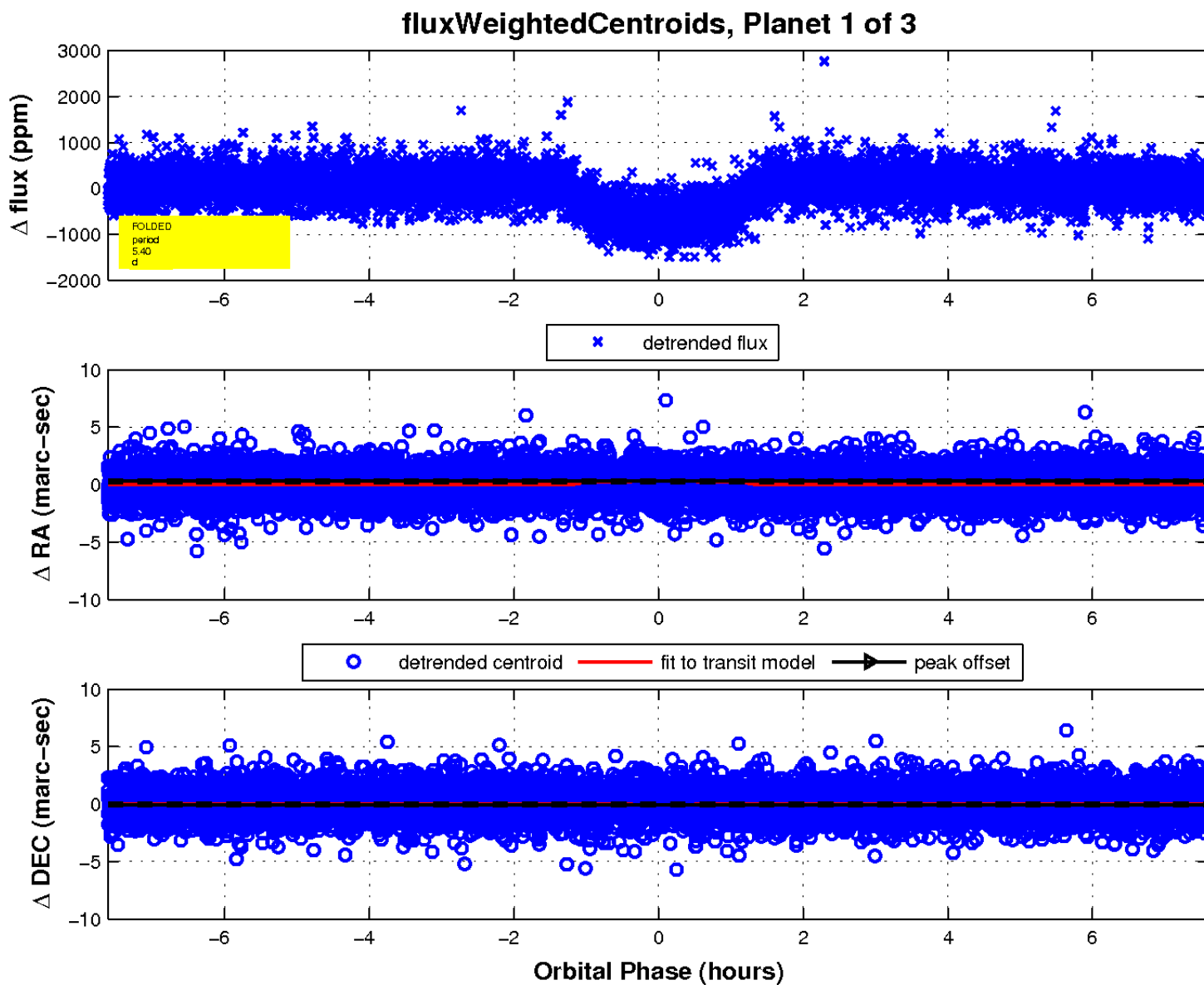
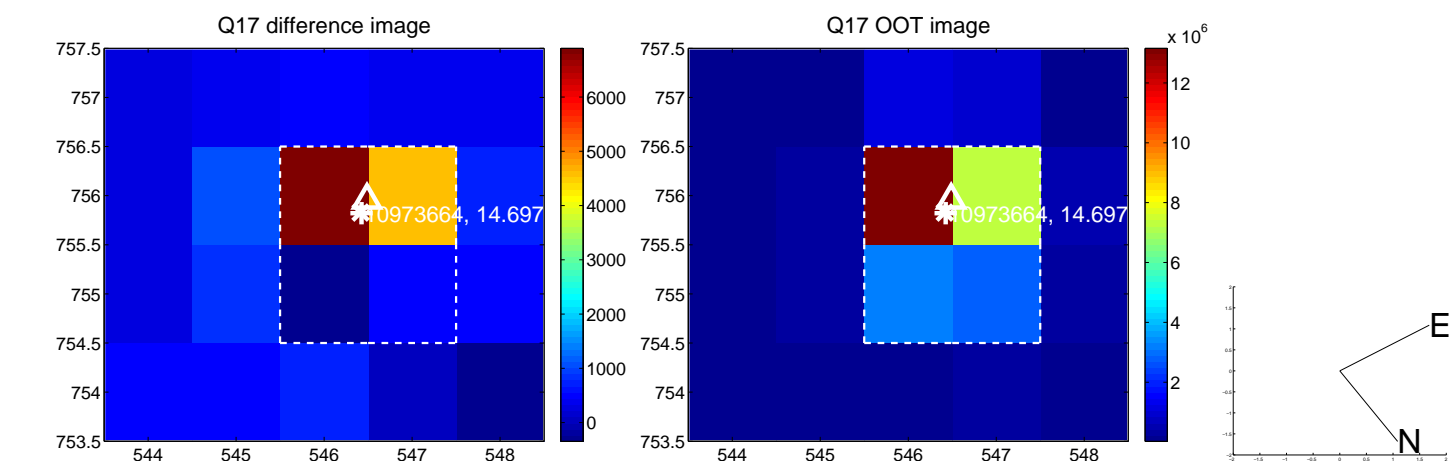
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

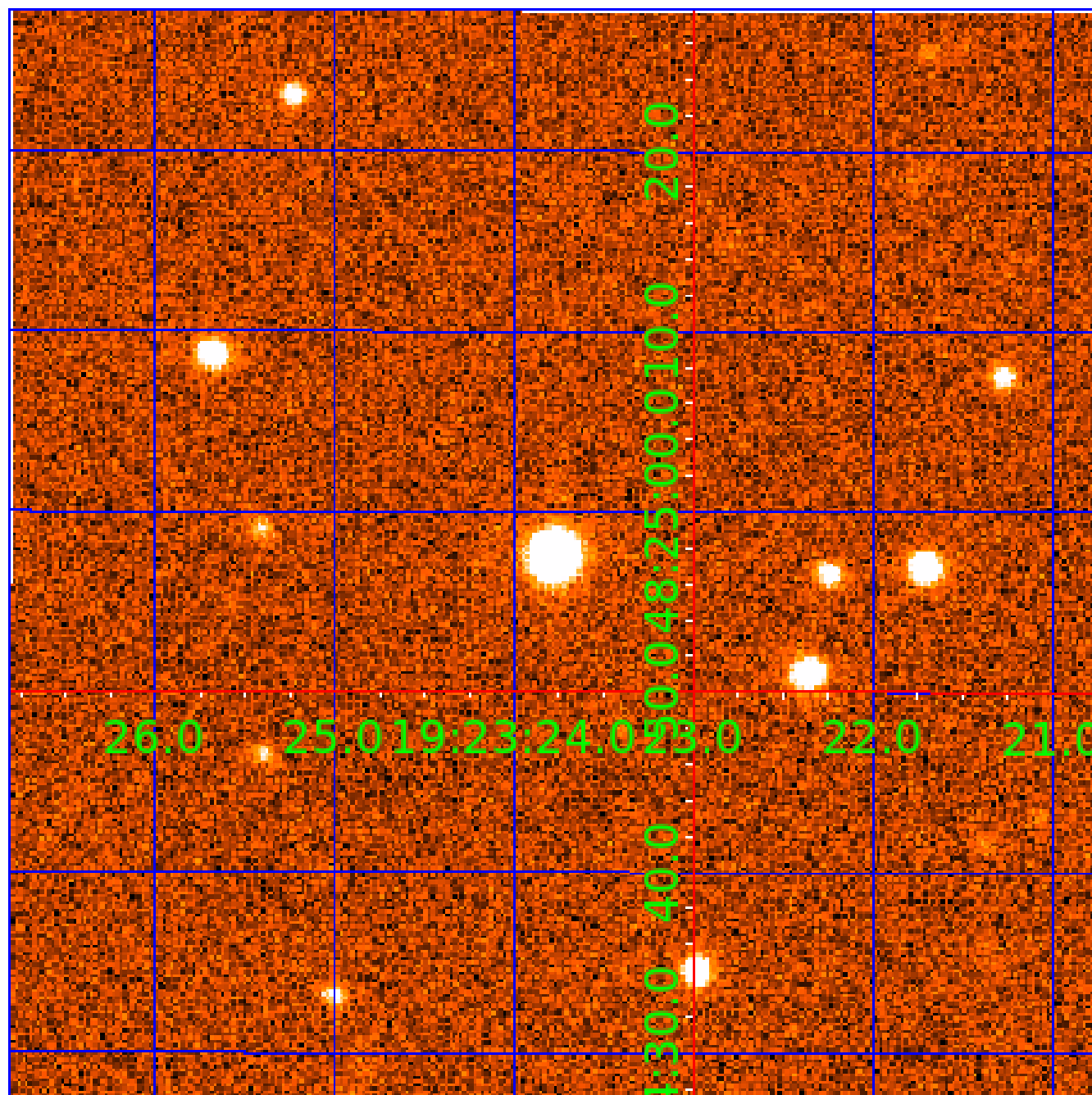


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010973664

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})
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
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010973664-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010973664-03	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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

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

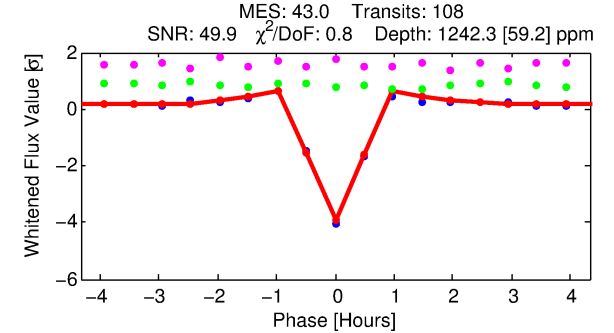
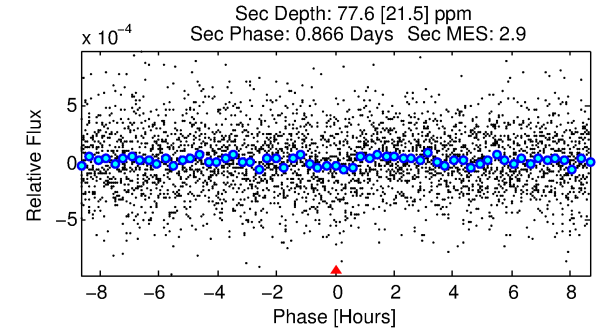
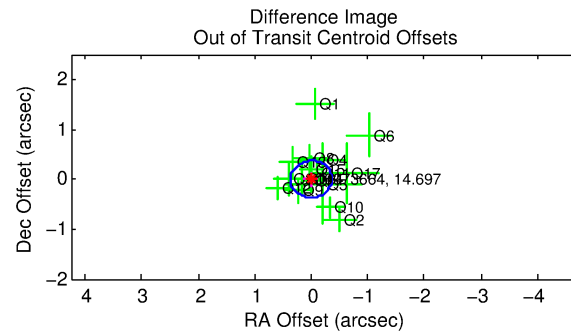
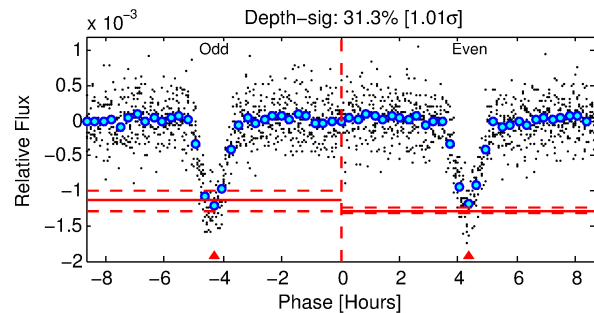
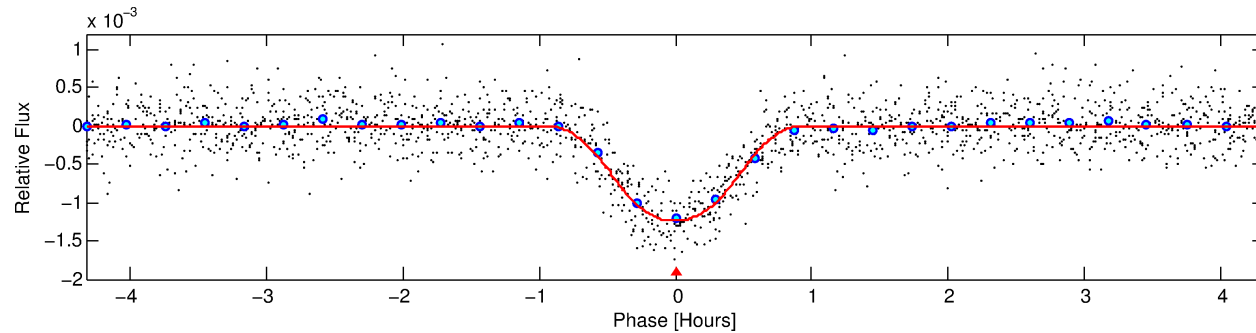
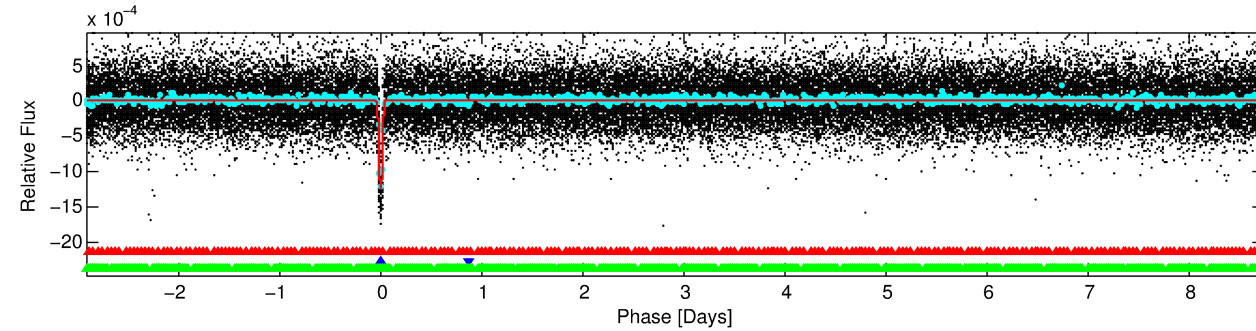
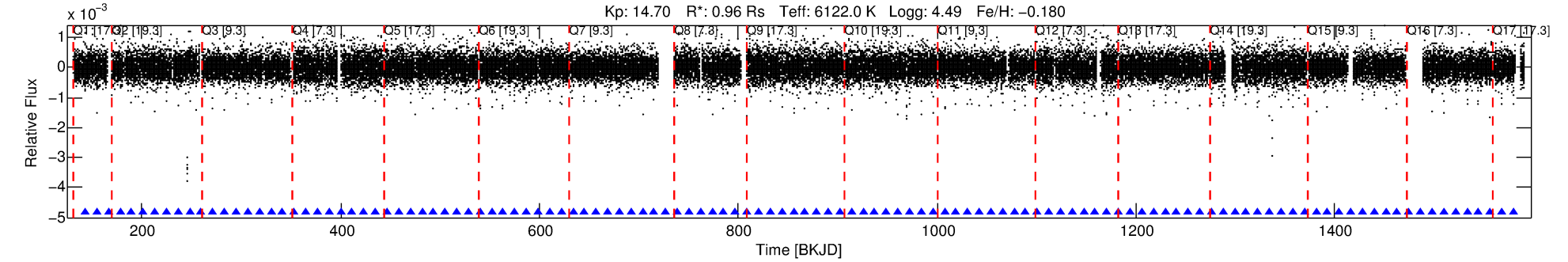
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010973664-02

No Significant Match Found

DV One-Page Summary

KIC: 10973664 Candidate: 2 of 3 Period: 11.679 d
KOI: K00601.02 Corr: 0.965



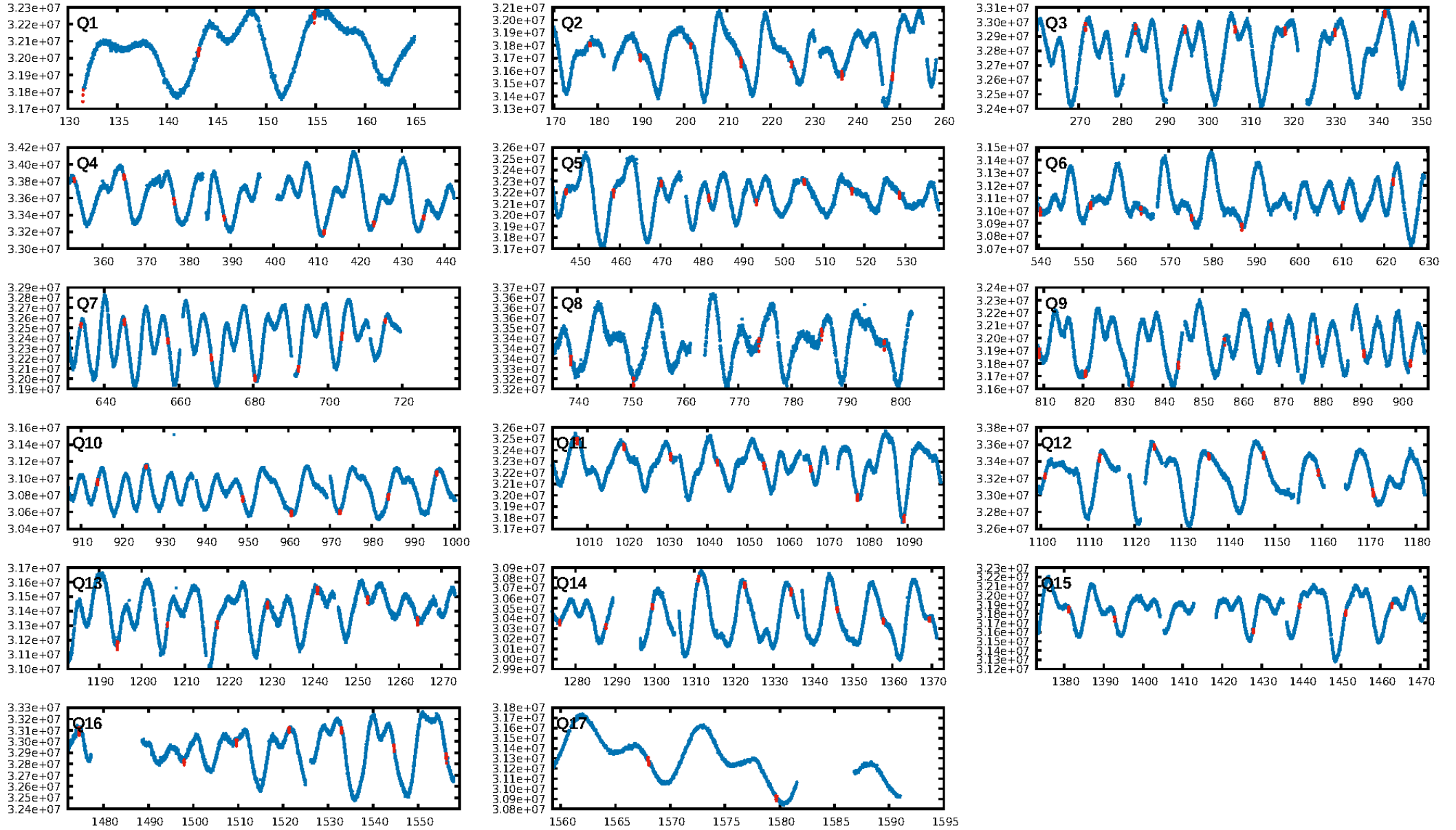
DV Fit Results:

Period = 11.67894 [0.00001] d
Epoch = 143.1911 [0.0006] BKJD
Rp/R* = 0.0417 [0.0024]
a/R* = 25.52 [2.53]
b = 0.96 [0.01]
Seff = 112.20 [45.06]
Teff = 830 [83] K
Rp = 4.38 [1.40] Re
a = 0.1021 [0.0269] AU
Ag = 23.16 [11.24] [1.97 σ]
Teffp = 2815 [228] K [8.18 σ]

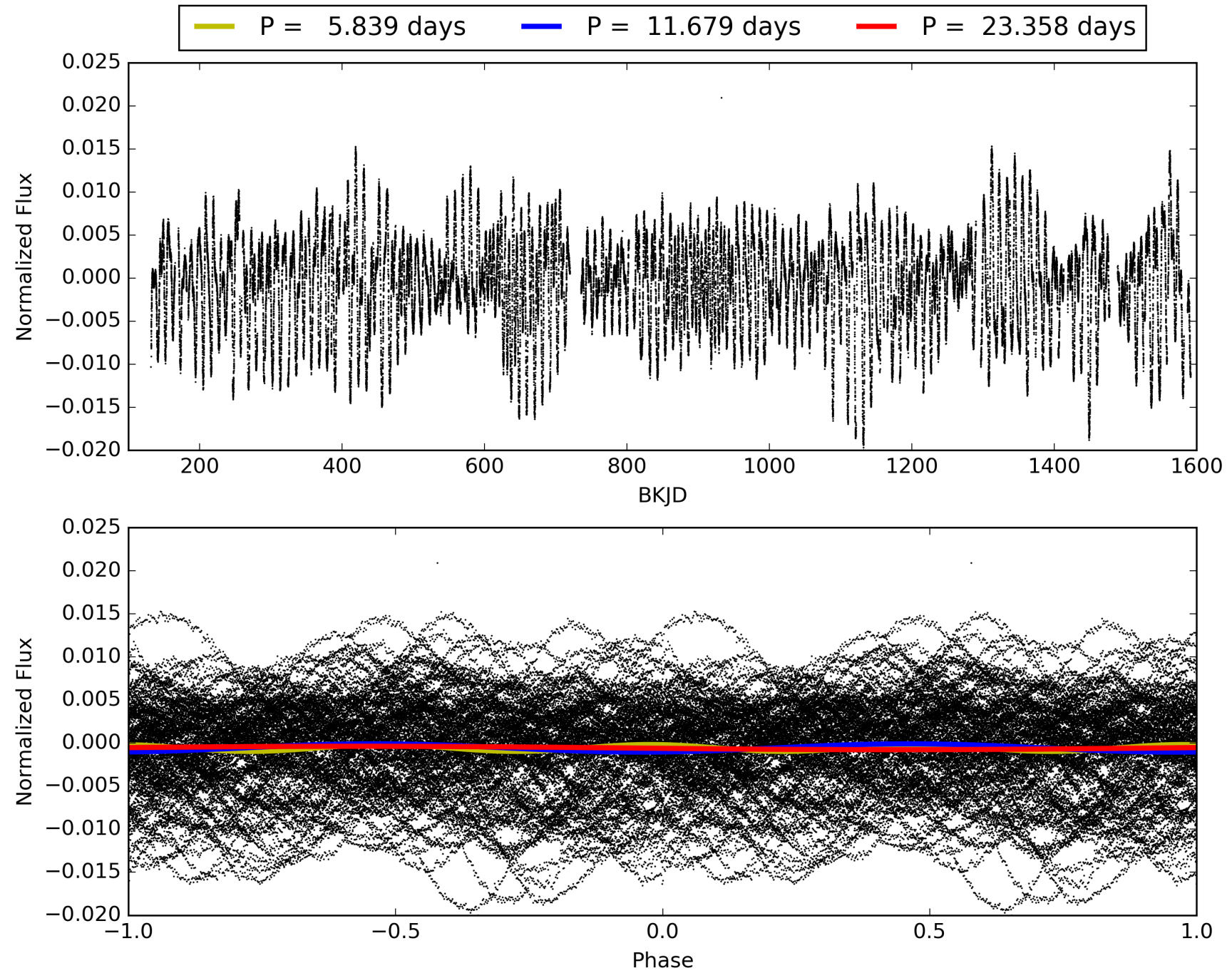
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [51.58 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [103/103]
GhostDiagnostic-chr: 4.169
Centroid-sig: 28.5%
Centroid-so: 0.155 arcsec [0.71 σ]
OotOffset-rm: 0.005 arcsec [0.04 σ]
KicOffset-rm: 0.101 arcsec [0.86 σ]
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 010973664-02, PDC Light Curves

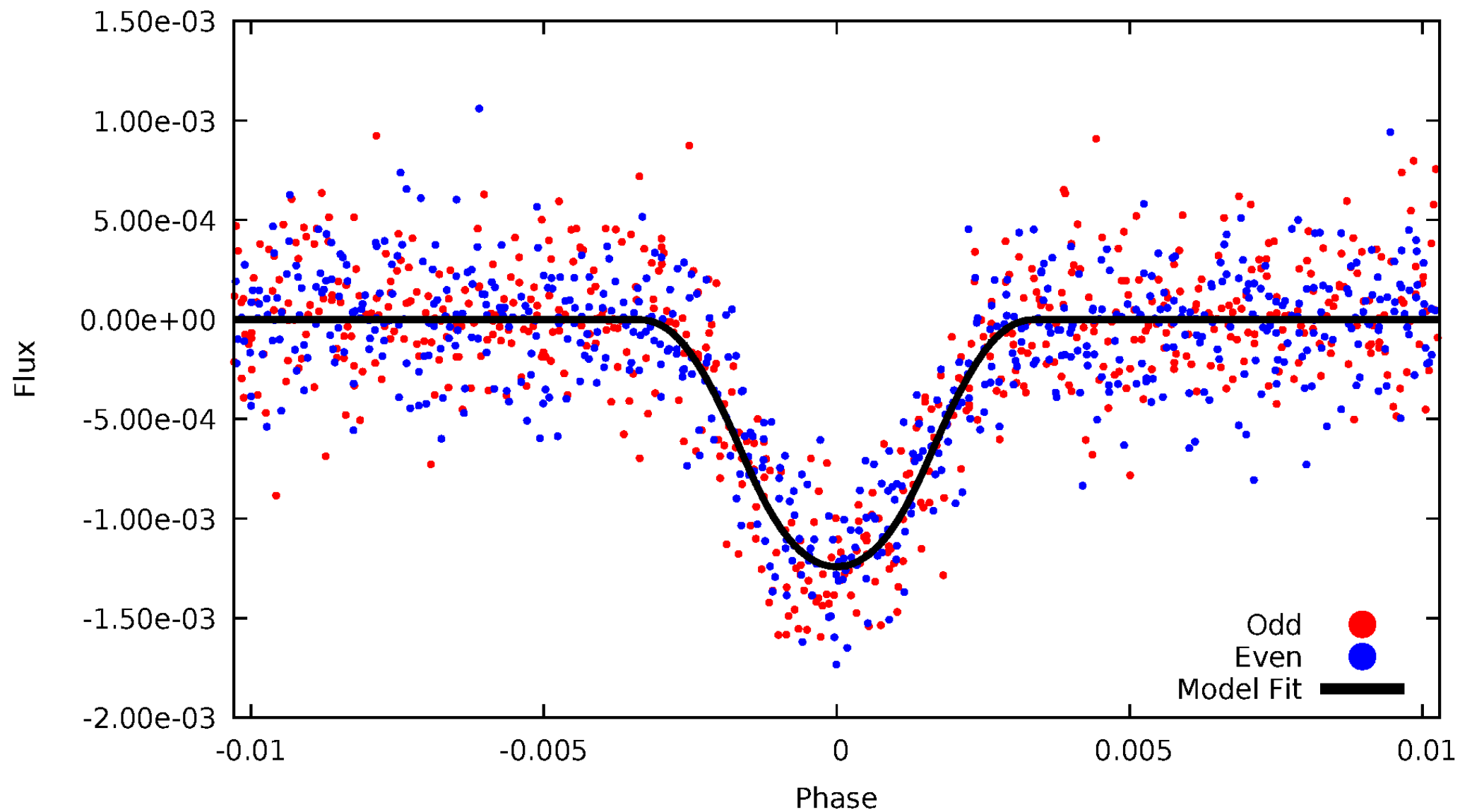


TCE 010973664-02



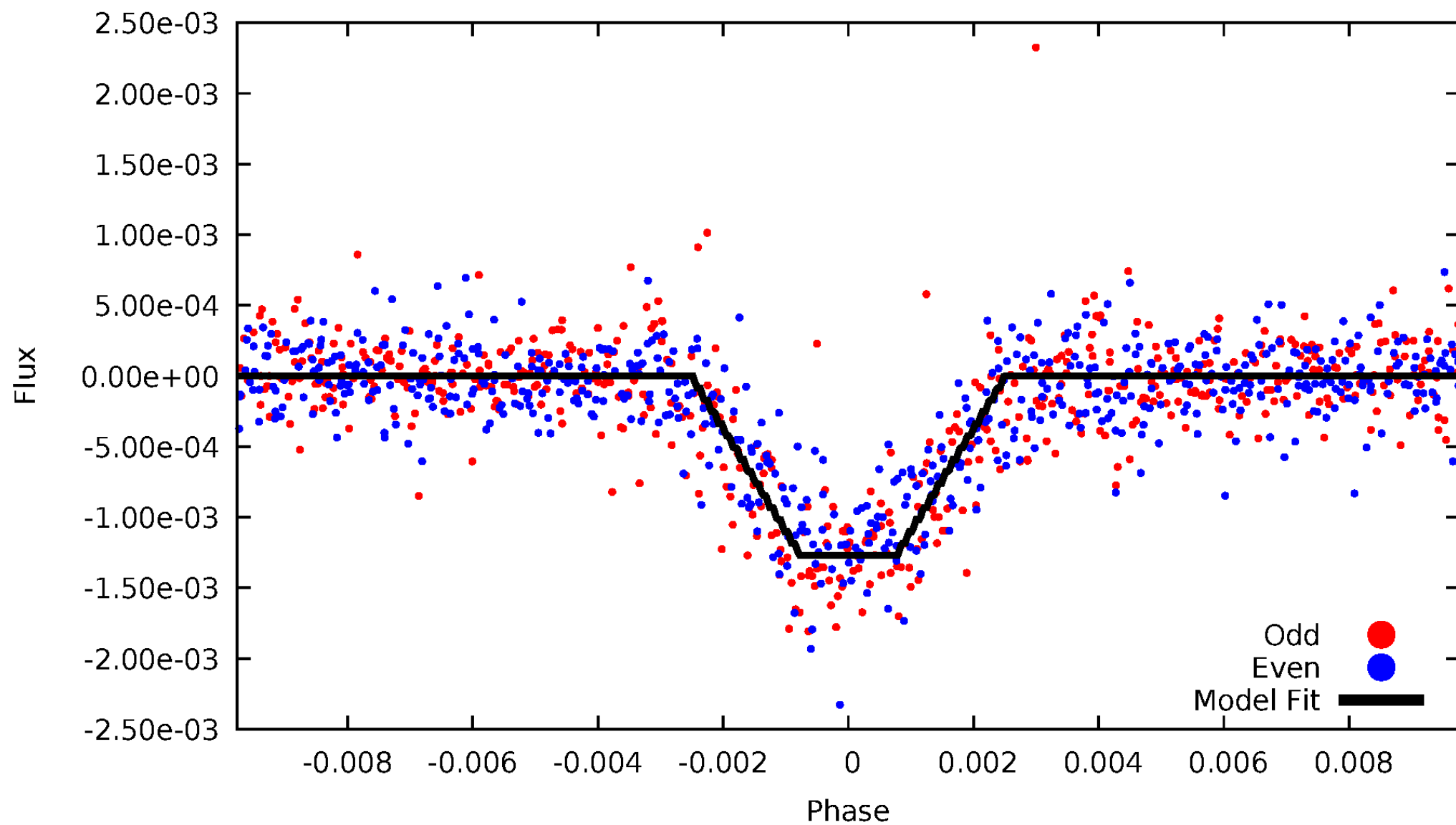
DV Odd/Even

TCE 010973664-02



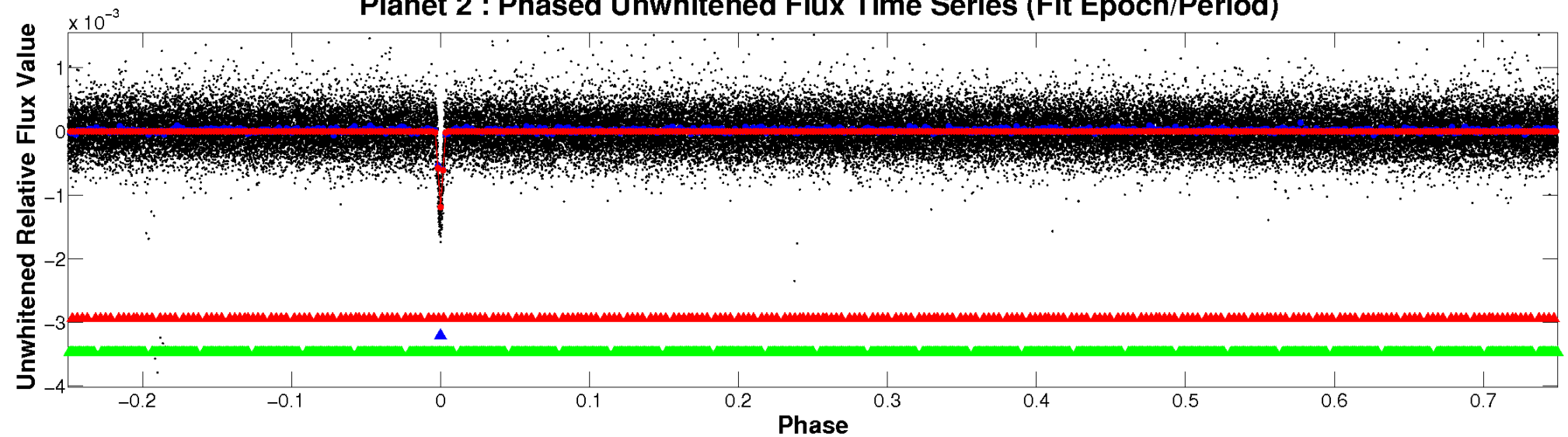
ALT Odd/Even

TCE 010973664-02

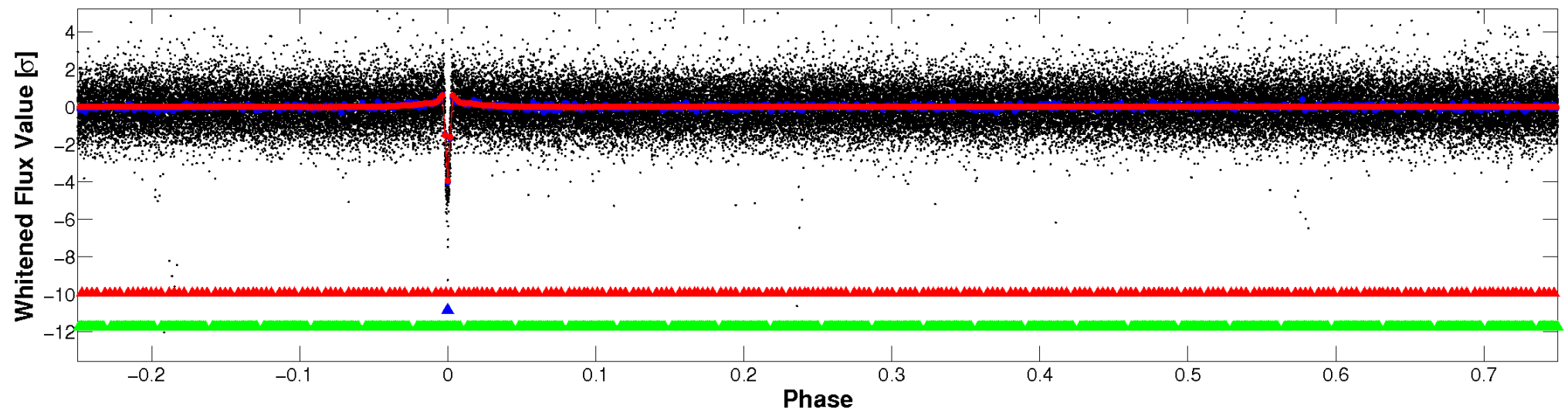


Non-Whitened Vs. Whitened Light Curve

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

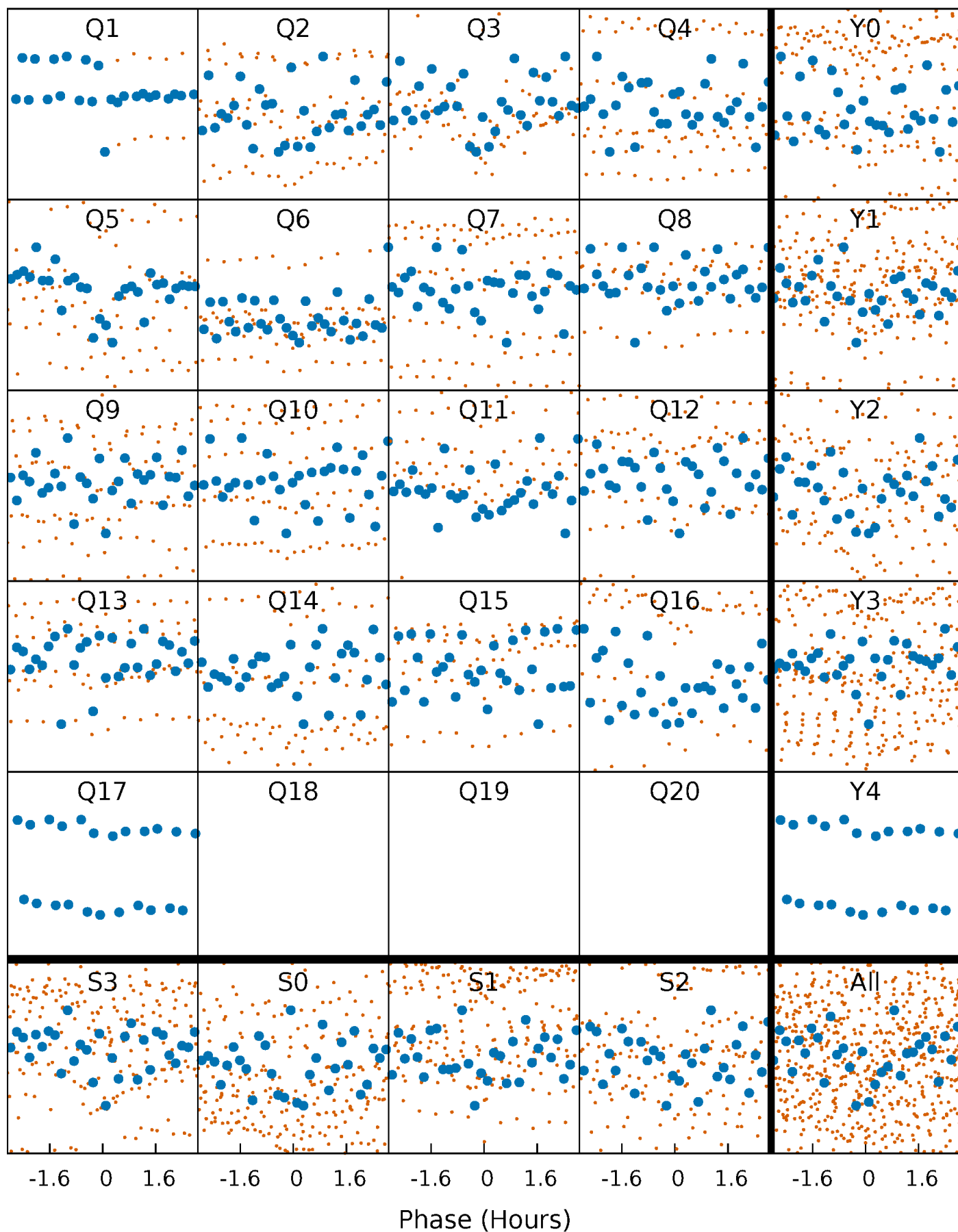


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



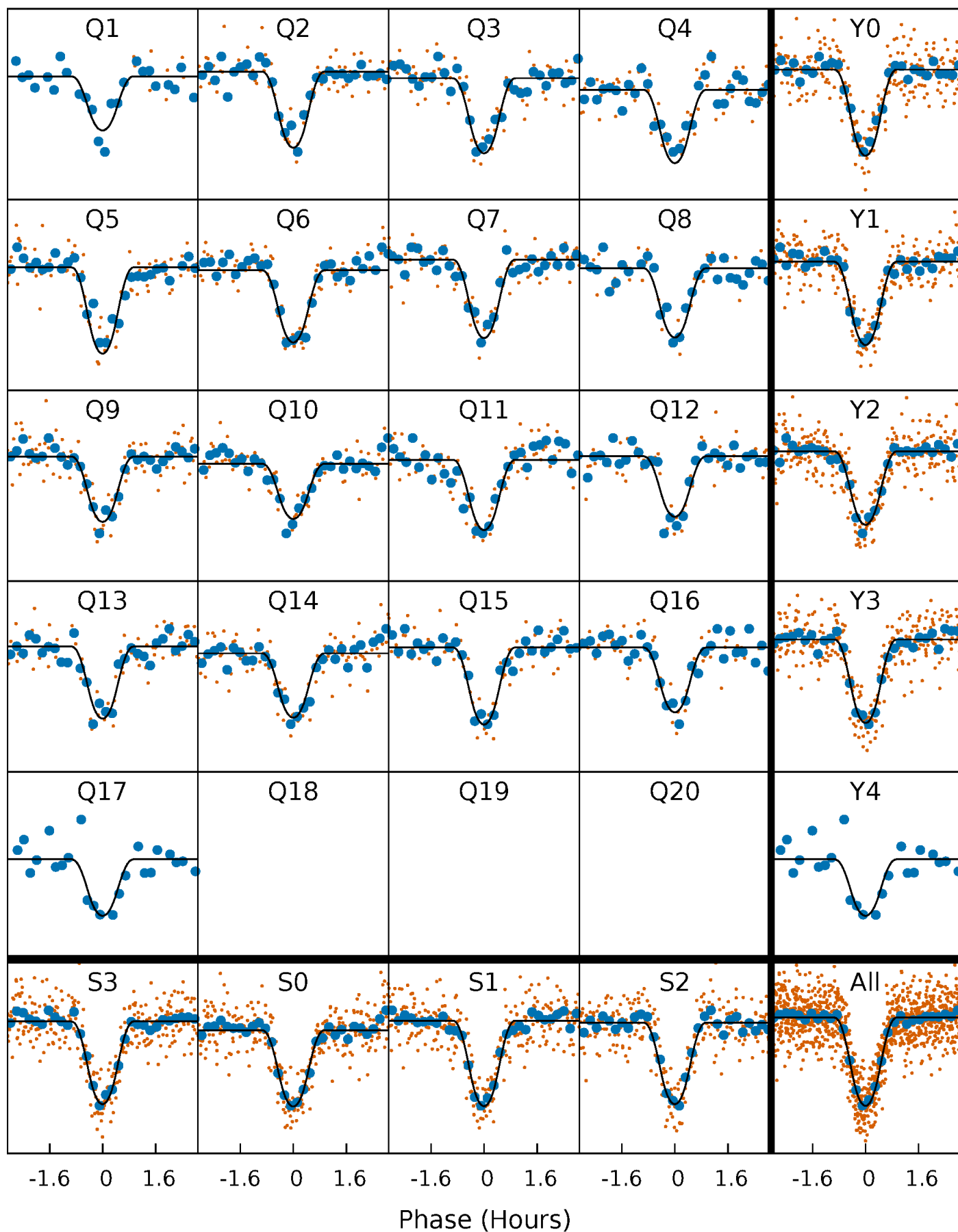
PDC Quarter-Phased Transit Curves

TCE 010973664-02 P= 11.678940 Days $T_0=143.191115$ (BKJD)



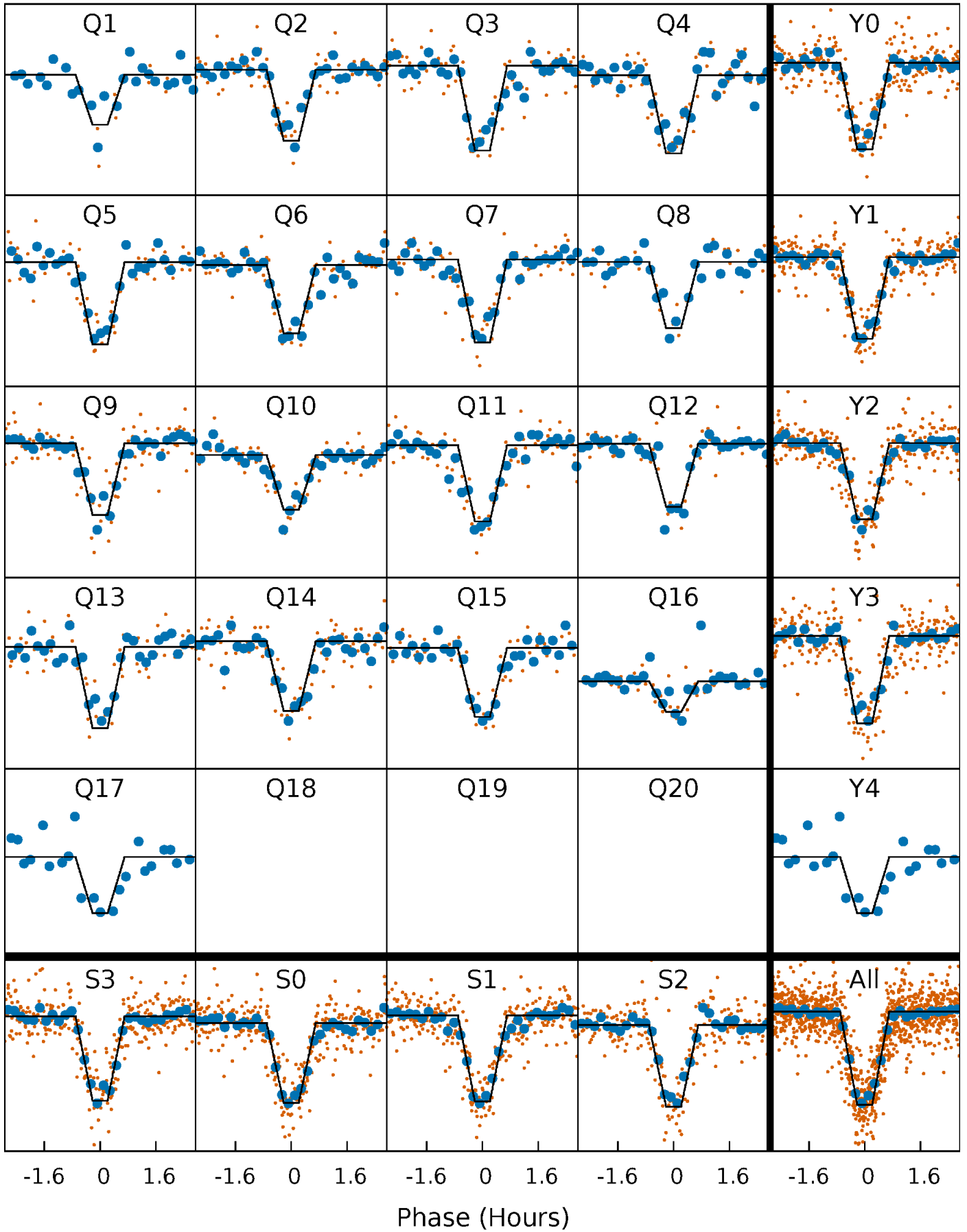
DV Quarter-Phased Transit Curves

TCE 010973664-02 P= 11.678940 Days $T_0=143.191115$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

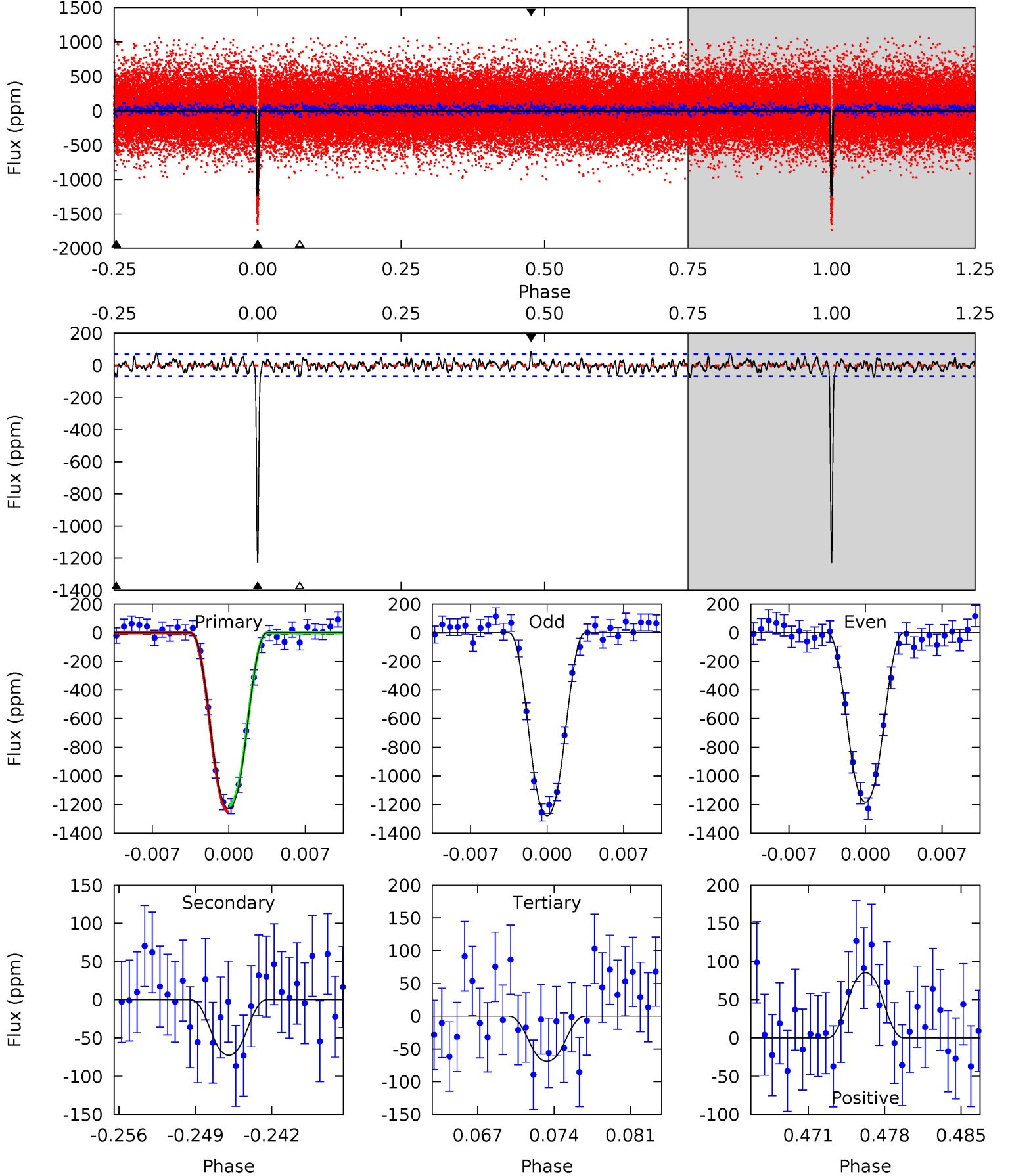
TCE 010973664-02 P= 11.678917 Days $T_0=143.192607$ (BKJD)



DV Model-Shift Uniqueness Test

010973664-02, P = 11.678940 Days, E = 119.833235 Days

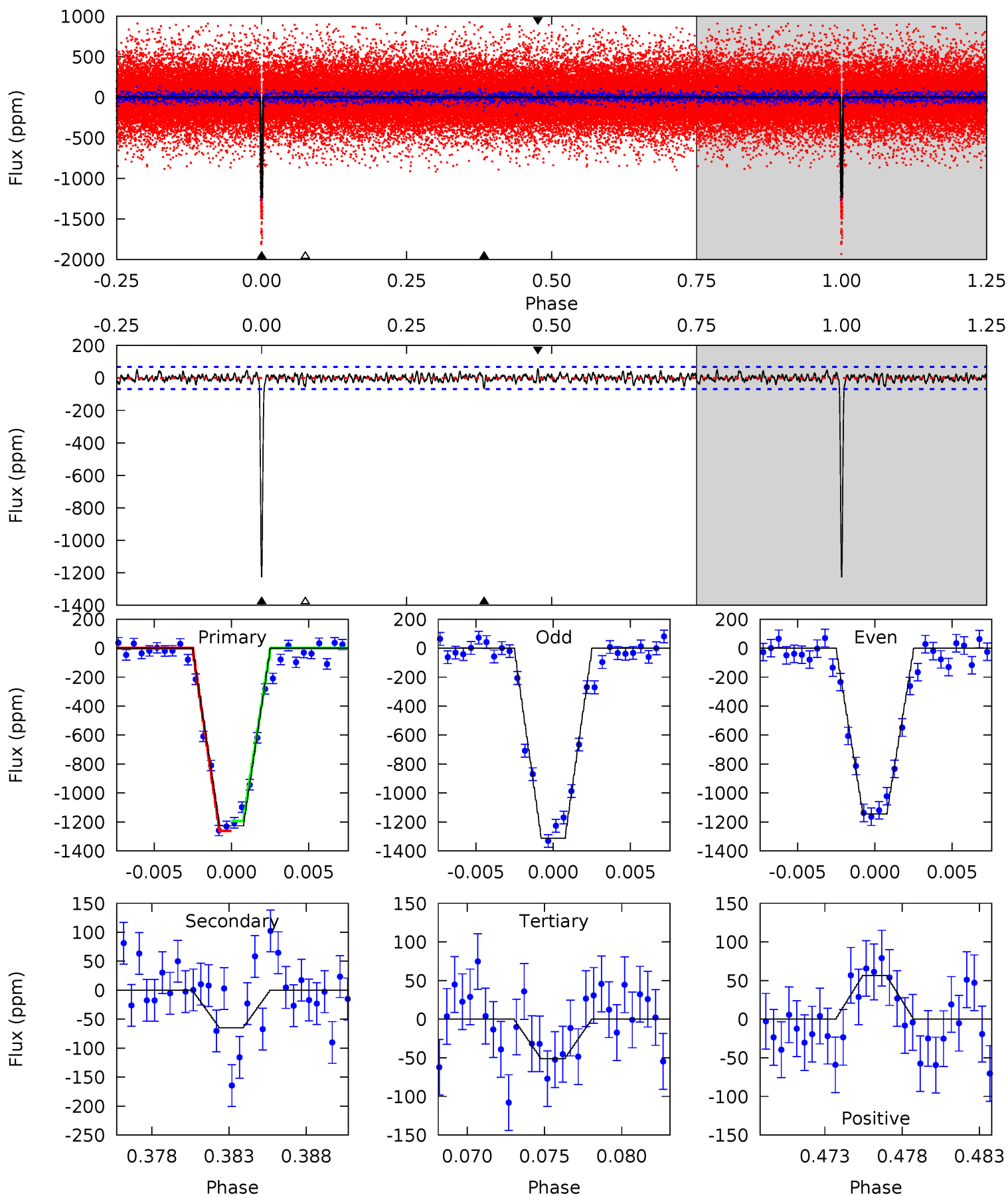
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
92.3	5.45	5.17	6.43	5.10	2.71	1.63	87.1	85.9	0.28	-0.98	3.58	1.00	0.07	1.66



Alt Model-Shift Uniqueness Test

010973664-02, P = 11.678917 Days, E = 119.834773 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
92.1	4.87	3.84	4.24	5.16	2.81	1.22	88.3	87.9	1.03	0.63	6.30	0.99	0.04	2.57



Stellar Parameters For KIC 010973664

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6122^{+169}_{-190}	$4.487^{+0.052}_{-0.208}$	$-0.180^{+0.250}_{-0.350}$	$0.964^{+0.303}_{-0.101}$	$1.041^{+0.139}_{-0.139}$	$1.635^{+0.361}_{-0.863}$
	+3%/-3%	+1%/-5%	+139%/-194%	+31%/-10%	+13%/-13%	+22%/-53%
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 010973664-02 / KOI 0601.02

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-73 ± 13	$4.55^{+0.87}_{-0.47}$	1184^{+95}_{-55}	3298^{+131}_{-124}	19^{+6}_{-6}
Alt.	-65 ± 13	$3.90^{+0.65}_{-0.45}$	1184^{+84}_{-56}	3404^{+147}_{-152}	23^{+9}_{-7}

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

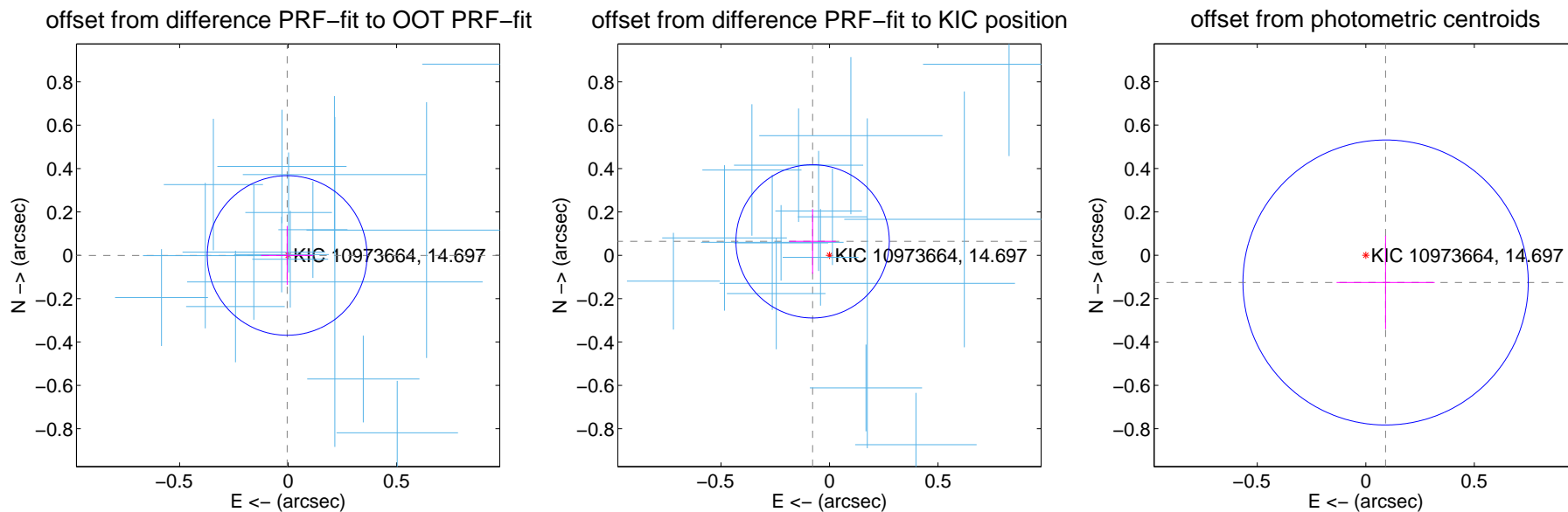
DV Centroid Data

Supplemental centroid analysis for 010973664-02. Kepler magnitude: 14.70. Transit SNR 49.90

There are 17 quarters with good PRF difference image offsets

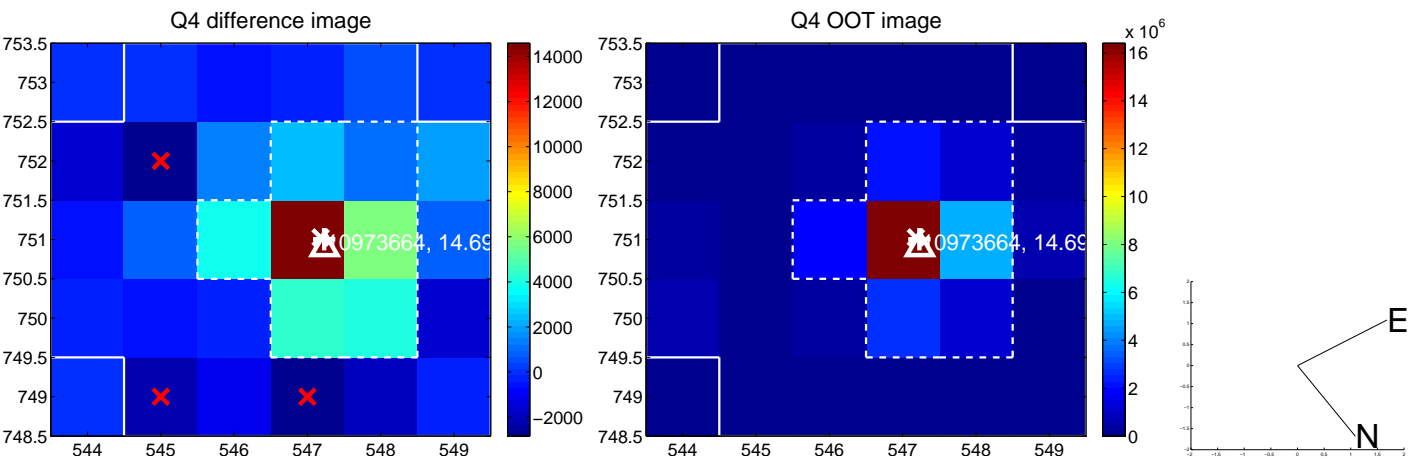
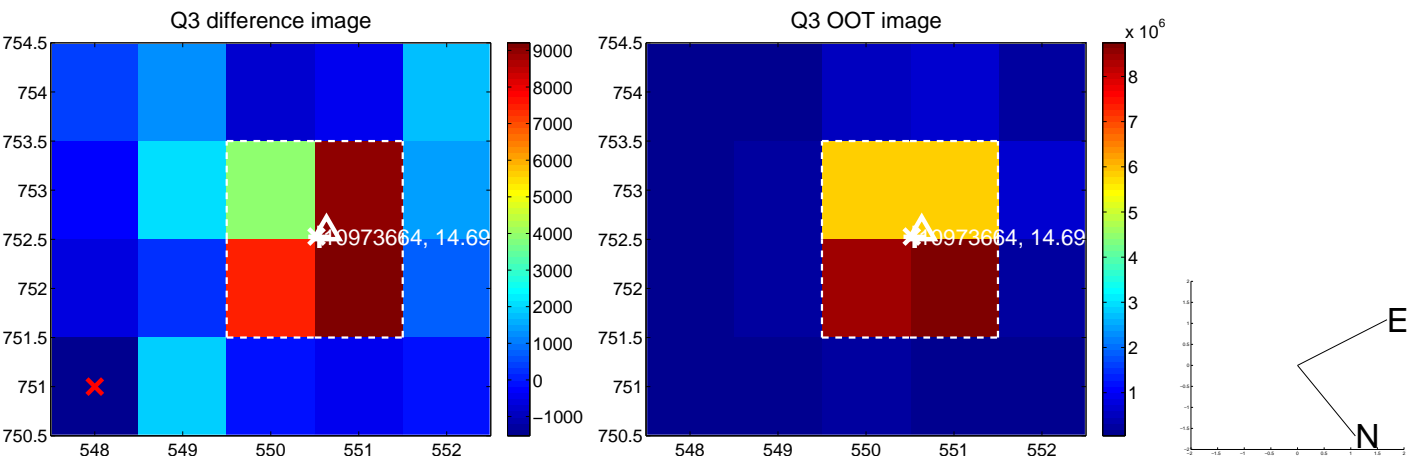
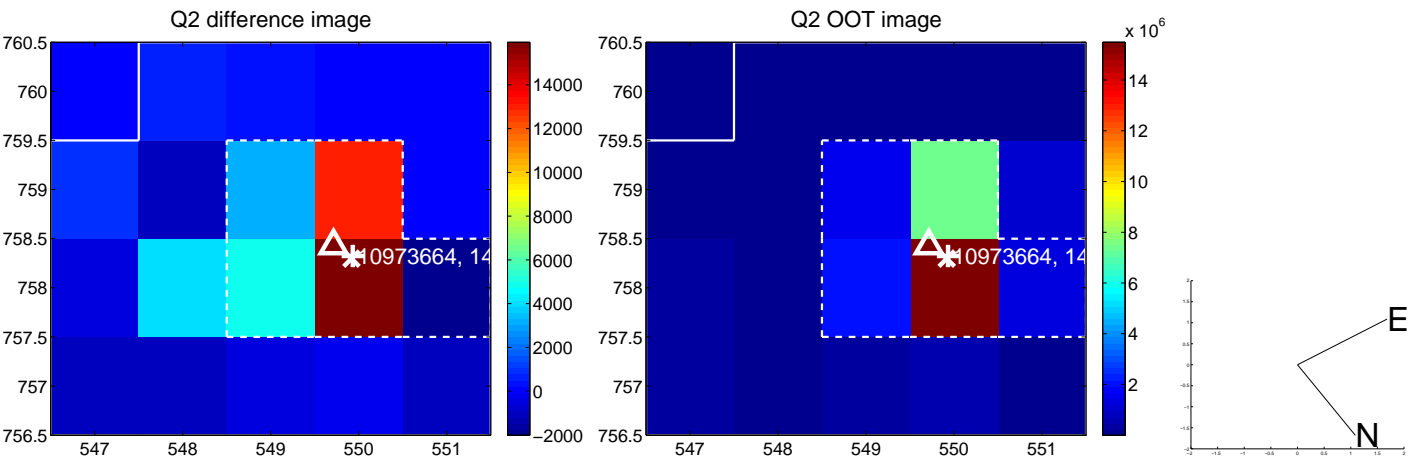
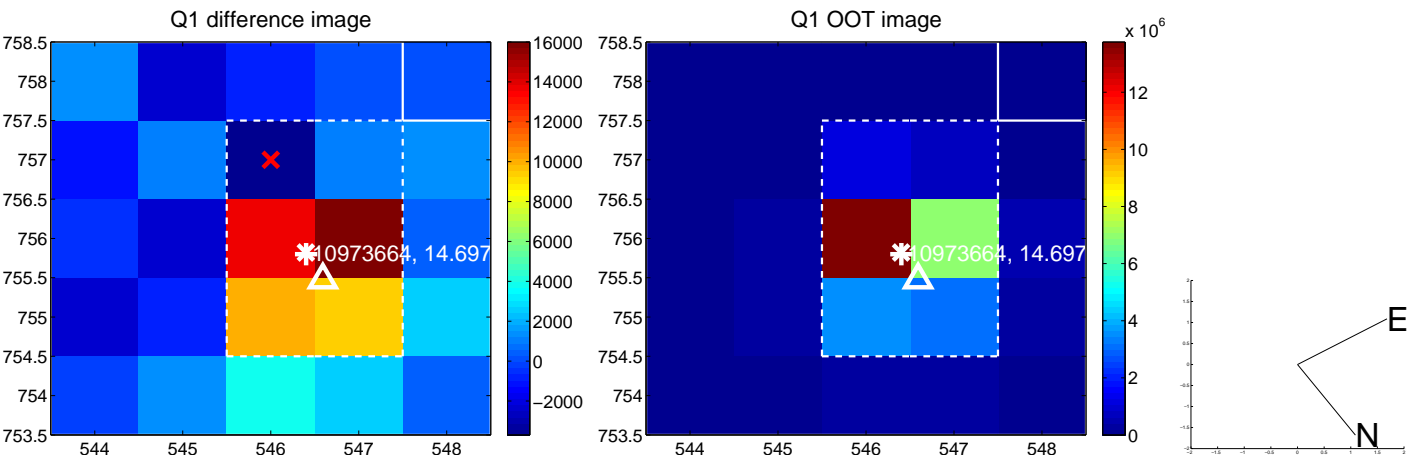
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.005 ± 0.123	0.04	0.005 ± 0.120	-0.001 ± 0.136
PRF-fit source offset from KIC position	0.101 ± 0.118	0.86	0.078 ± 0.107	0.064 ± 0.149
photometric centroid source offset	0.16 ± 0.22	0.71	-0.09 ± 0.23	-0.13 ± 0.22

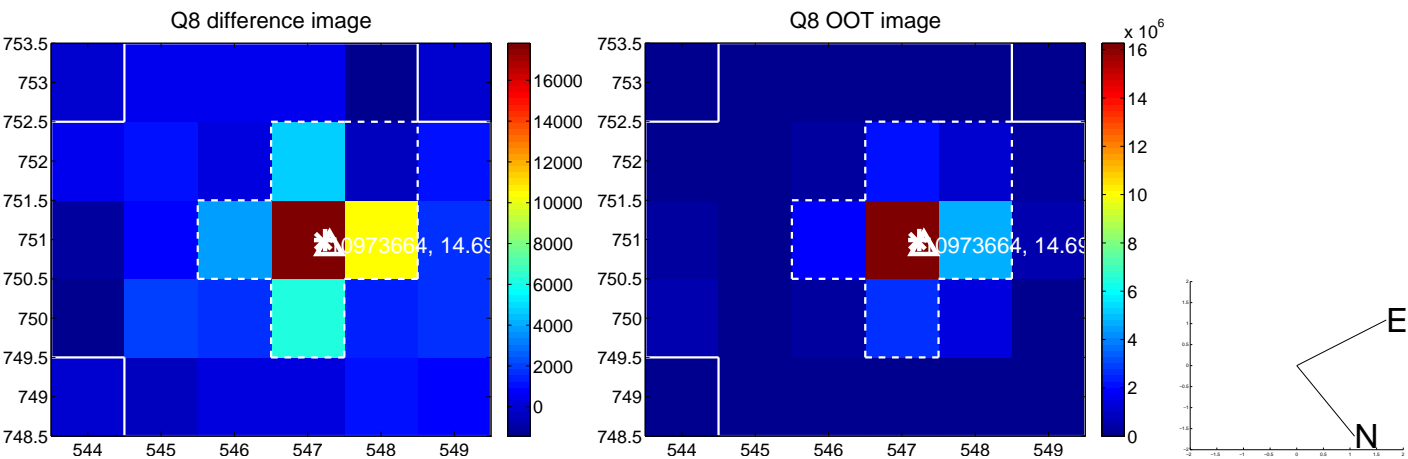
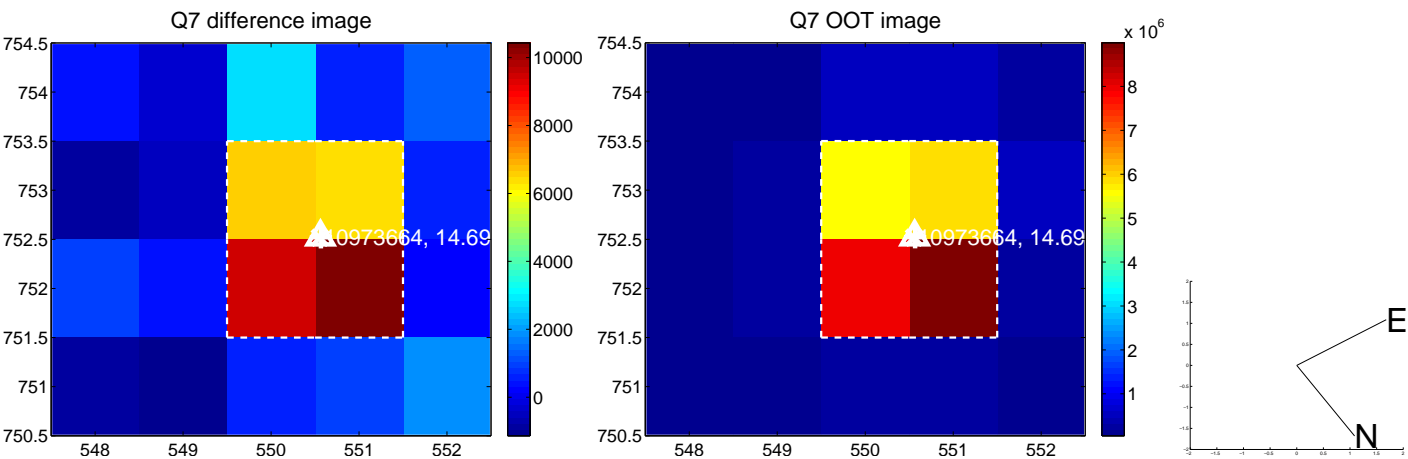
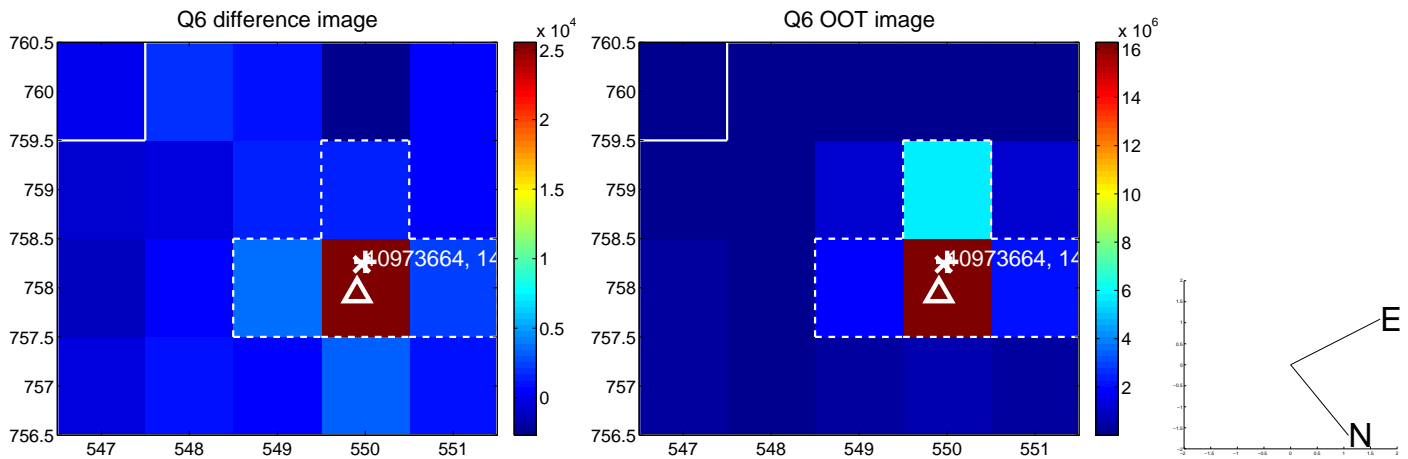
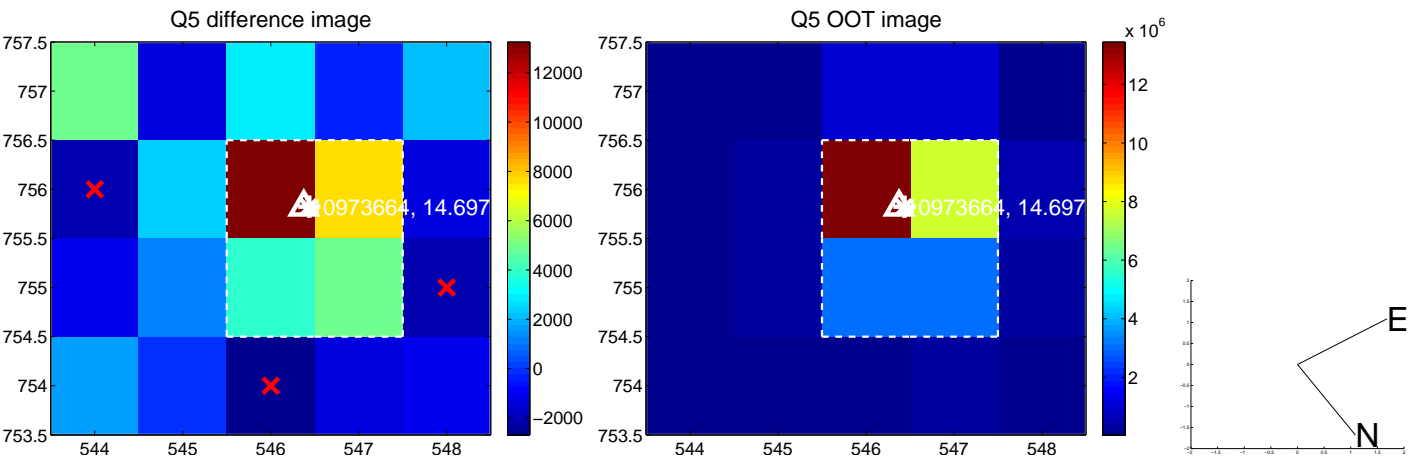


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

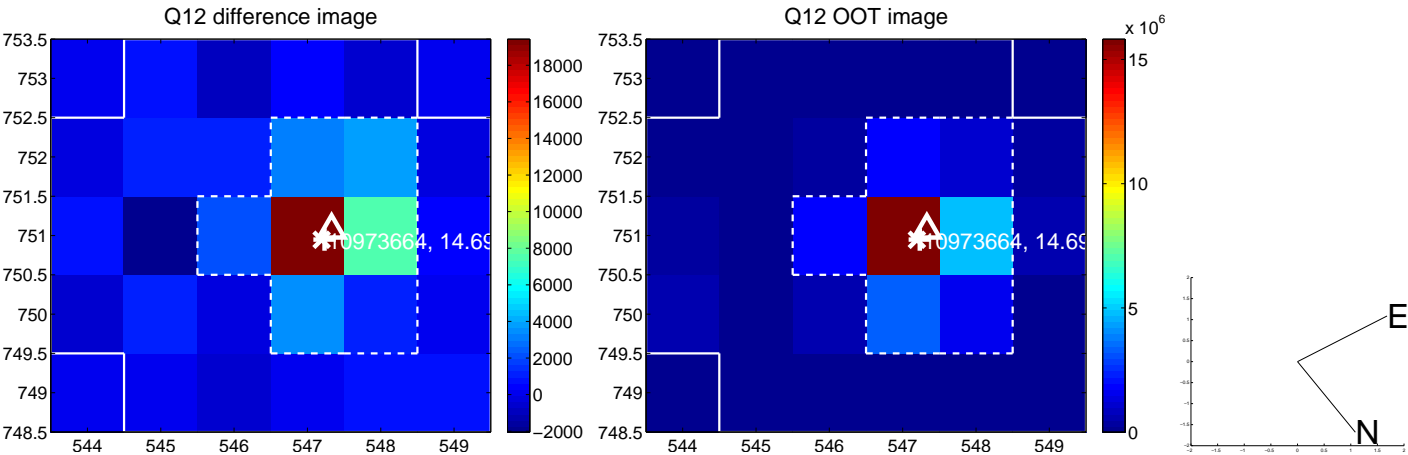
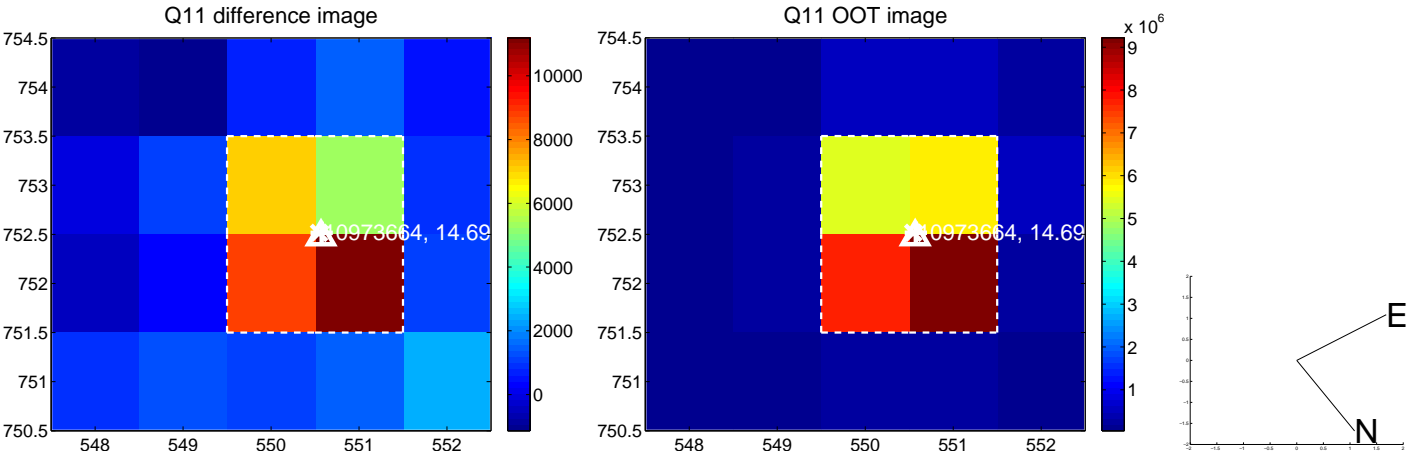
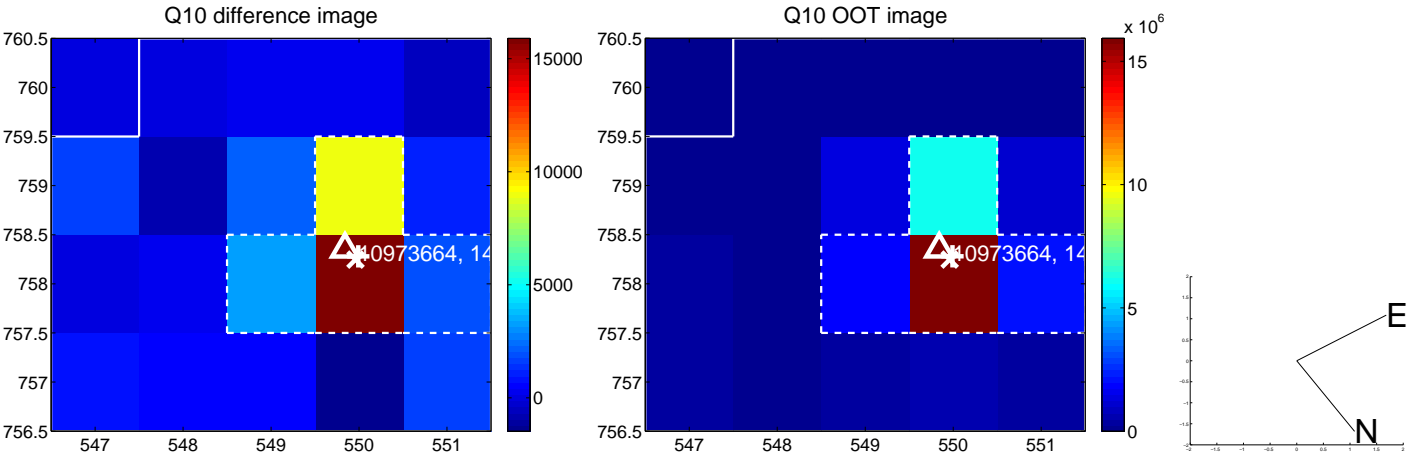
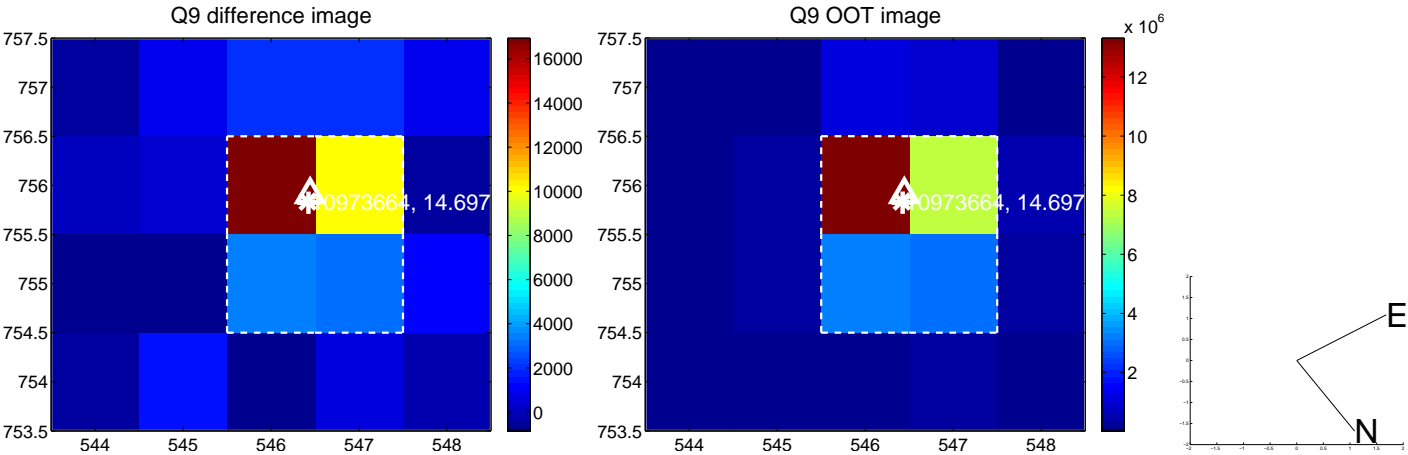
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



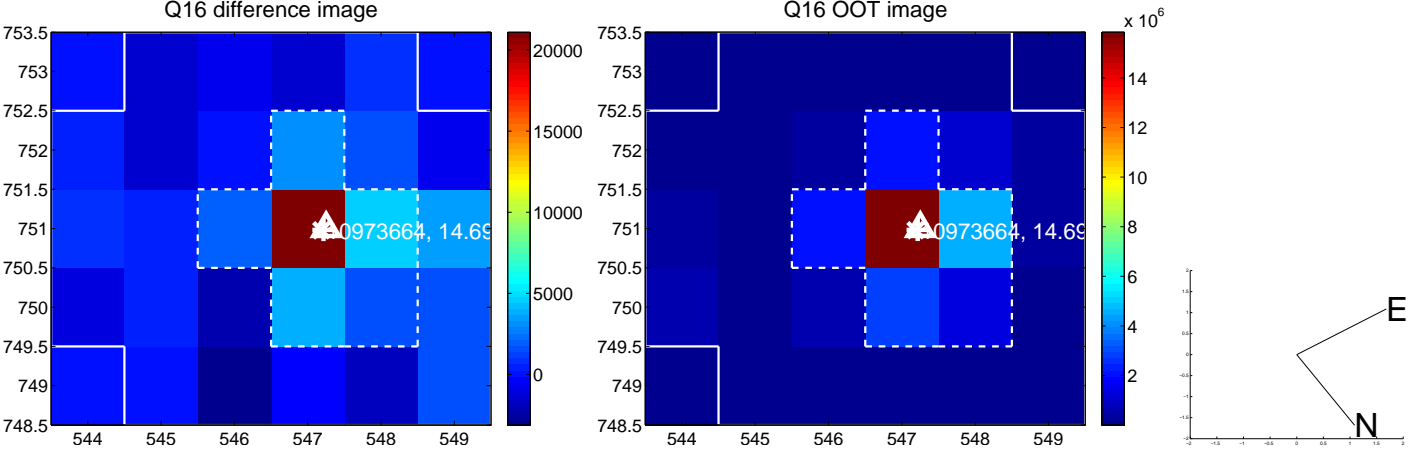
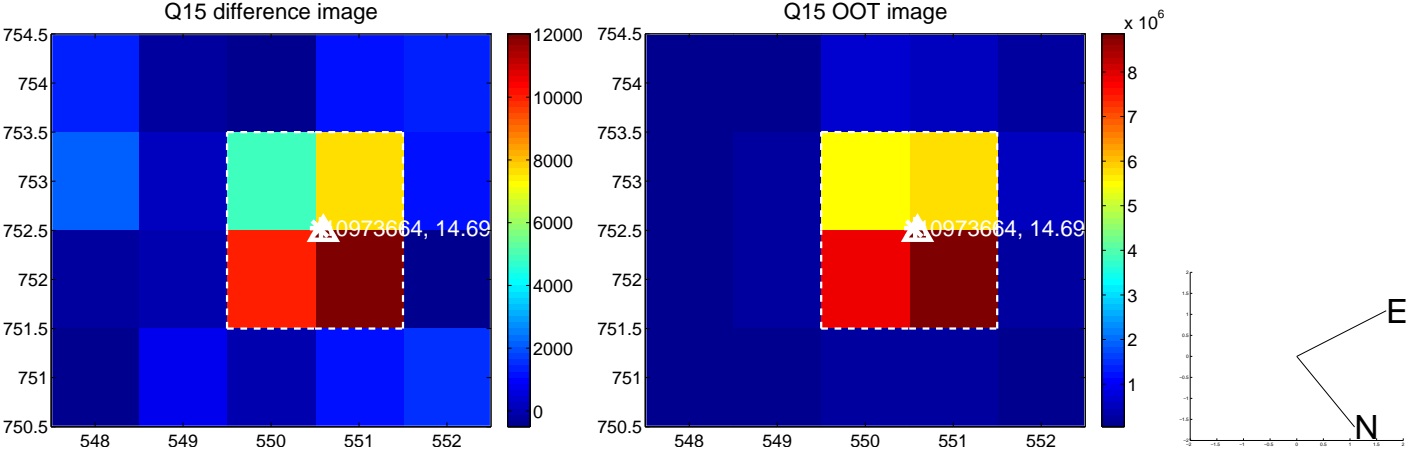
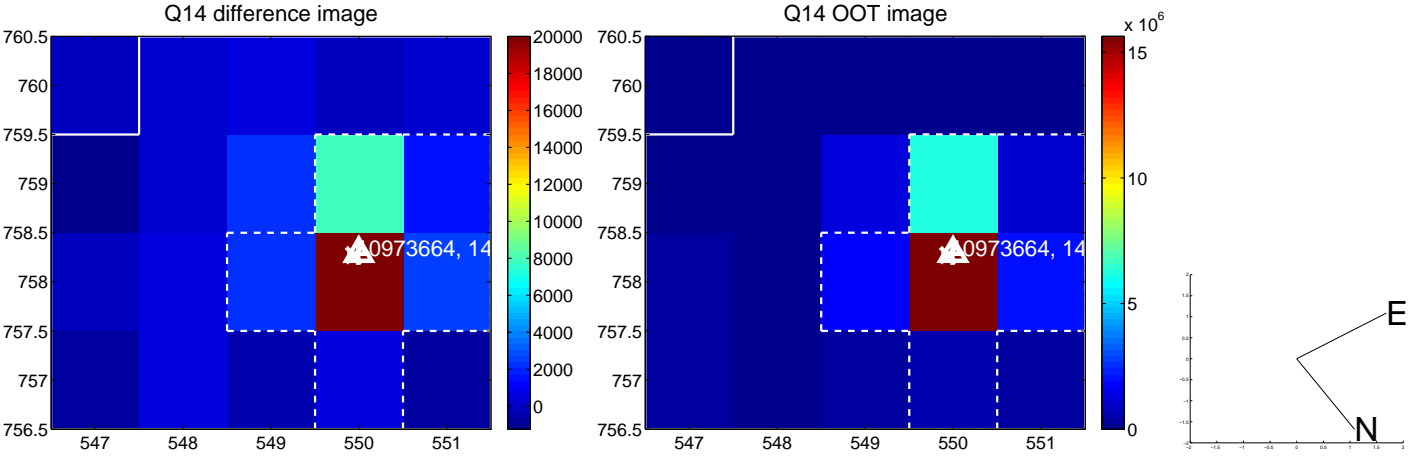
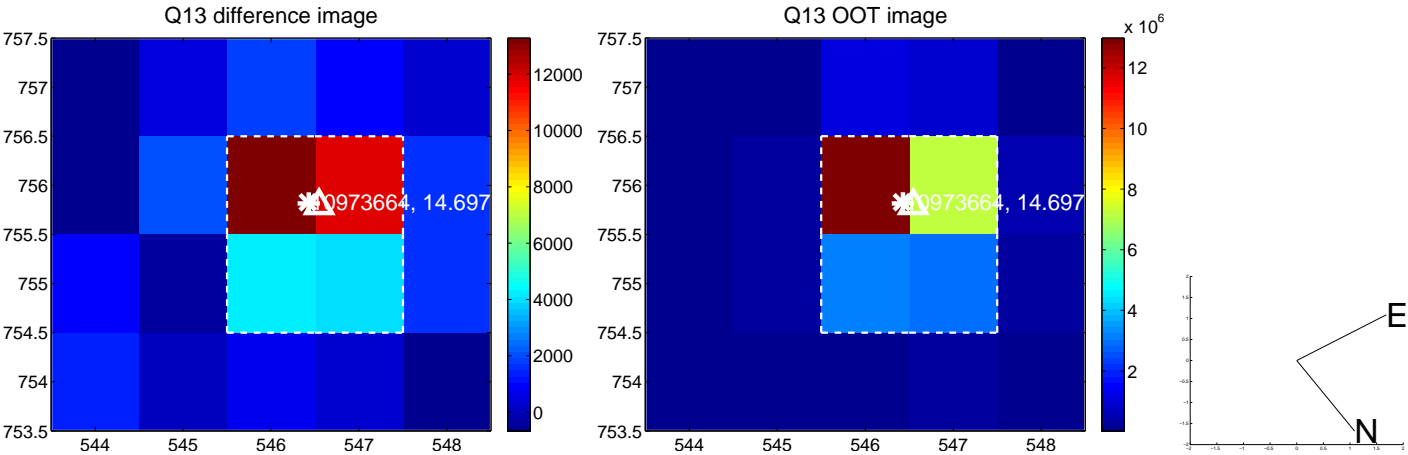
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



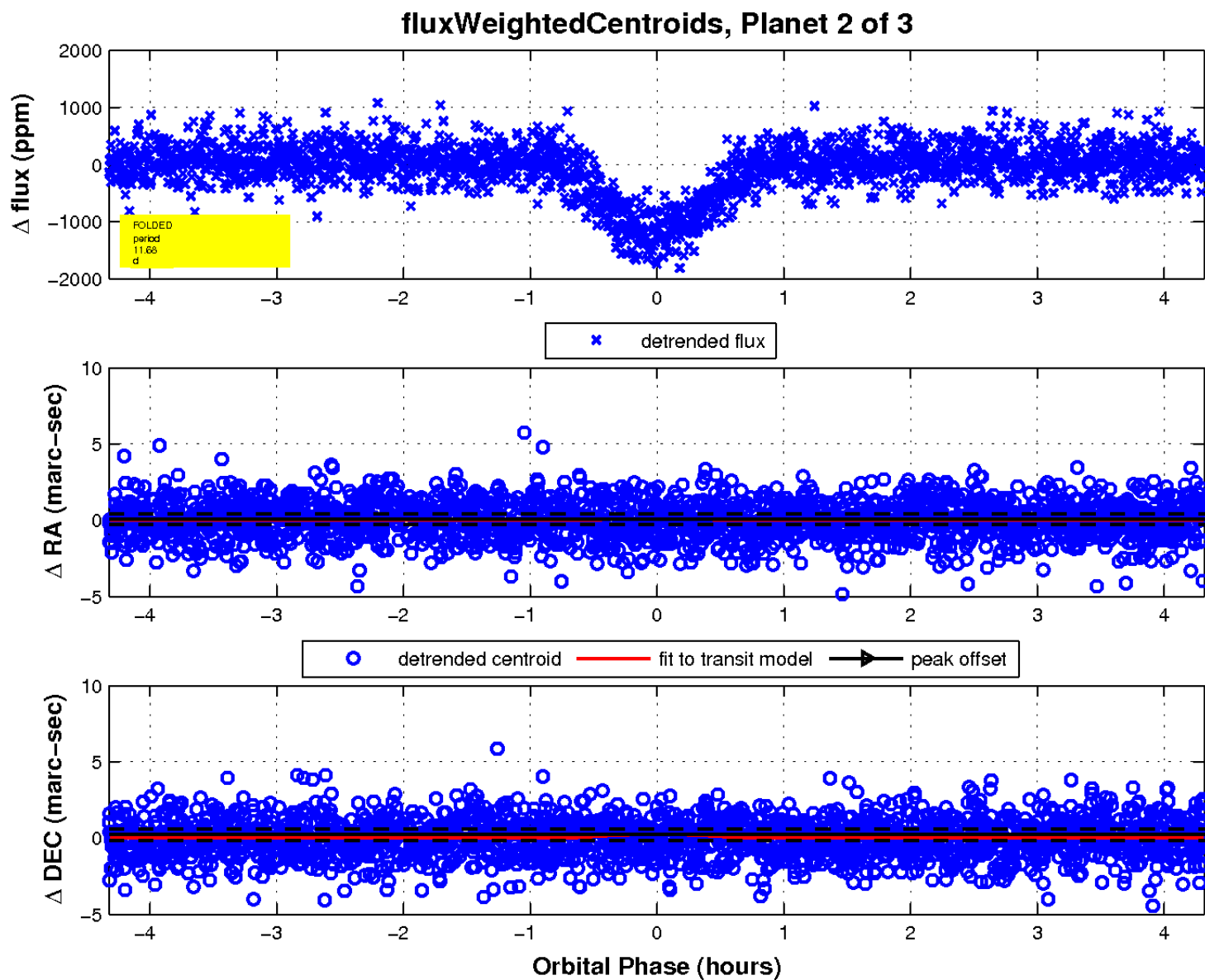
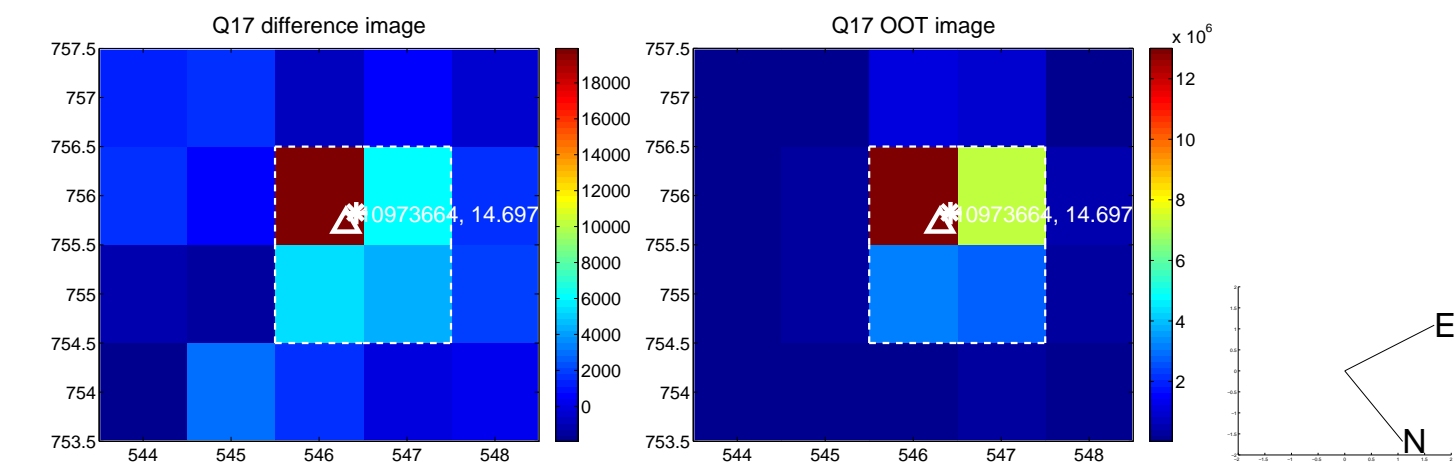
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

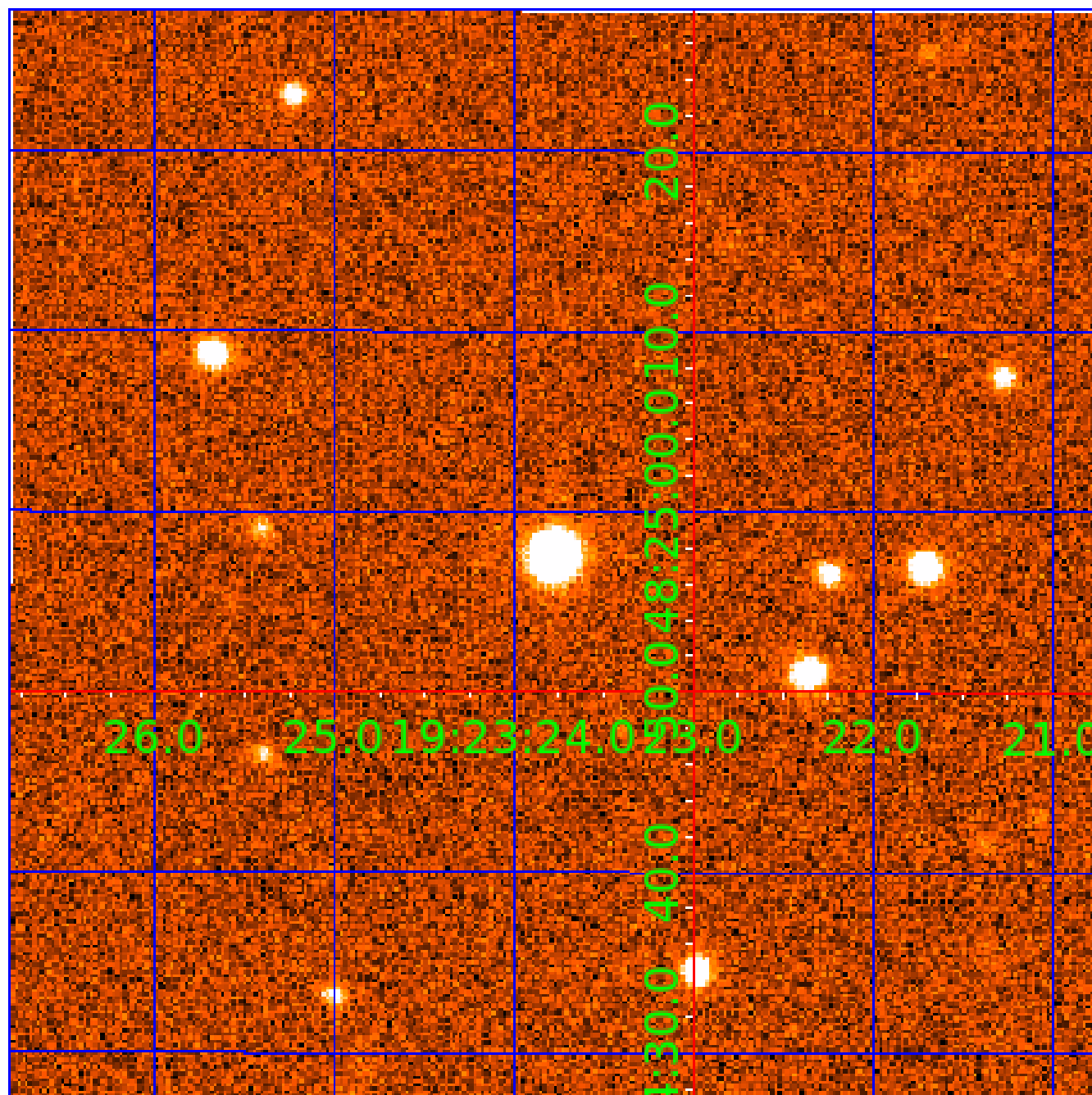


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010973664

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})
010973664-01	OBS	0601.01	5.404273	134.355483	787.0	2.539	57.0	61.3	0.96	6122	2.96	313.48
010973664-02	OBS	0601.02	11.678940	143.191115	1242.3	1.442	43.0	49.9	0.96	6122	4.38	112.20
010973664-03	OBS	0601.03	1.208463	132.468353	225.1	1.605	29.0	33.6	0.96	6122	1.70	2309.62

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010973664-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010973664-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010973664-03	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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

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

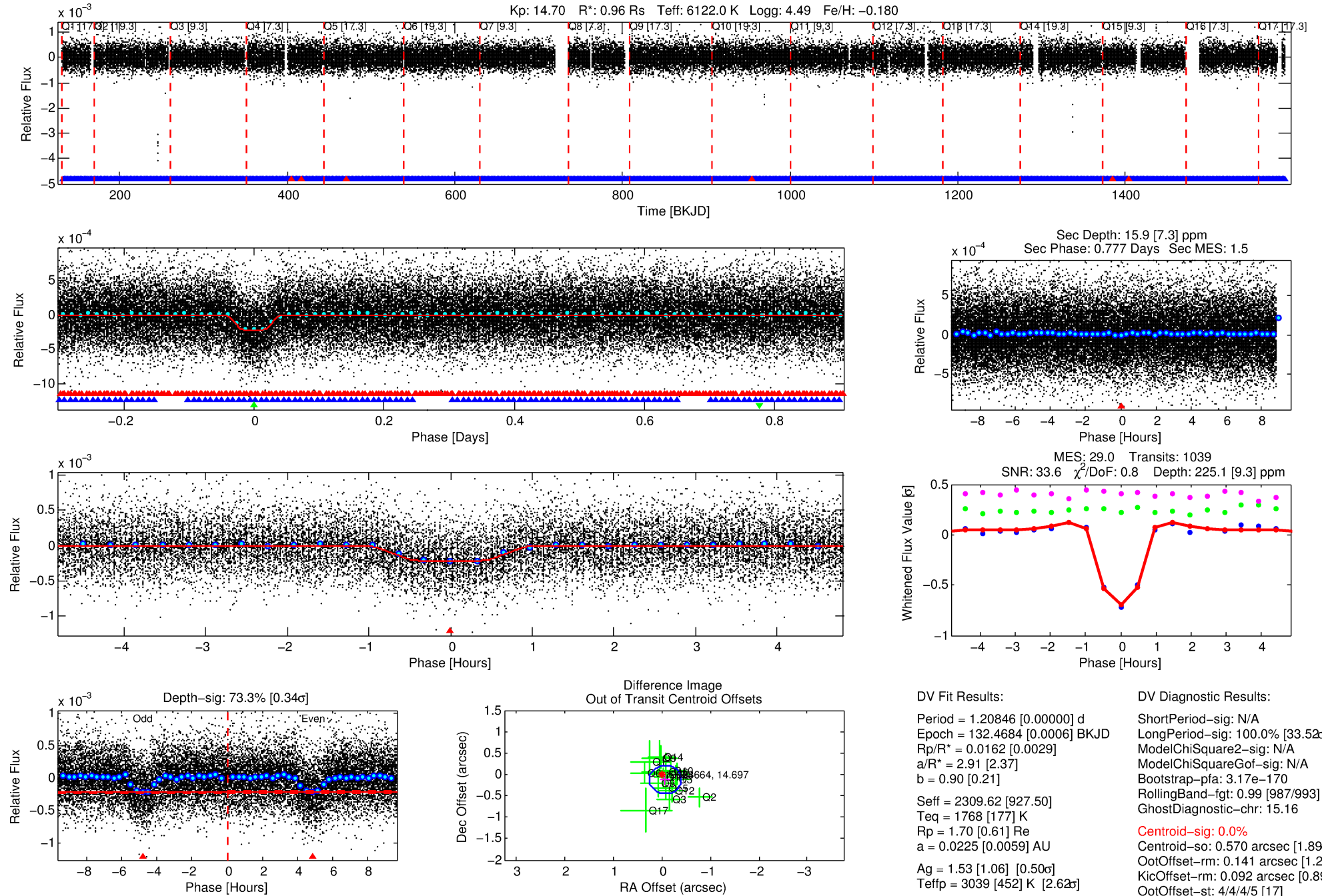
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010973664-03

No Significant Match Found

DV One-Page Summary

KIC: 10973664 Candidate: 3 of 3 Period: 1.208 d
KOI: K00601.03 Corr: 0.970



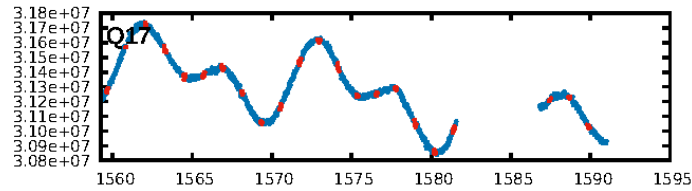
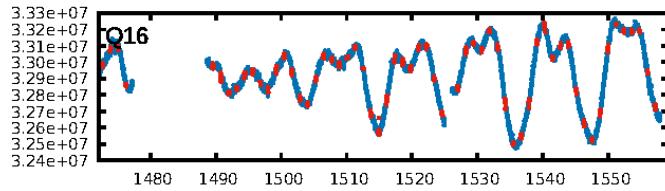
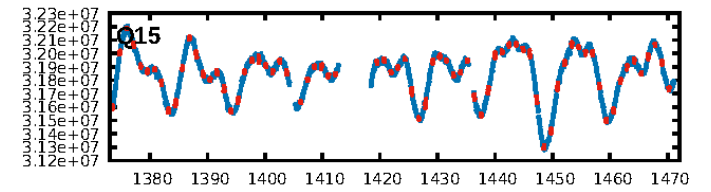
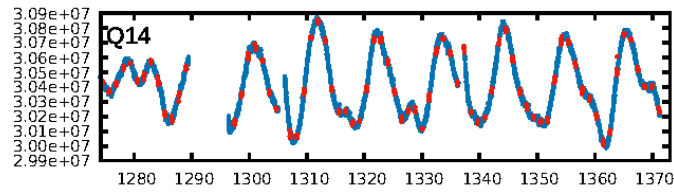
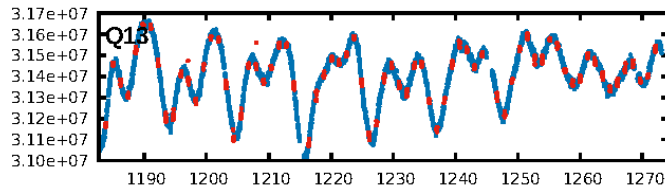
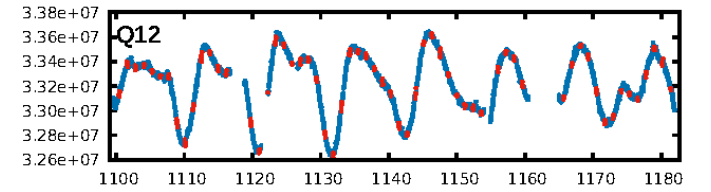
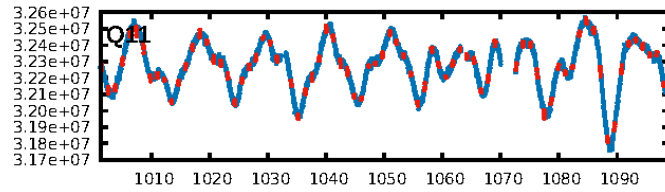
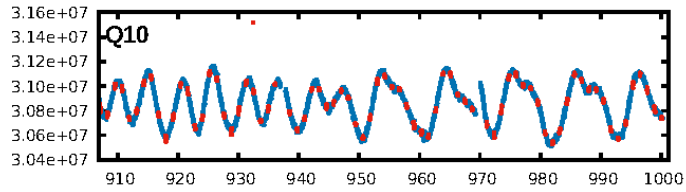
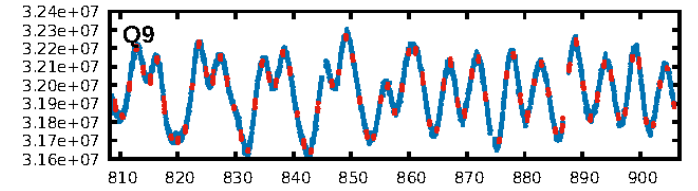
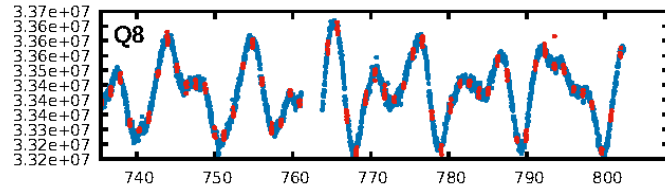
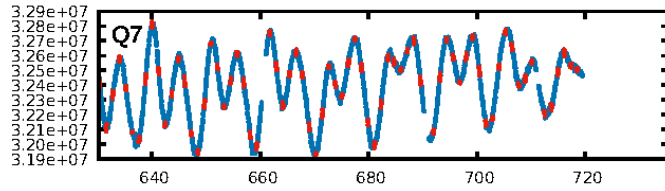
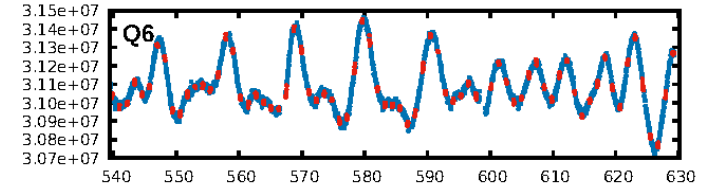
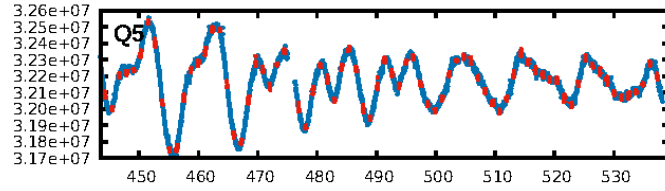
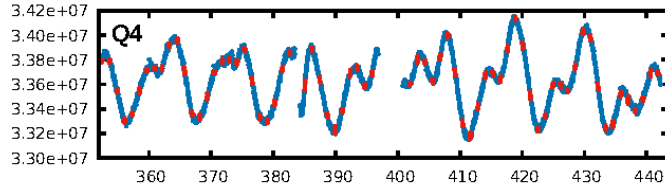
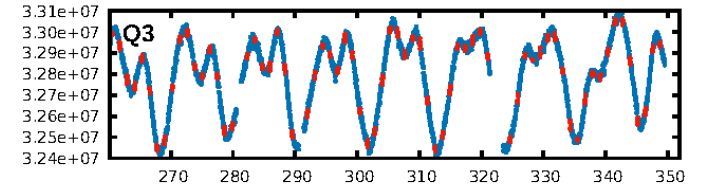
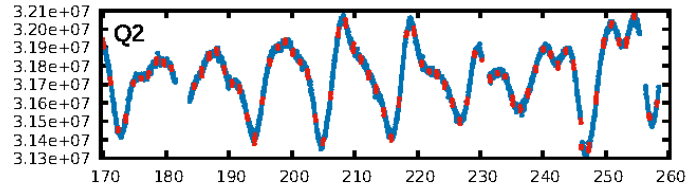
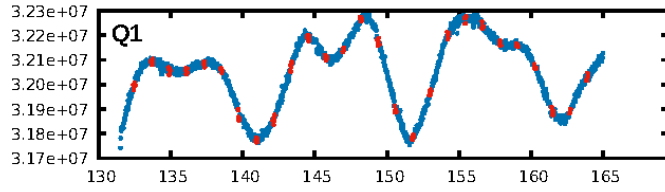
DV Fit Results:

Period = 1.20846 [0.00000] d
Epoch = 132.4684 [0.0006] BKJD
Rp/R* = 0.0162 [0.0029]
a/R* = 2.91 [2.37]
b = 0.90 [0.21]
Seff = 2309.62 [927.50]
Teff = 1768 [177] K
Rp = 1.70 [0.61] Re
a = 0.0225 [0.0059] AU
Ag = 1.53 [1.06] [0.50 σ]
Teffp = 3039 [452] K [2.62 σ]

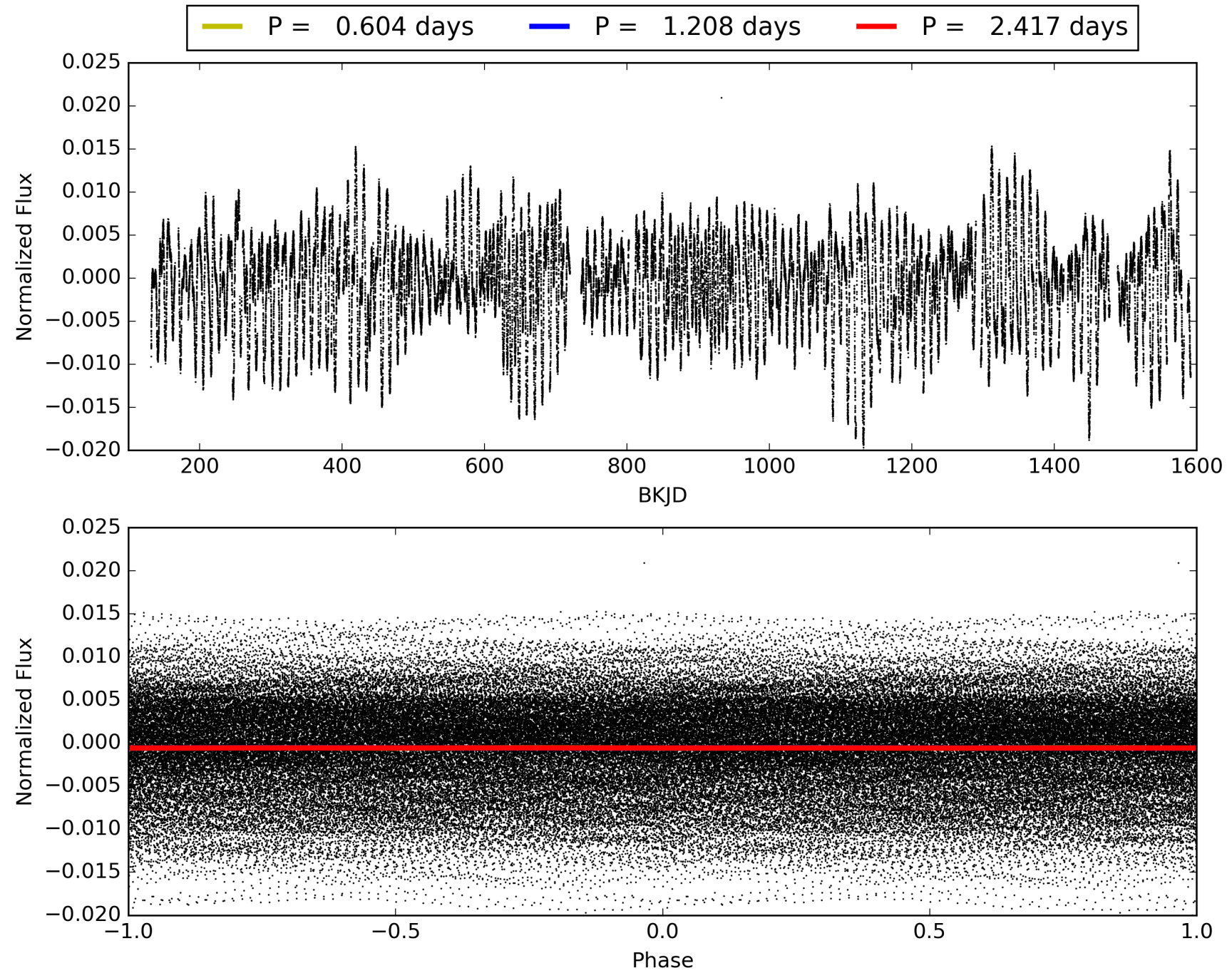
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [33.52 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.17e-170
RollingBand-fgt: 0.99 [987/993]
GhostDiagnostic-chr: 15.16
Centroid-sig: 0.0%
Centroid-so: 0.570 arcsec [1.89 σ]
OotOffset-rm: 0.141 arcsec [1.28 σ]
KicOffset-rm: 0.092 arcsec [0.89 σ]
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 010973664-03, PDC Light Curves

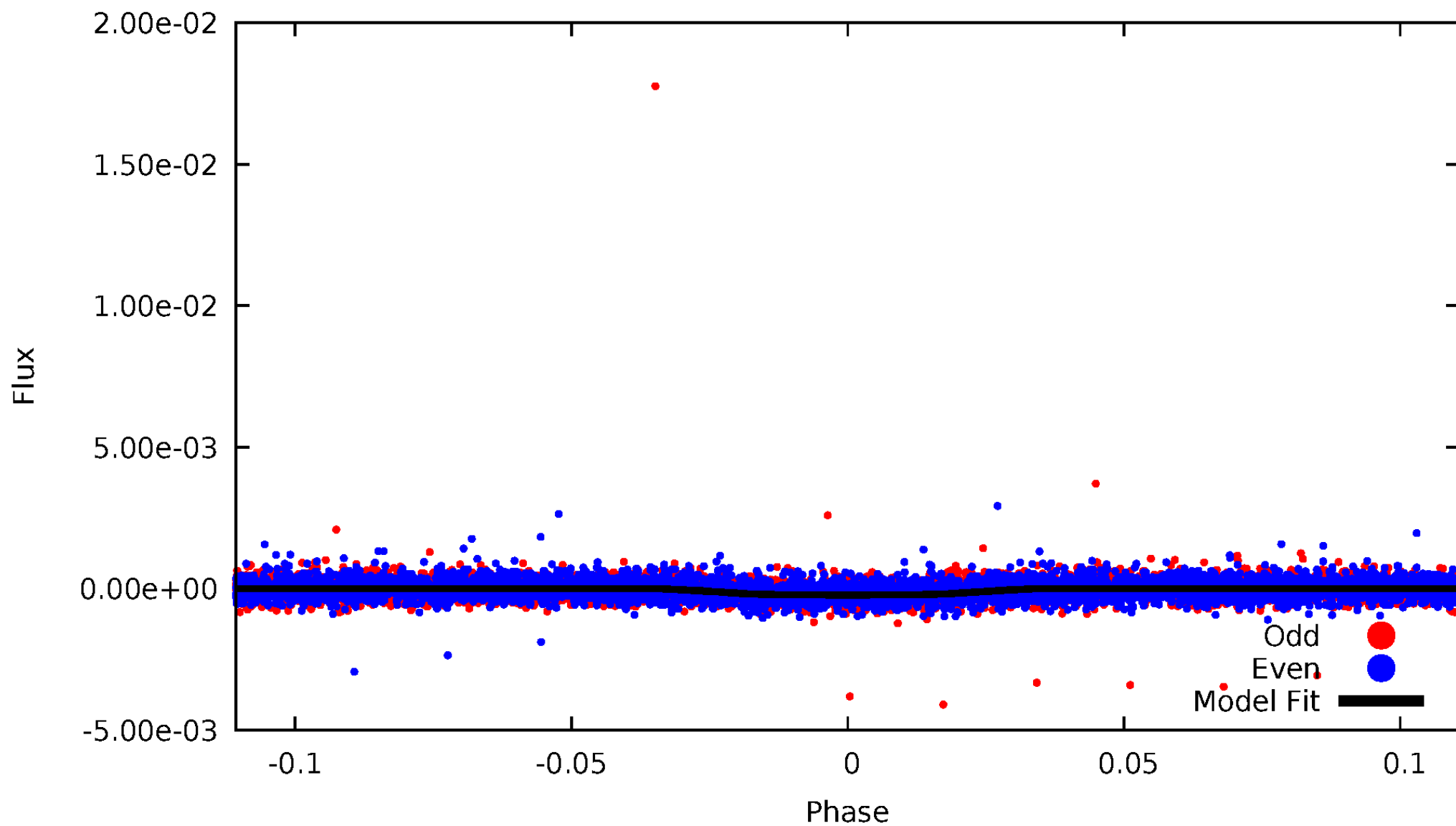


TCE 010973664-03



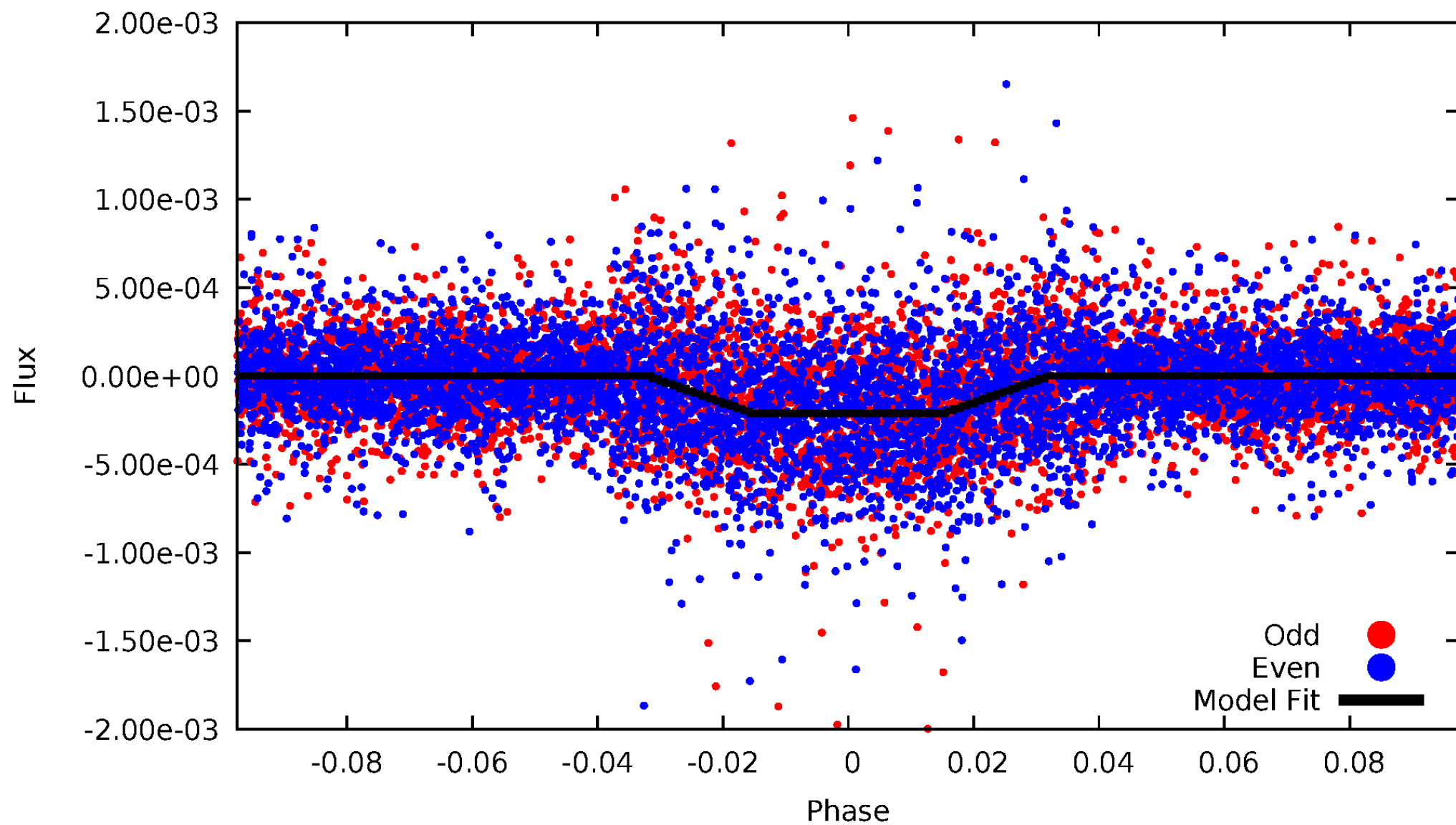
DV Odd/Even

TCE 010973664-03

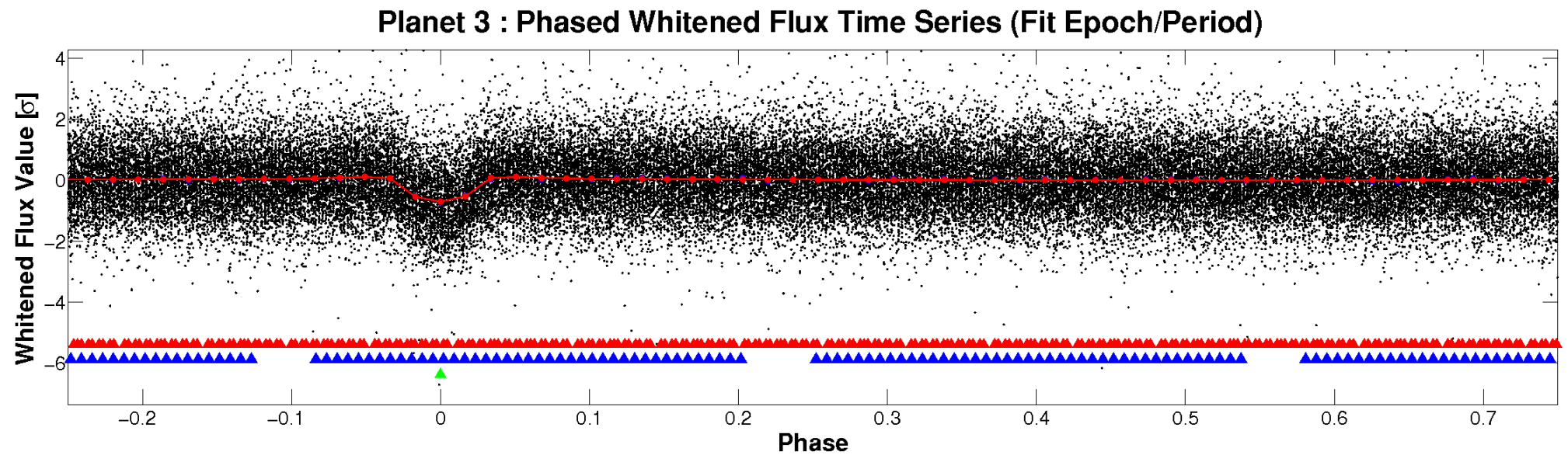
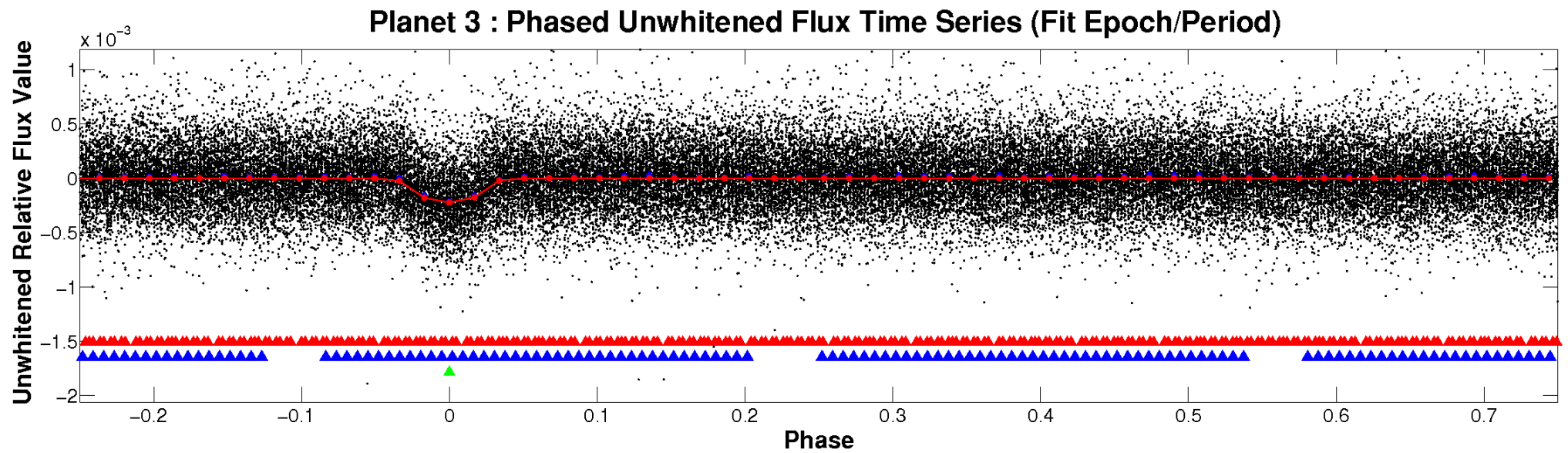


ALT Odd/Even

TCE 010973664-03

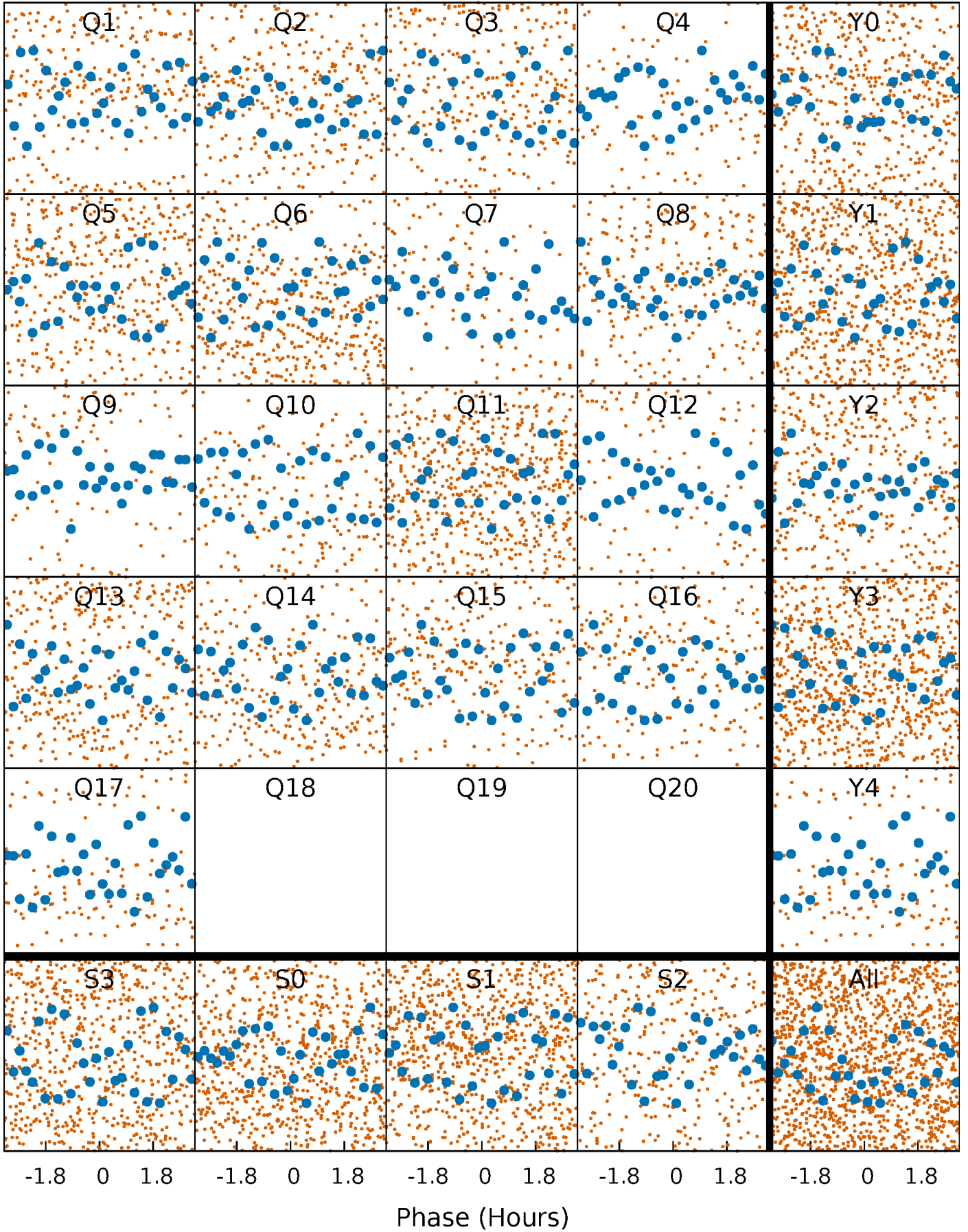


Non-Whitened Vs. Whitened Light Curve



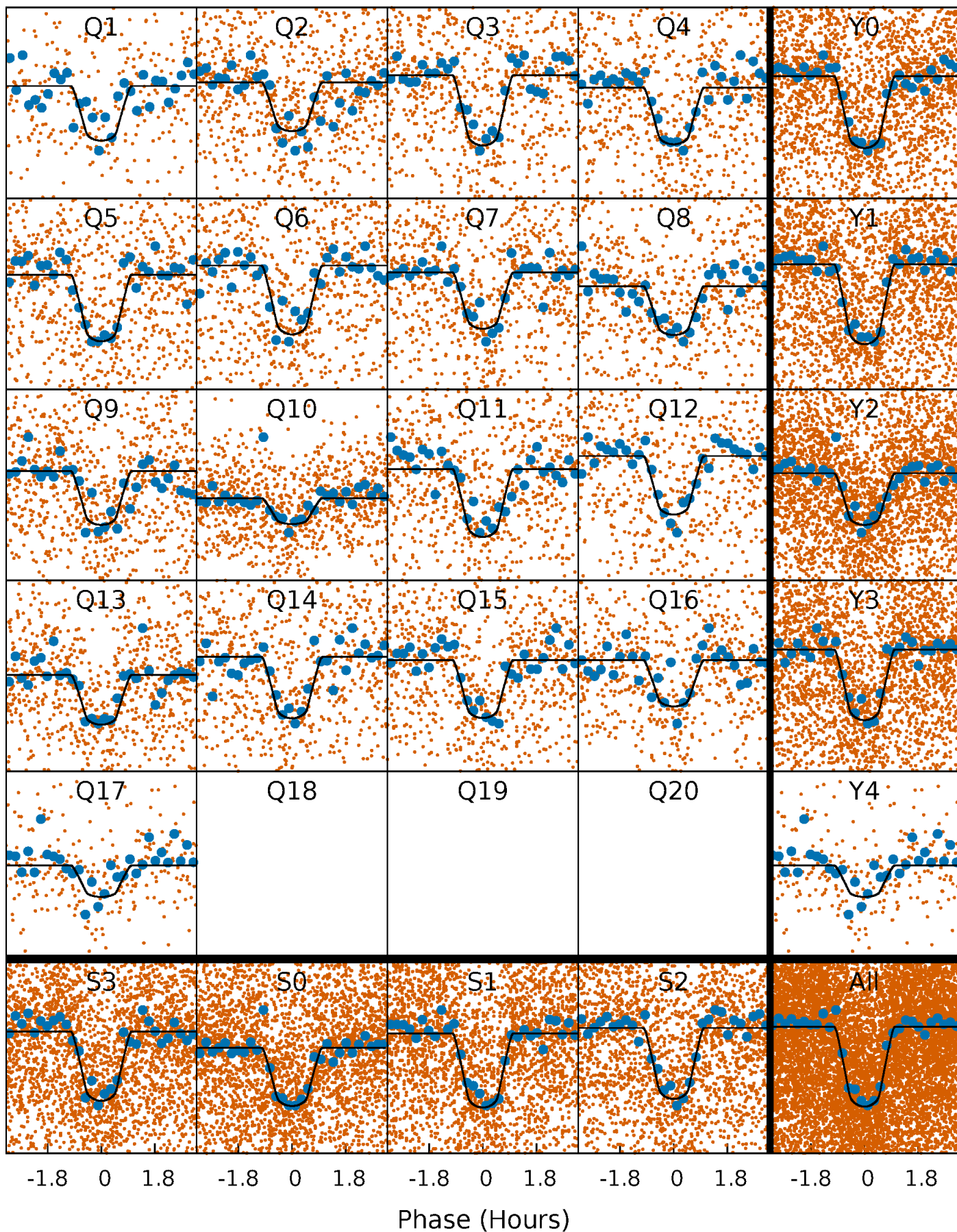
PDC Quarter-Phased Transit Curves

TCE 010973664-03 P= 1.208463 Days $T_0=132.468353$ (BKJD)



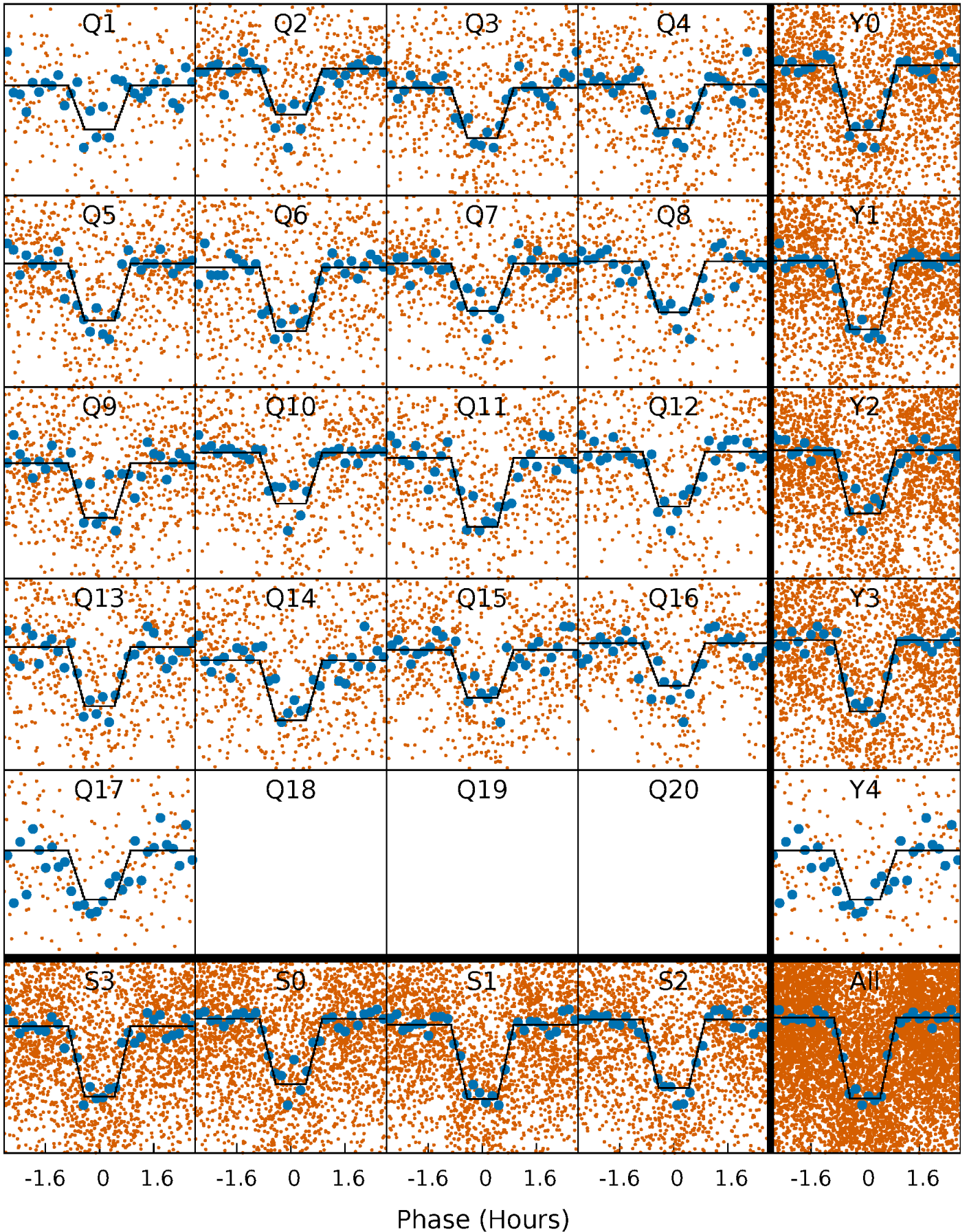
DV Quarter-Phased Transit Curves

TCE 010973664-03 P= 1.208463 Days $T_0=132.468353$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

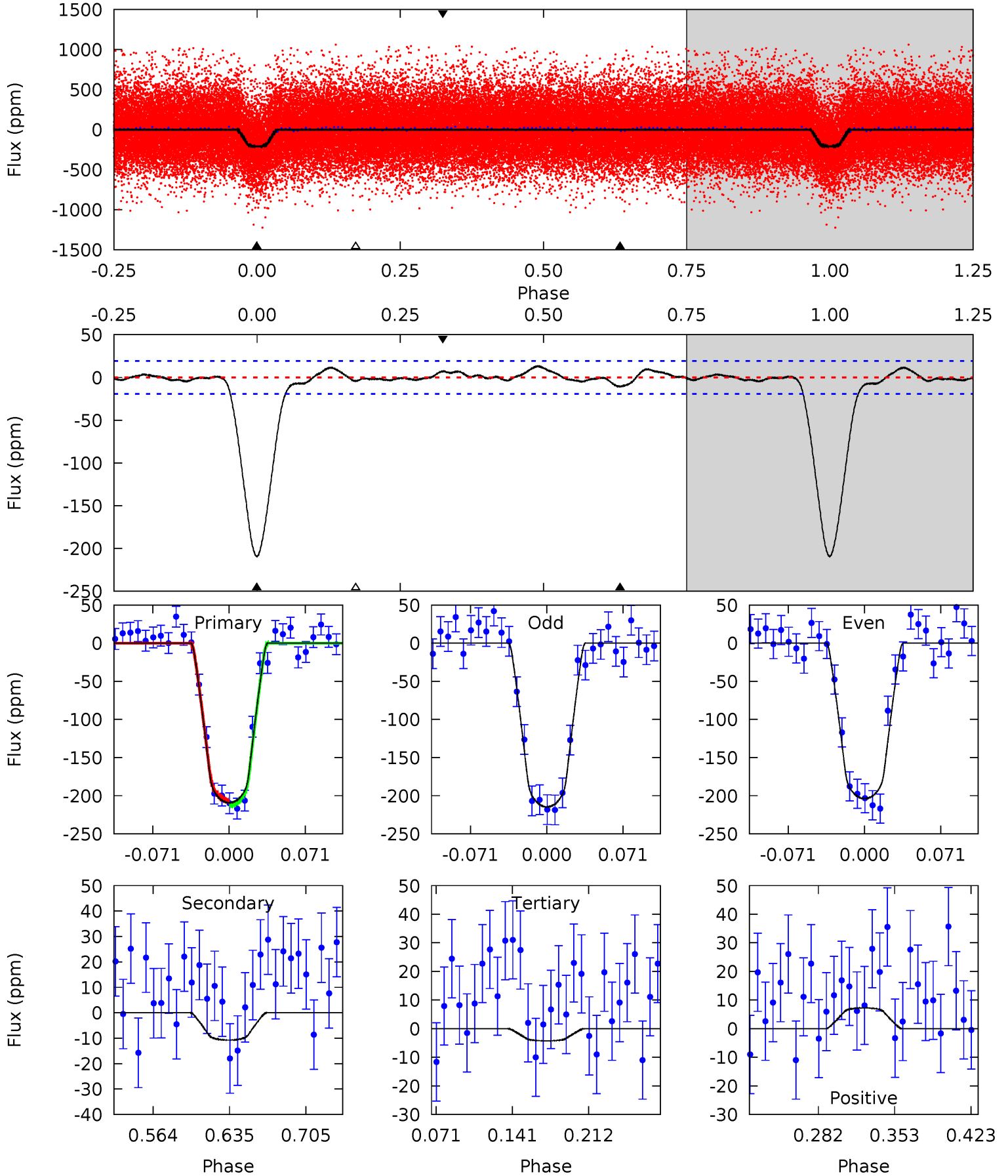
TCE 010973664-03 P= 1.208457 Days $T_0=132.471581$ (BKJD)



DV Model-Shift Uniqueness Test

010973664-03, P = 1.208463 Days, E = 131.259890 Days

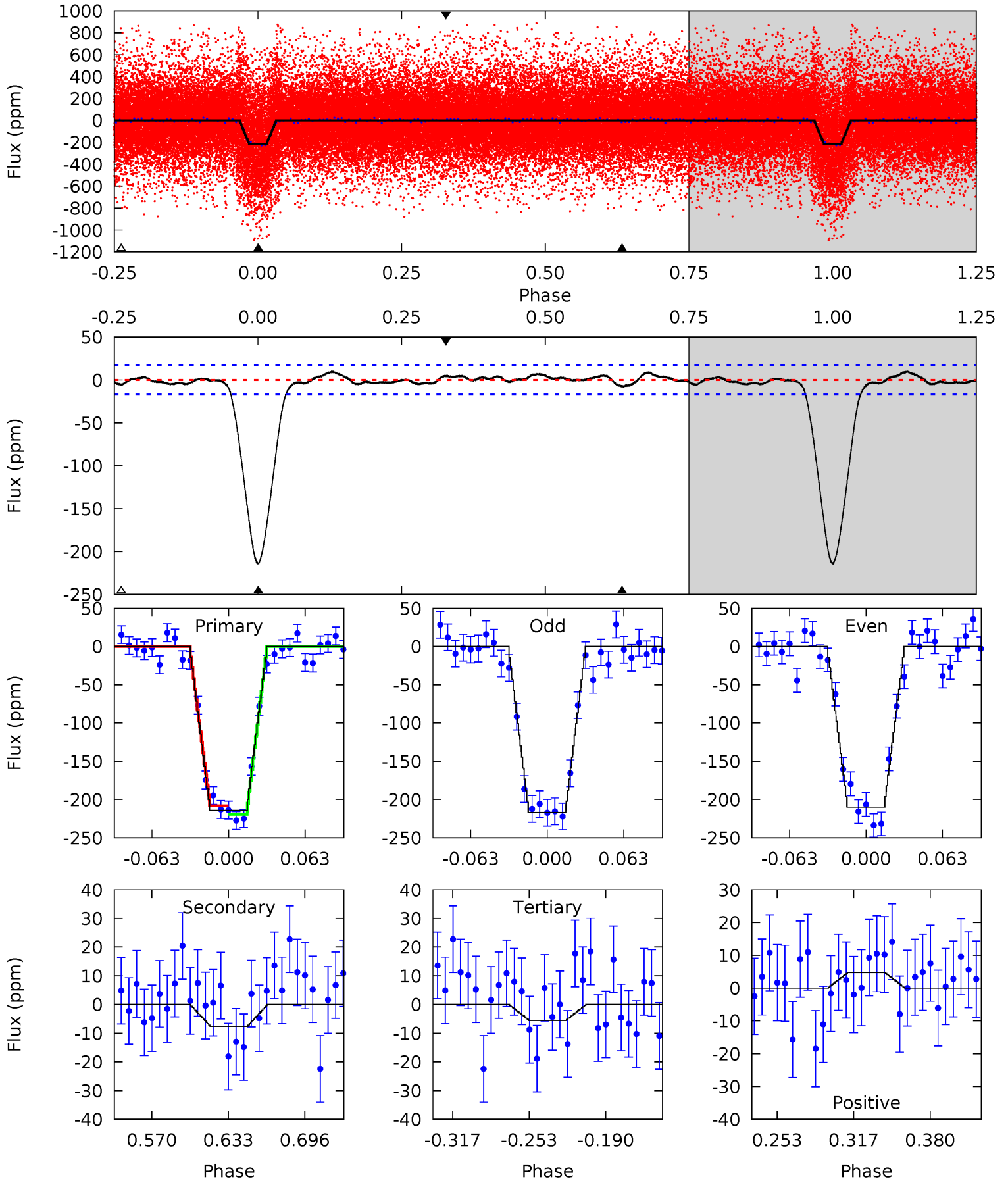
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
50.6	2.60	1.03	1.76	4.64	1.81	1.04	49.6	48.8	1.57	0.84	1.32	1.00	0.06	0.74



Alt Model-Shift Uniqueness Test

010973664-03, P = 1.208457 Days, E = 131.263124 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
58.5	2.10	1.51	1.30	4.66	1.86	0.90	57.0	57.2	0.59	0.79	0.90	0.98	0.04	1.55



Stellar Parameters For KIC 010973664

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6122^{+169}_{-190}	$4.487^{+0.052}_{-0.208}$	$-0.180^{+0.250}_{-0.350}$	$0.964^{+0.303}_{-0.101}$	$1.041^{+0.139}_{-0.139}$	$1.635^{+0.361}_{-0.863}$
	+3%/-3%	+1%/-5%	+139%/-194%	+31%/-10%	+13%/-13%	+22%/-53%
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 010973664-03 / KOI 0601.03

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-11 ± 4	$1.78^{+0.42}_{-0.36}$	2526^{+178}_{-117}	3093^{+380}_{-501}	$0.886^{+0.695}_{-0.434}$
Alt.	-8 ± 4	$1.62^{+0.42}_{-0.37}$	2522^{+205}_{-114}	3007^{+459}_{-729}	$0.798^{+0.678}_{-0.448}$

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

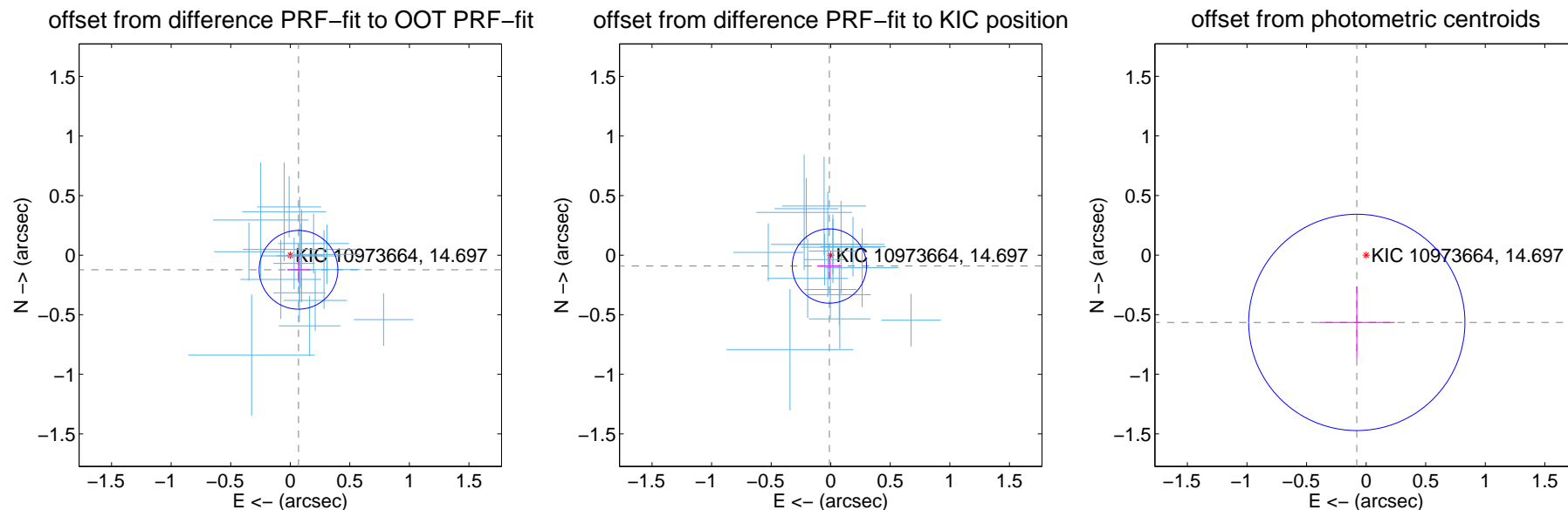
DV Centroid Data

Supplemental centroid analysis for 010973664-03. Kepler magnitude: 14.70. Transit SNR 33.62

There are 17 quarters with good PRF difference image offsets

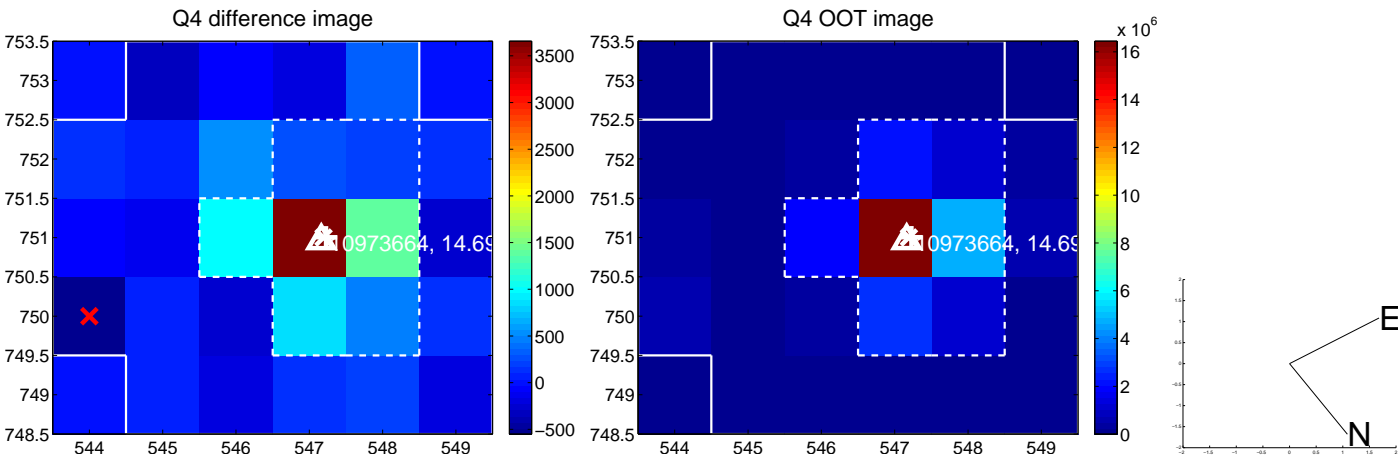
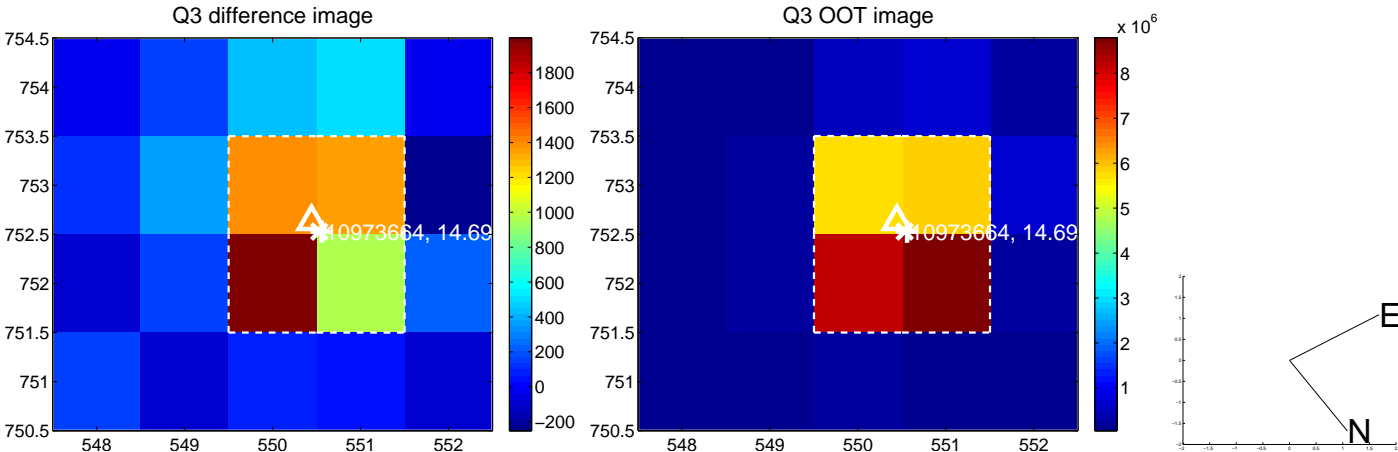
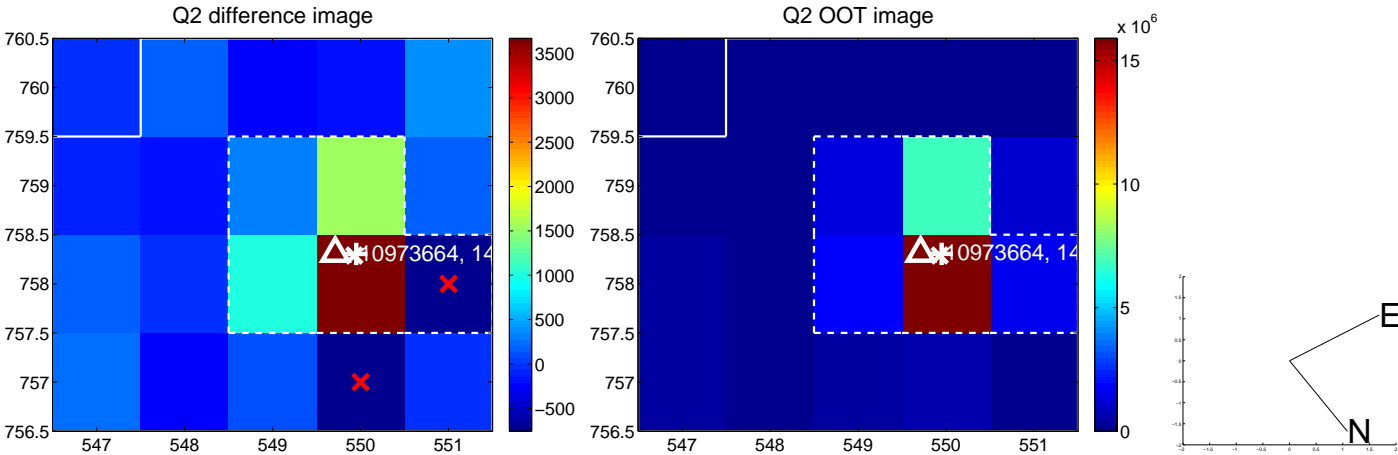
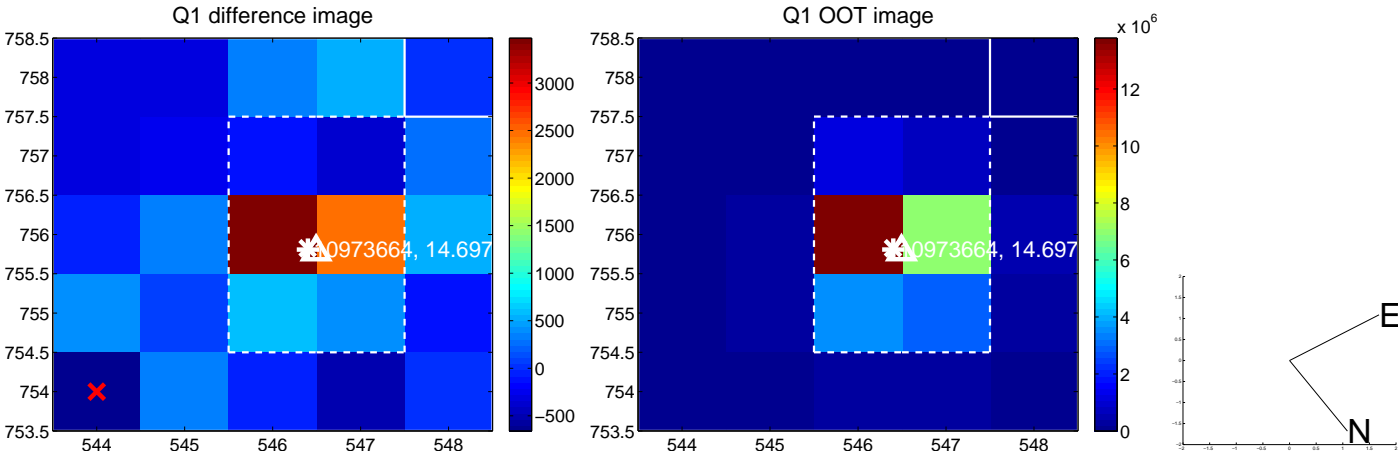
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.141 ± 0.110	1.28	-0.069 ± 0.094	-0.123 ± 0.107
PRF-fit source offset from KIC position	0.092 ± 0.104	0.89	0.011 ± 0.103	-0.091 ± 0.104
photometric centroid source offset	0.57 ± 0.30	1.89	0.08 ± 0.32	-0.56 ± 0.30

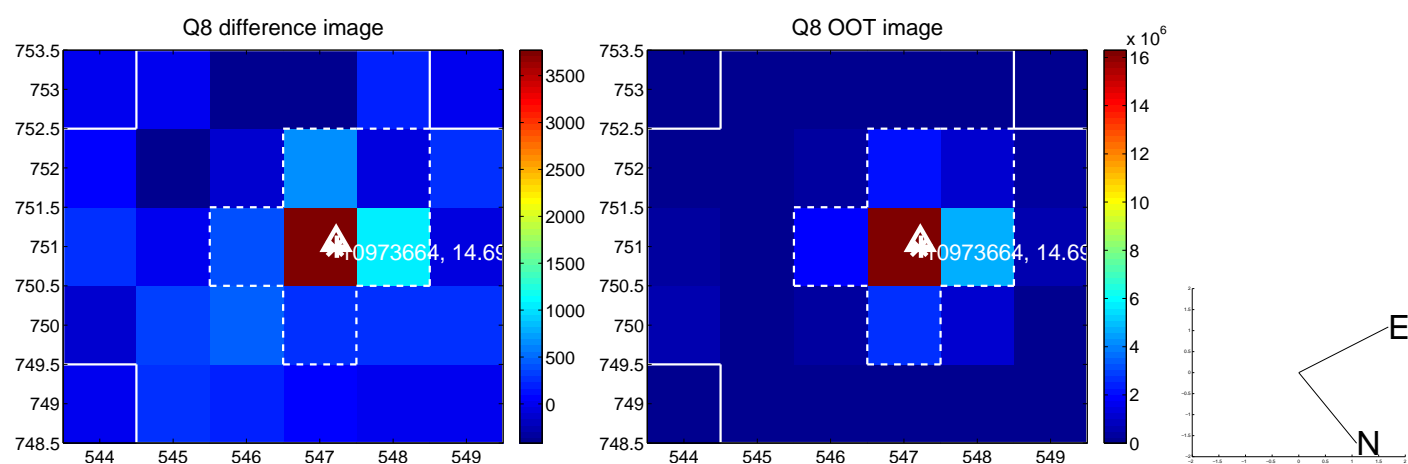
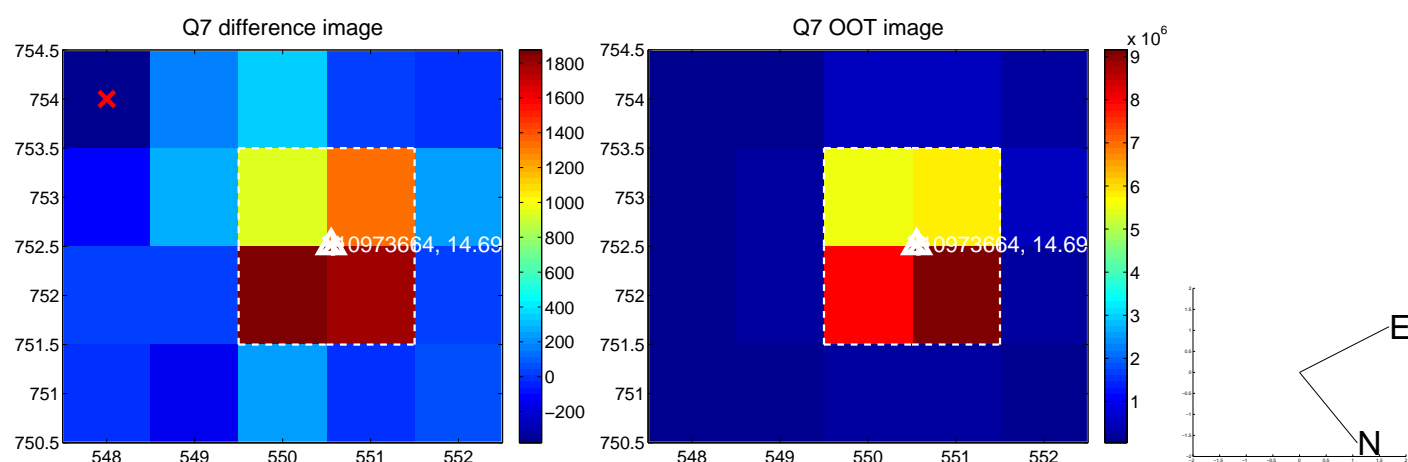
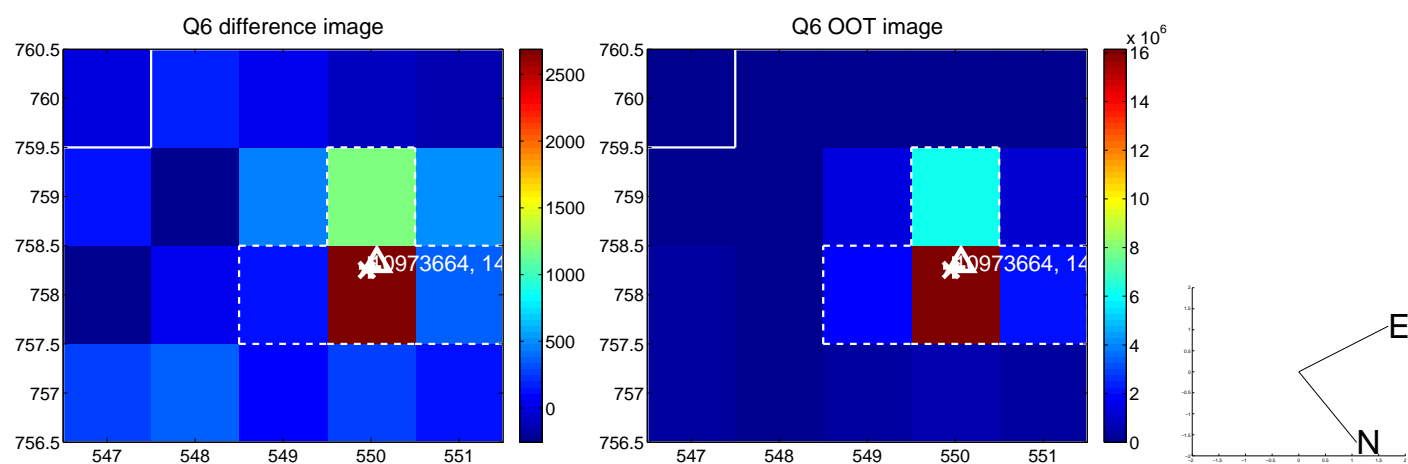
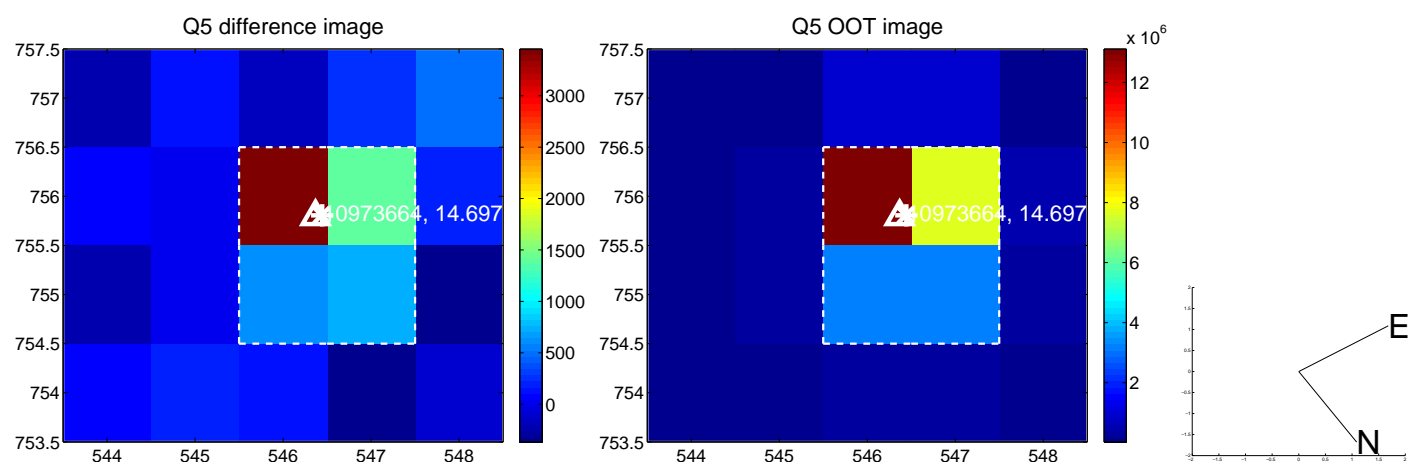


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

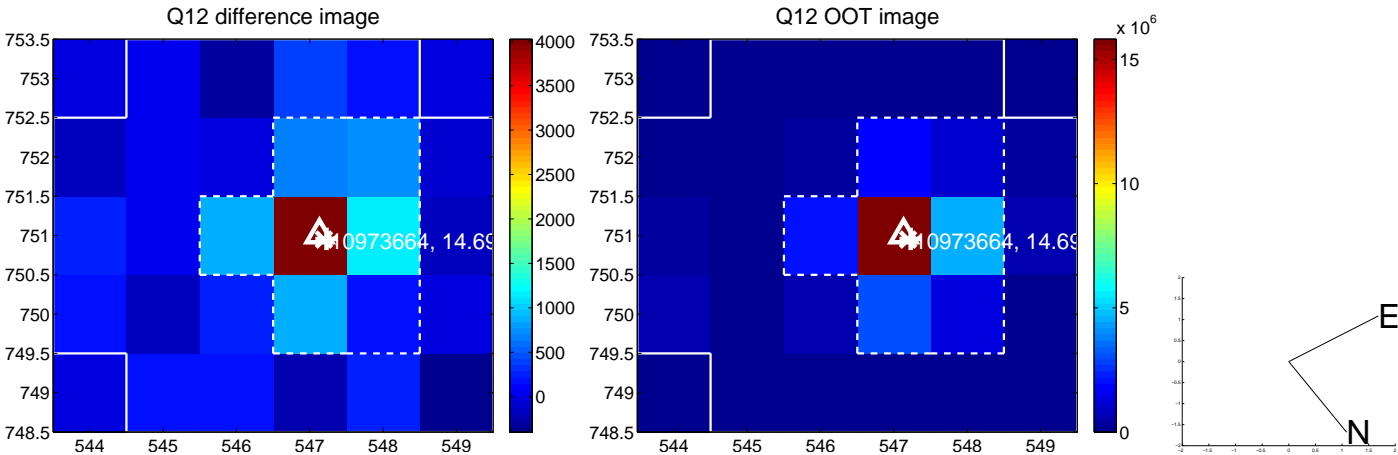
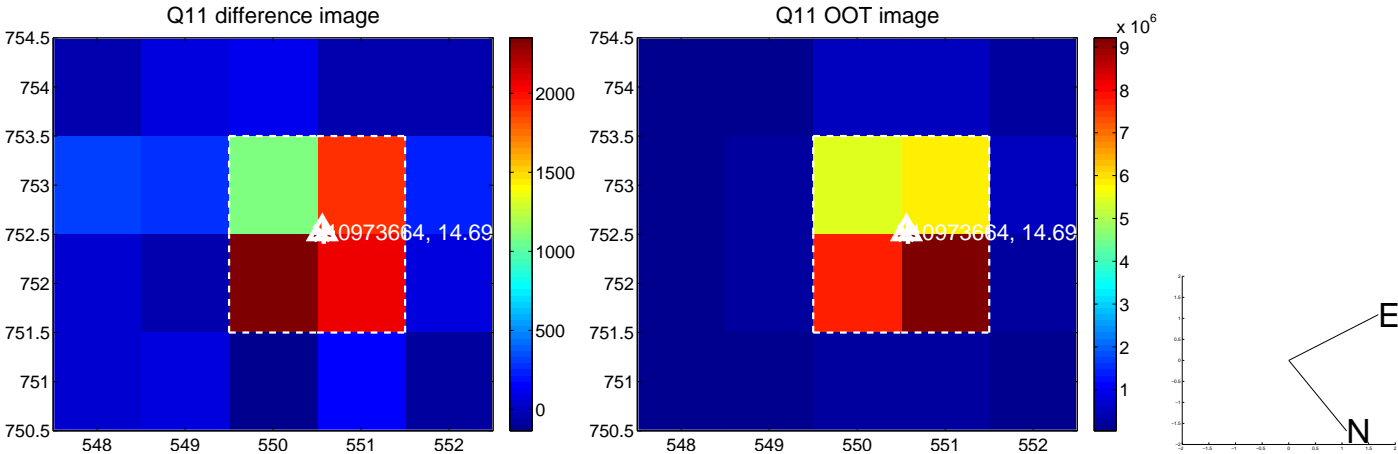
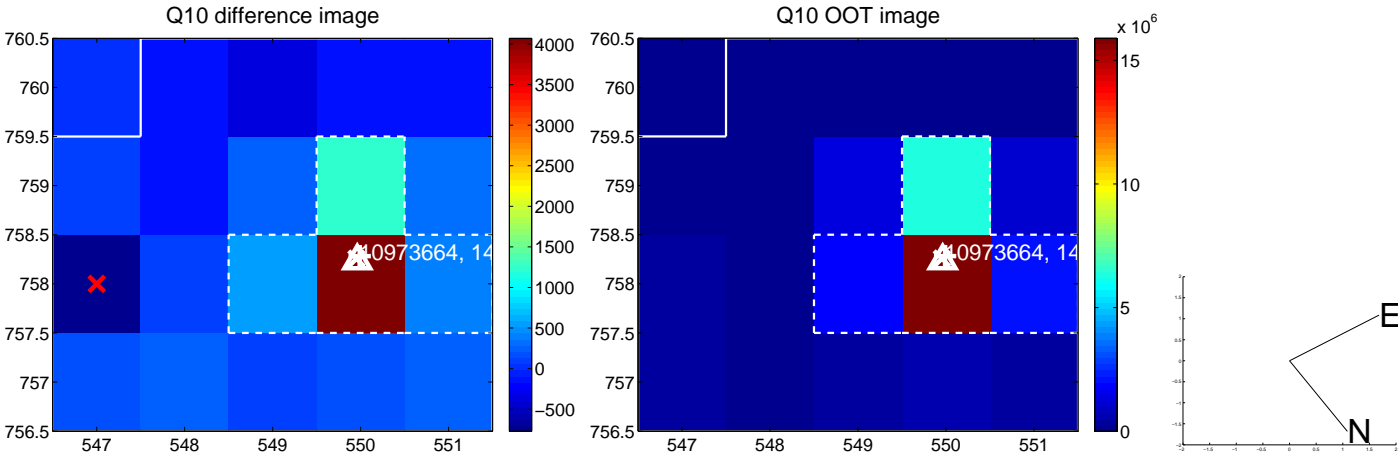
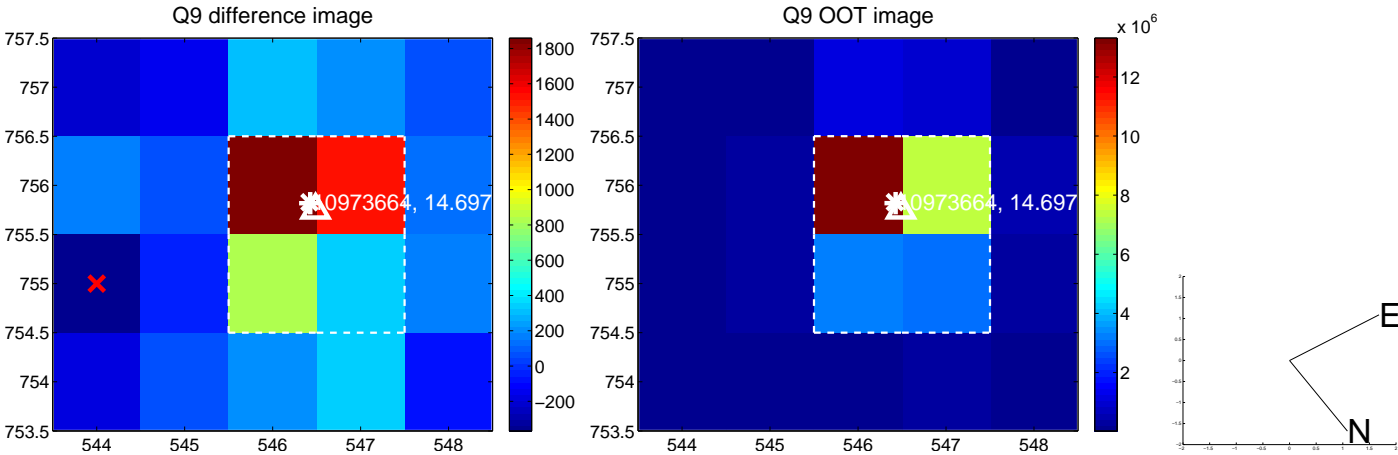
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



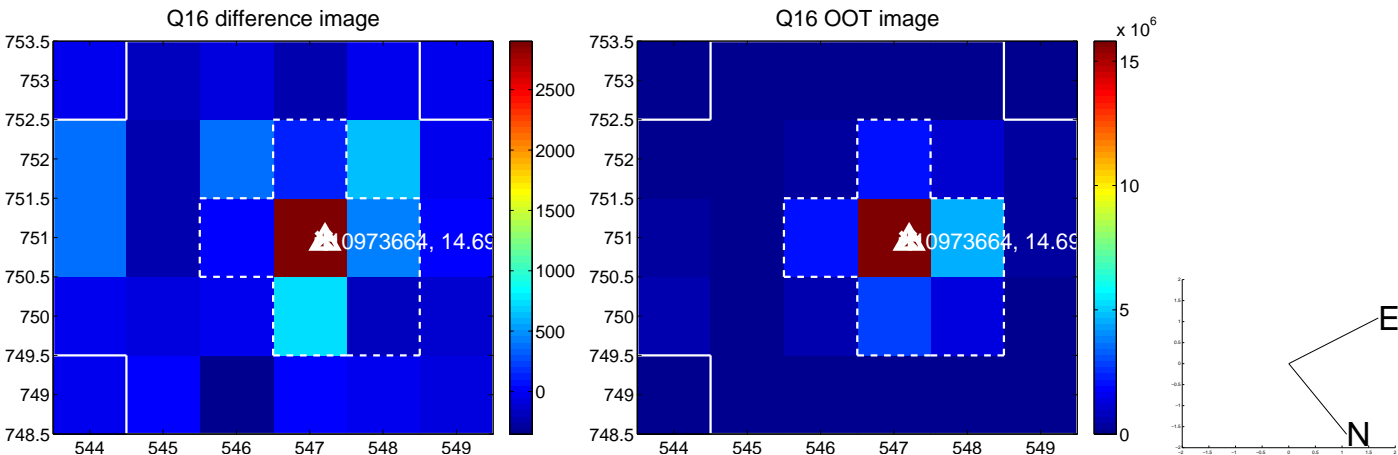
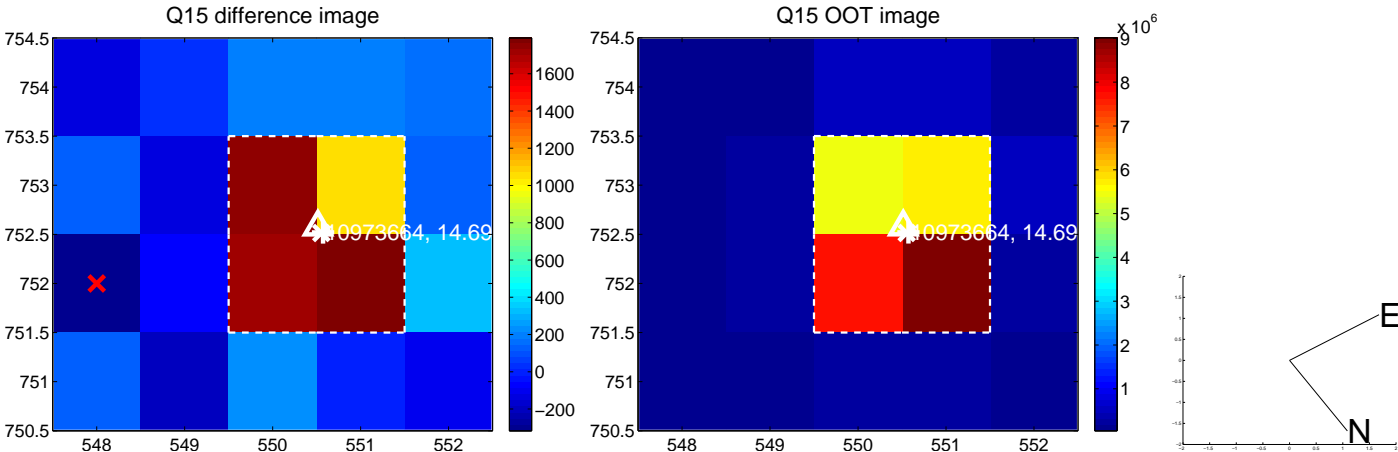
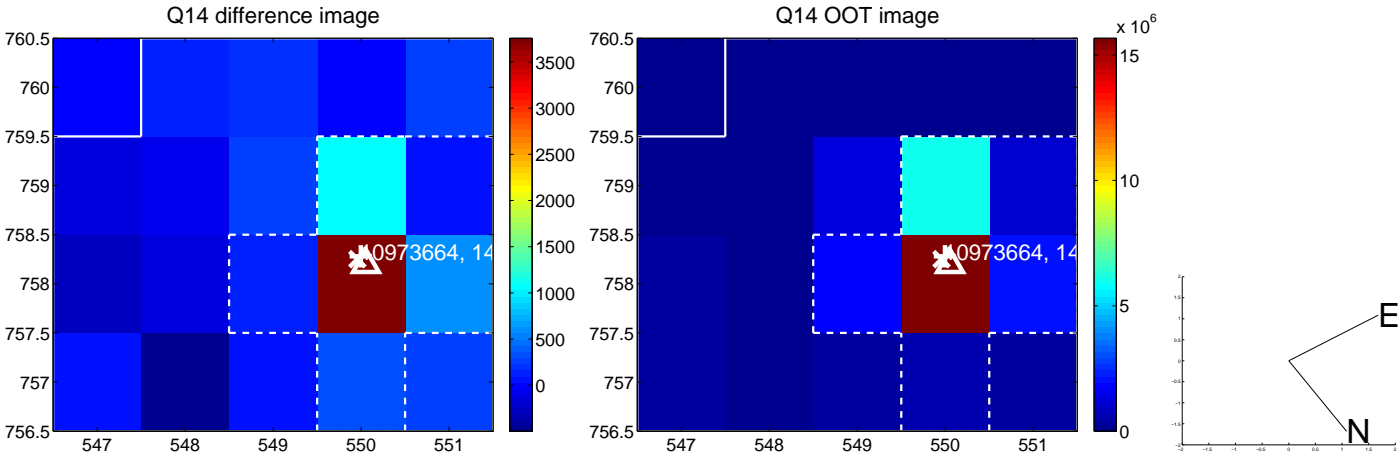
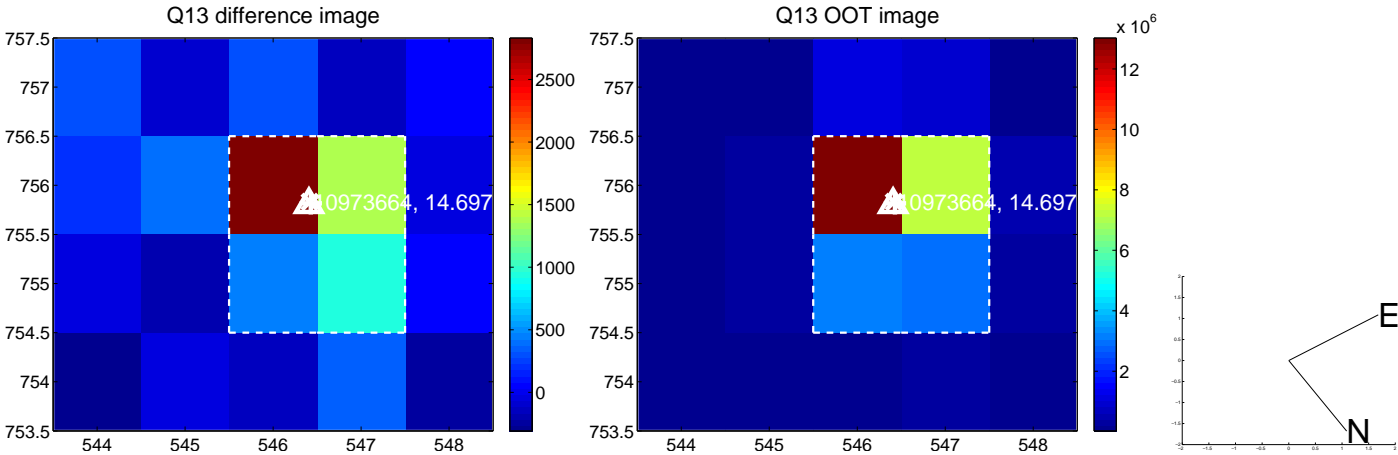
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



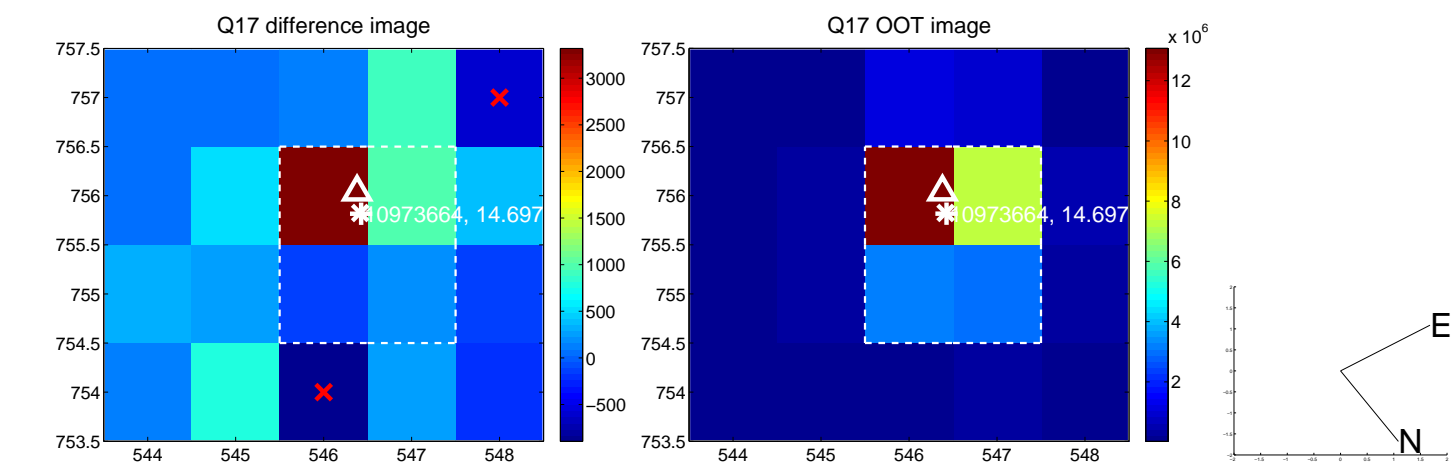
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



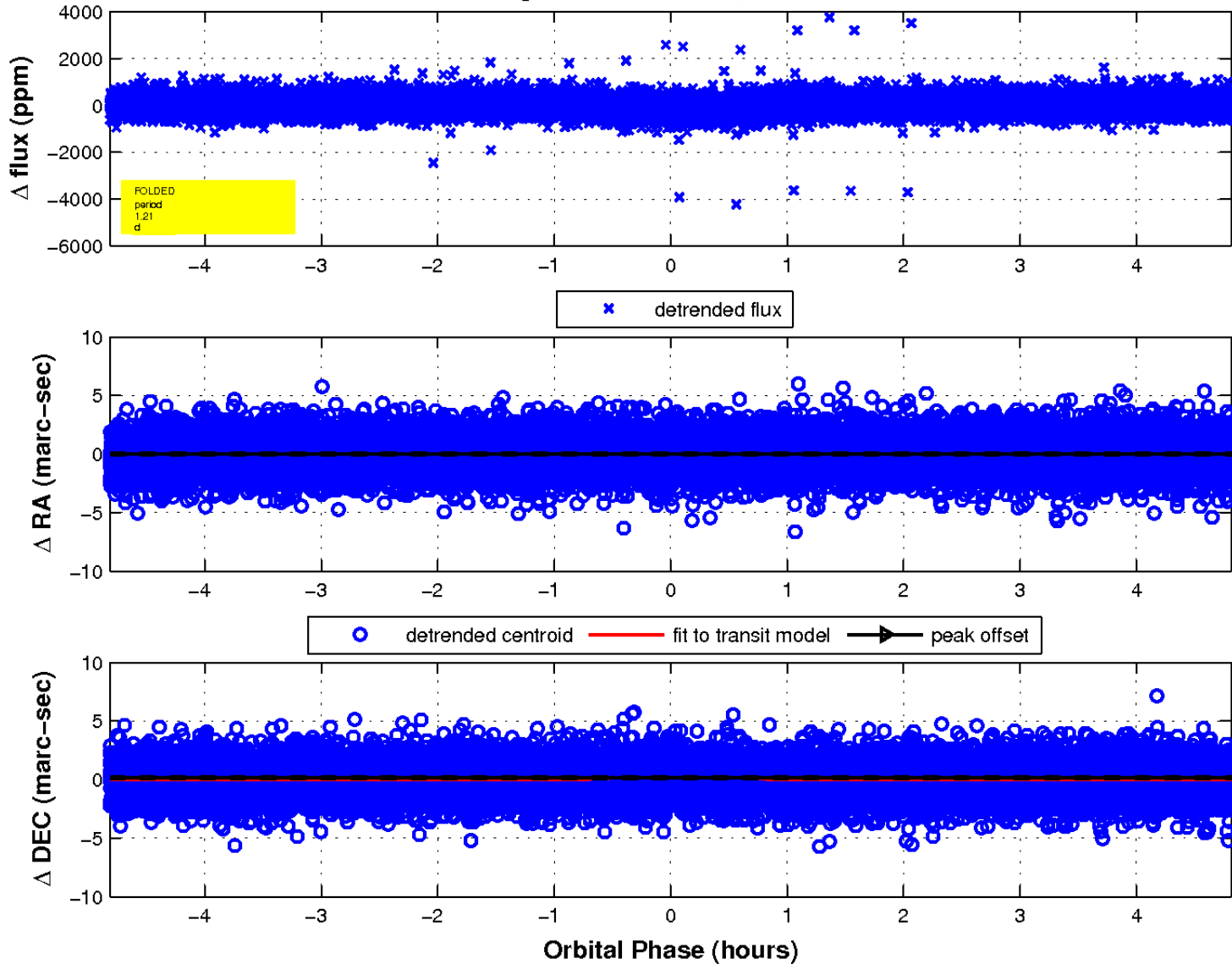
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

