

KIC 010601284

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})
010601284-01	OBS	0749.01	5.349570	134.357820	815.6	3.279	48.5	54.6	0.91	5185	3.12	169.11
010601284-02	OBS	0749.02	3.941024	132.150747	339.1	2.842	22.7	24.9	0.91	5185	2.10	254.16
010601284-03	OBS	0749.03	8.108966	132.811850	187.2	3.502	9.8	10.0	0.91	5185	1.53	97.12

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010601284-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010601284-02	OBS	PC	0.98	0	0	0	0	NO_COMMENT
010601284-03	OBS	PC	0.97	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.

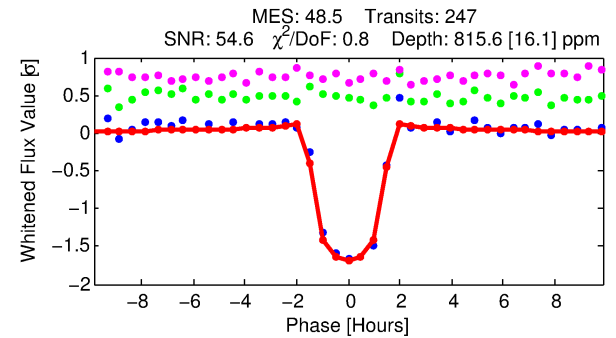
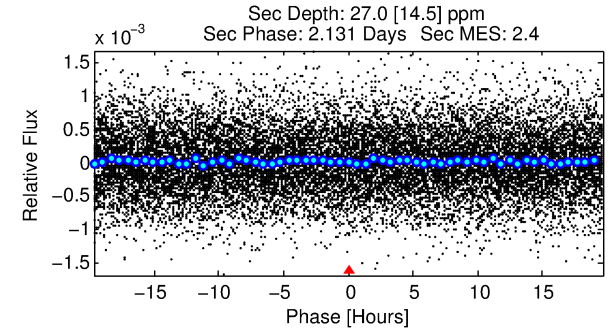
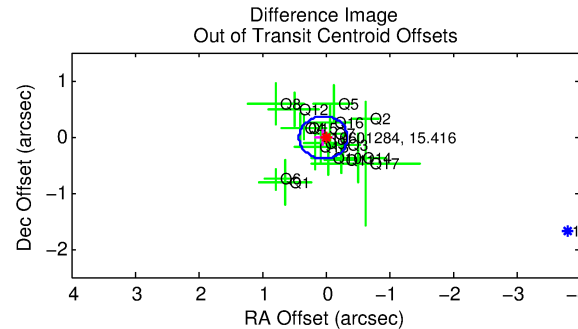
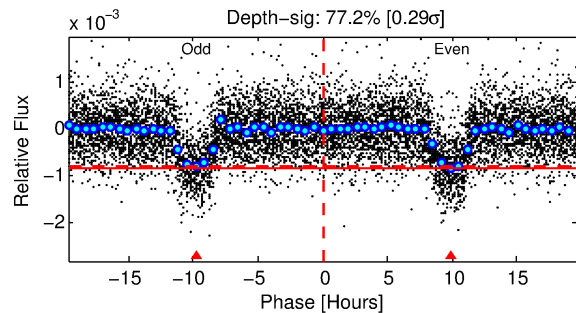
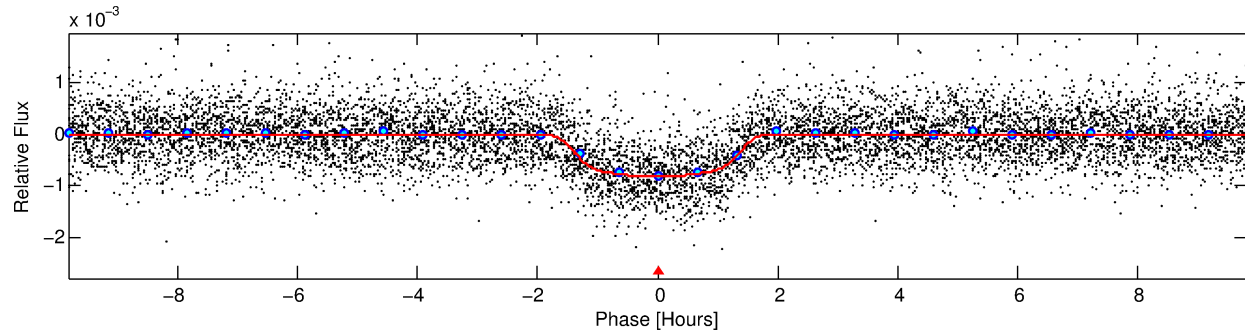
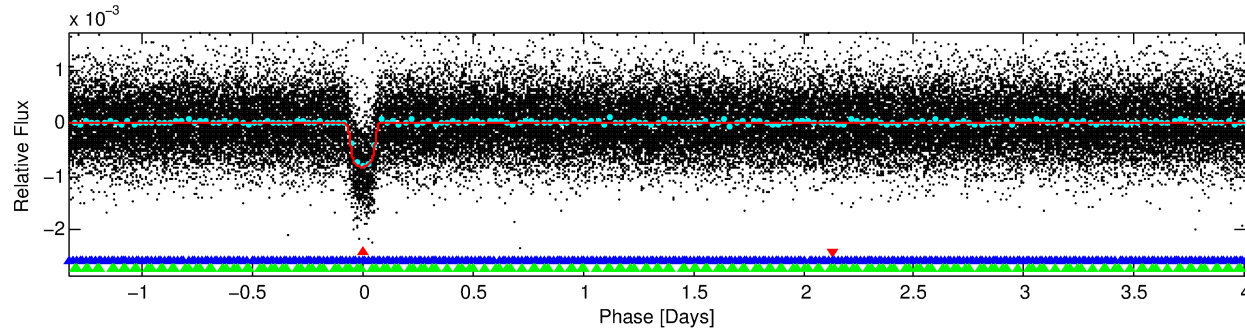
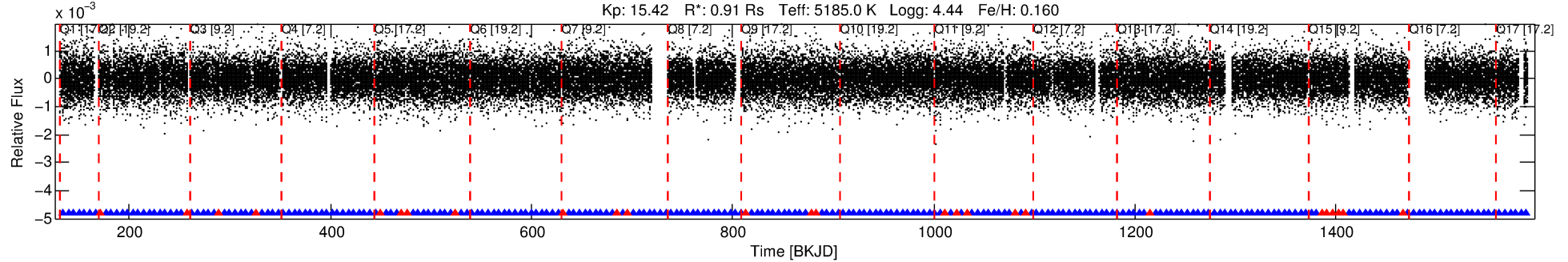
Ephemeris Match Information For 010601284-01

No Significant Match Found

DV One-Page Summary

KIC: 10601284 Candidate: 1 of 3 Period: 5.350 d
KOI: K00749.01 Name: Kepler-226c Corr: 0.989

Kp: 15.42 R*: 0.91 Rs Teff: 5185.0 K Logg: 4.44 Fe/H: 0.160



DV Fit Results:

Period = 5.34957 [0.00001] d
Epoch = 134.3578 [0.0011] BKJD
Rp/R* = 0.0314 [0.0018]
a/R* = 6.58 [1.43]
b = 0.89 [0.05]
Seff = 169.11 [29.73]
Teff = 920 [40] K
Rp = 3.12 [0.35] Re
a = 0.0563 [0.0055] AU
Ag = 4.85 [2.77] [1.39σ]
Teffp = 2110 [291] K [4.05σ]

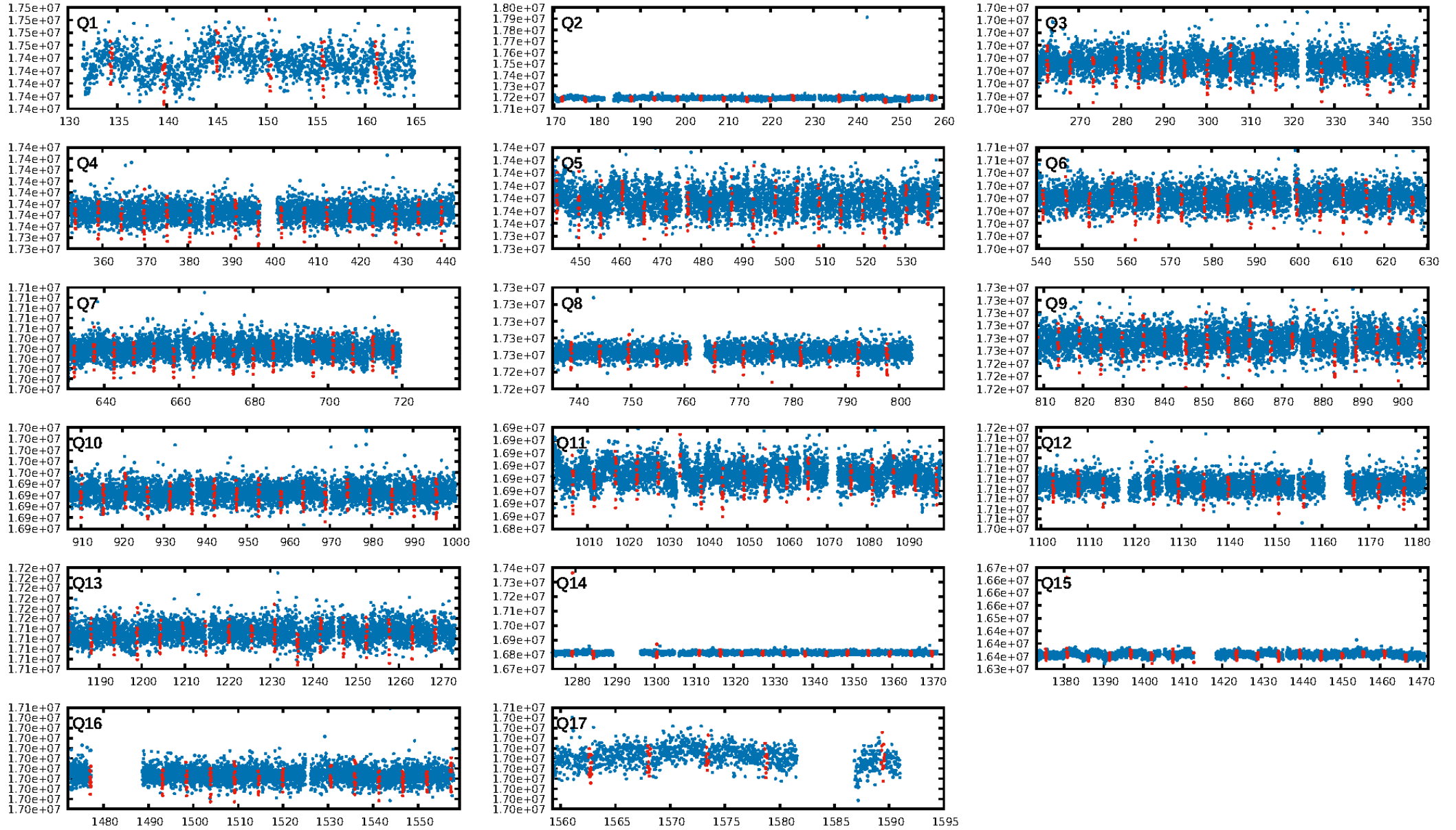
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [7.79σ]
LongPeriod-sig: 100.0% [13.80σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.89 [210/236]
GhostDiagnostic-chr: 14.41
Centroid-sig: 0.2%
Centroid-so: 0.808 arcsec [2.45σ]
OotOffset-rm: 0.042 arcsec [0.33σ]
KicOffset-rm: 0.036 arcsec [0.29σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.94 [16/17]
DiffImageOverlap-fno: 1.00 [17/17]

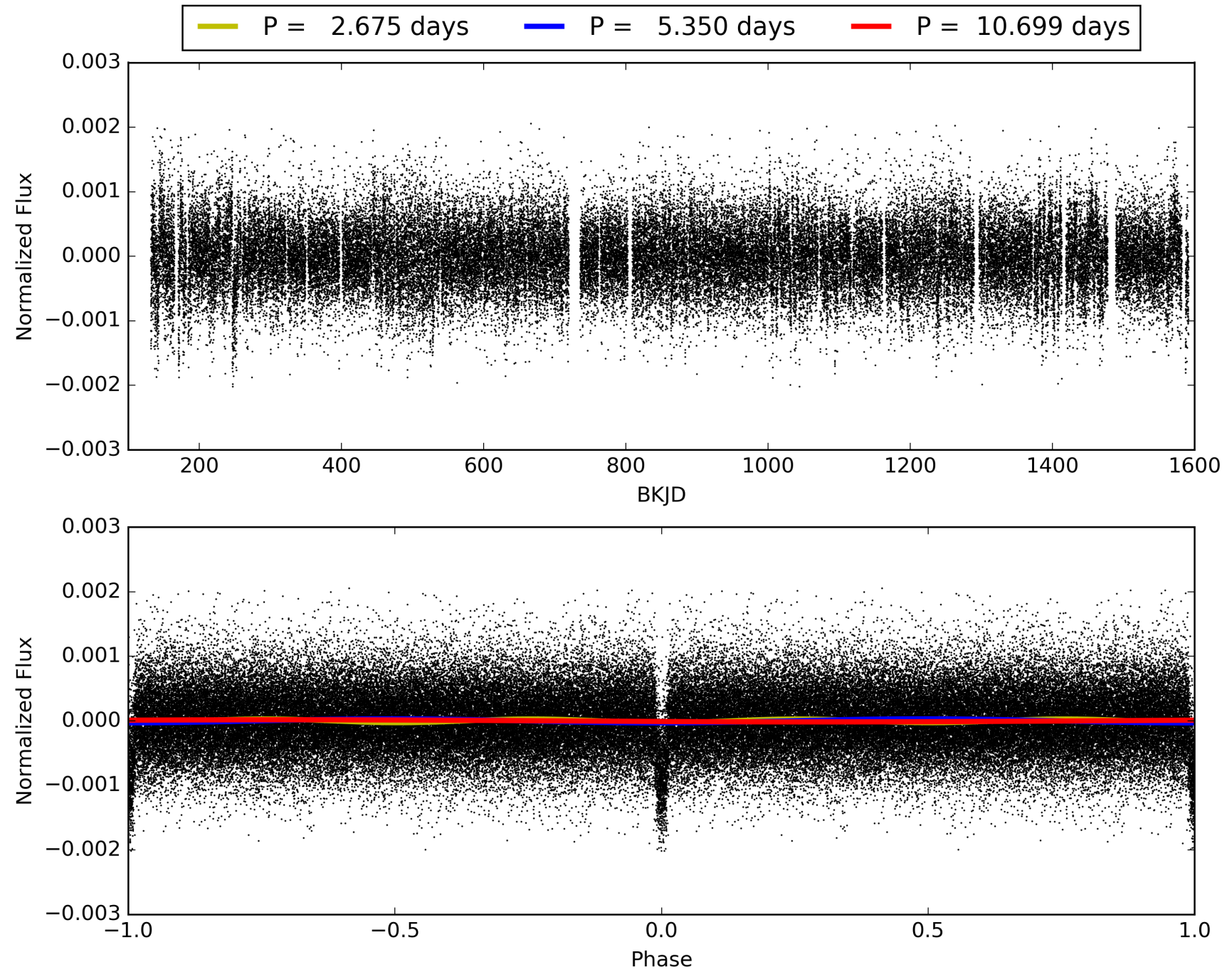
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 15:35:17 Z

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

TCE 010601284-01, PDC Light Curves

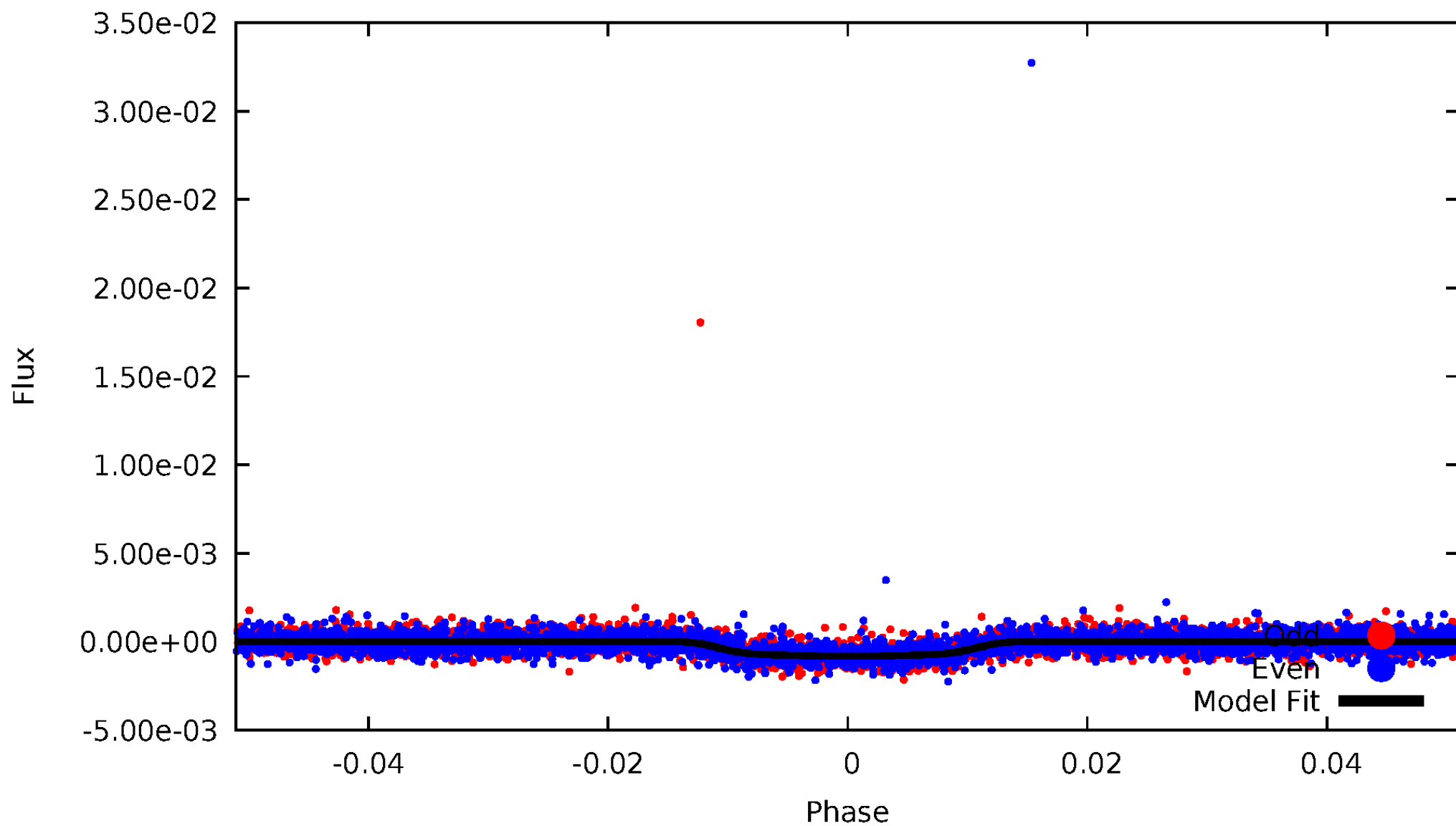


TCE 010601284-01



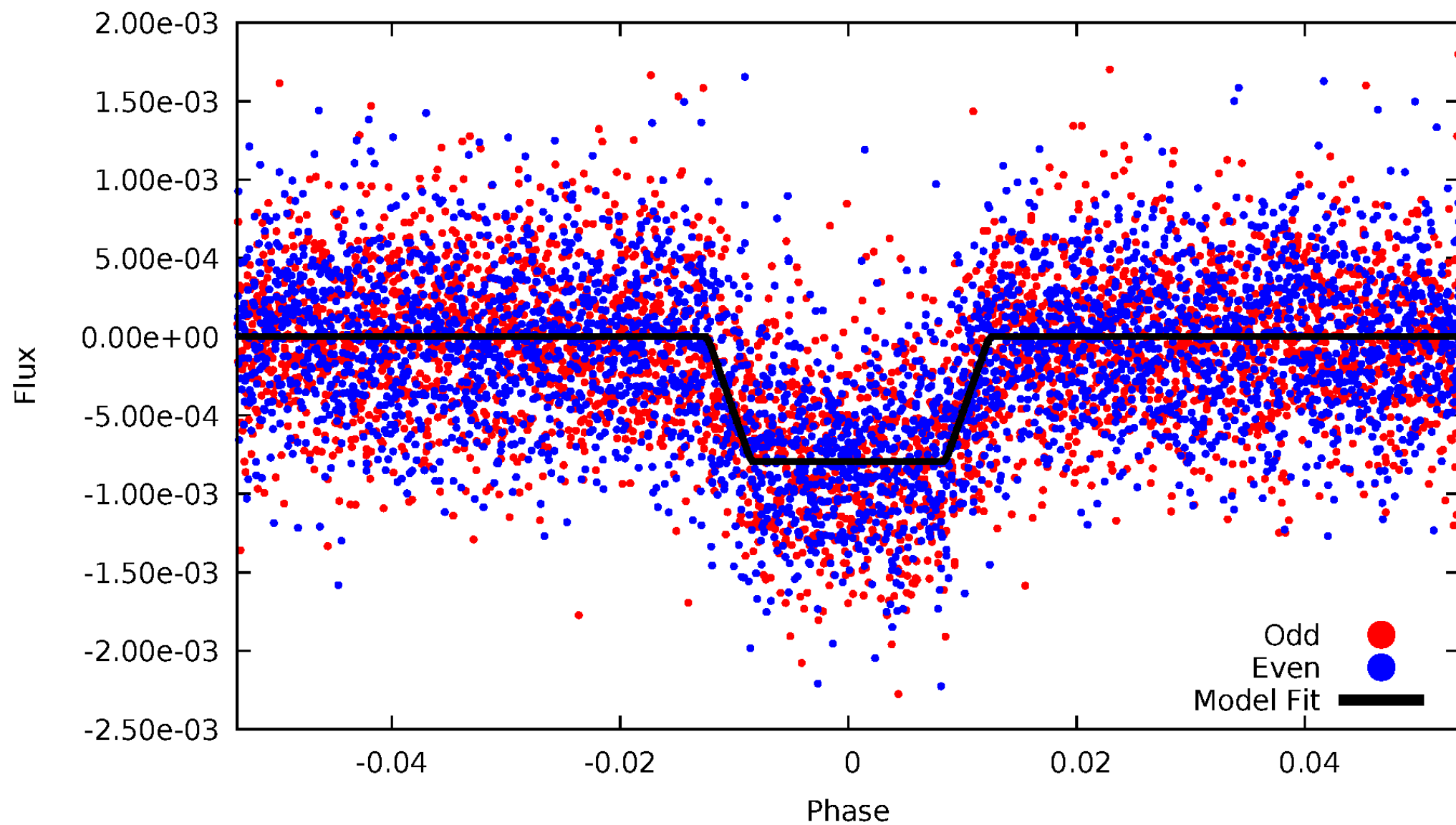
DV Odd/Even

TCE 010601284-01



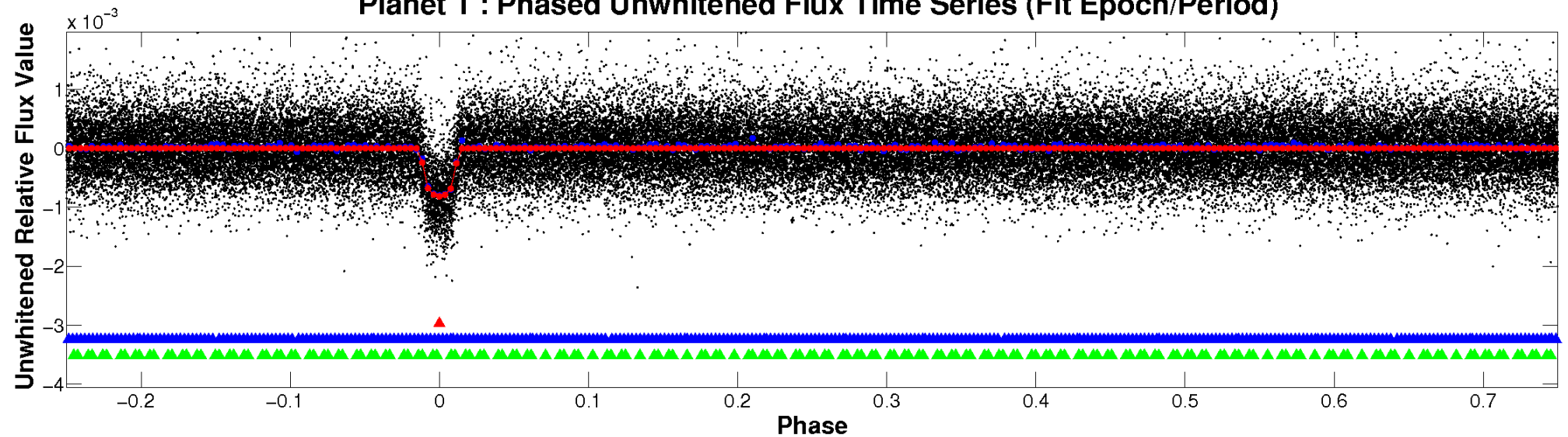
ALT Odd/Even

TCE 010601284-01

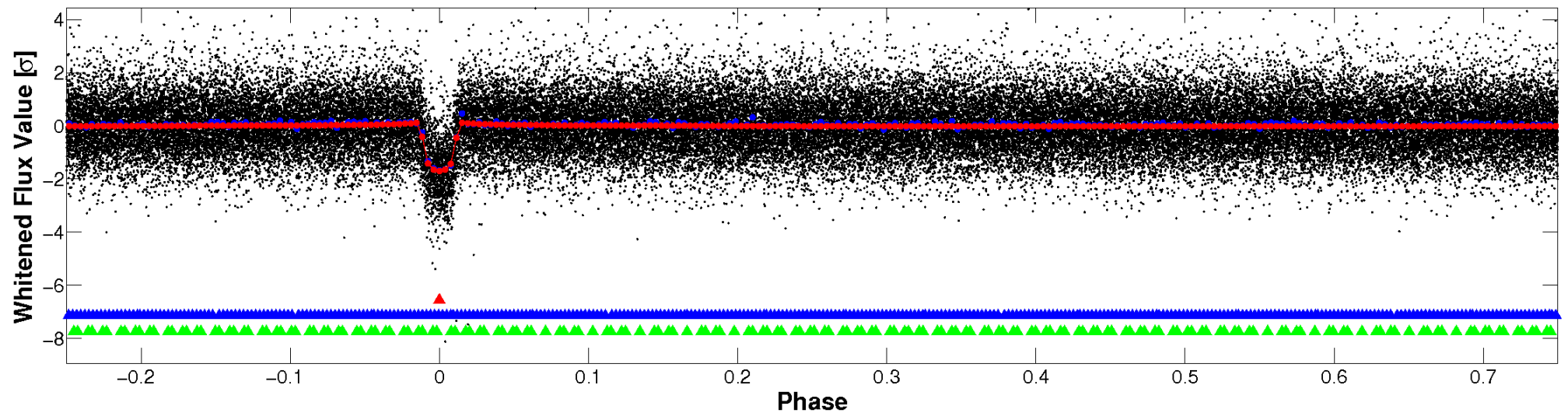


Non-Whitened Vs. Whitened Light Curve

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

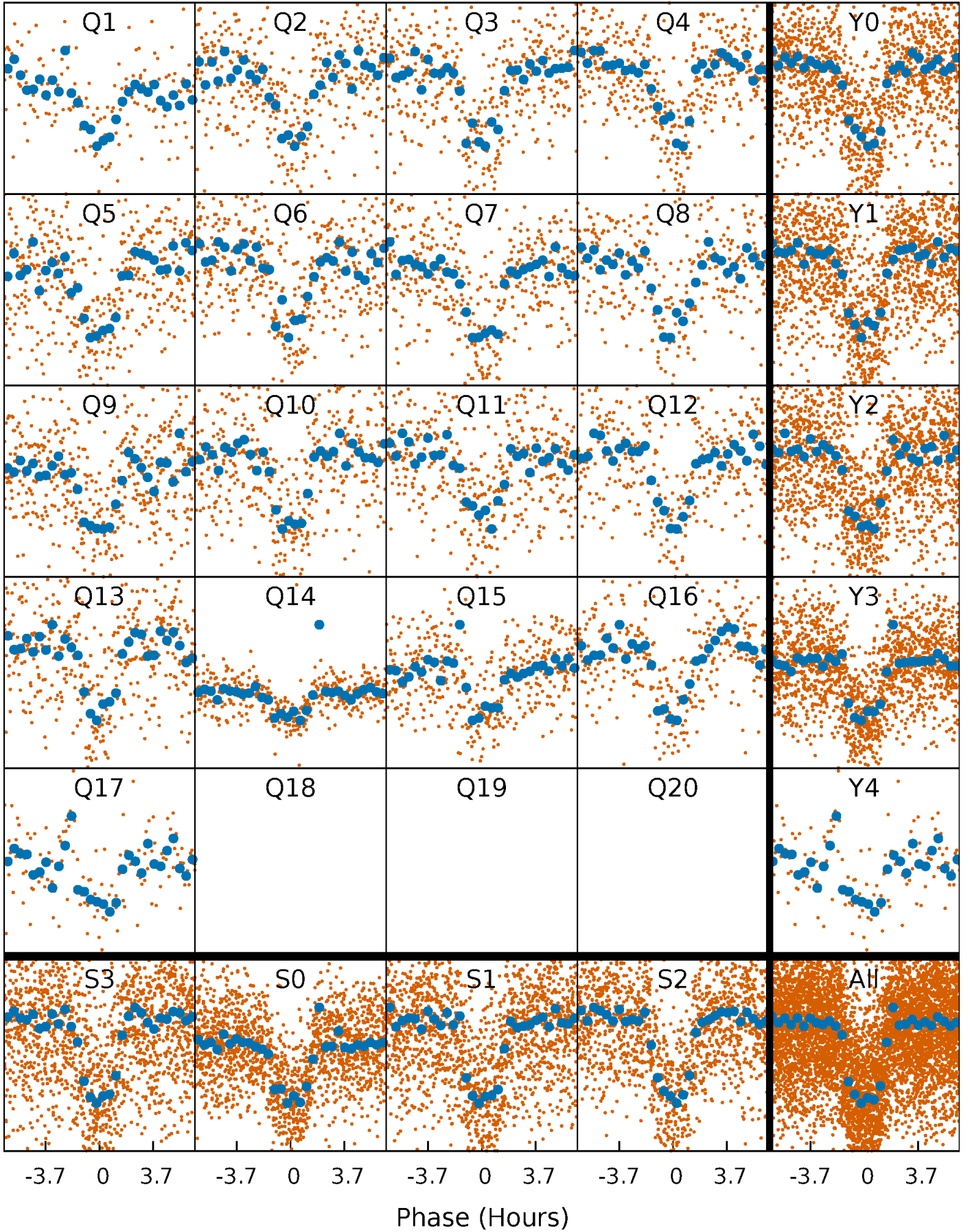


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



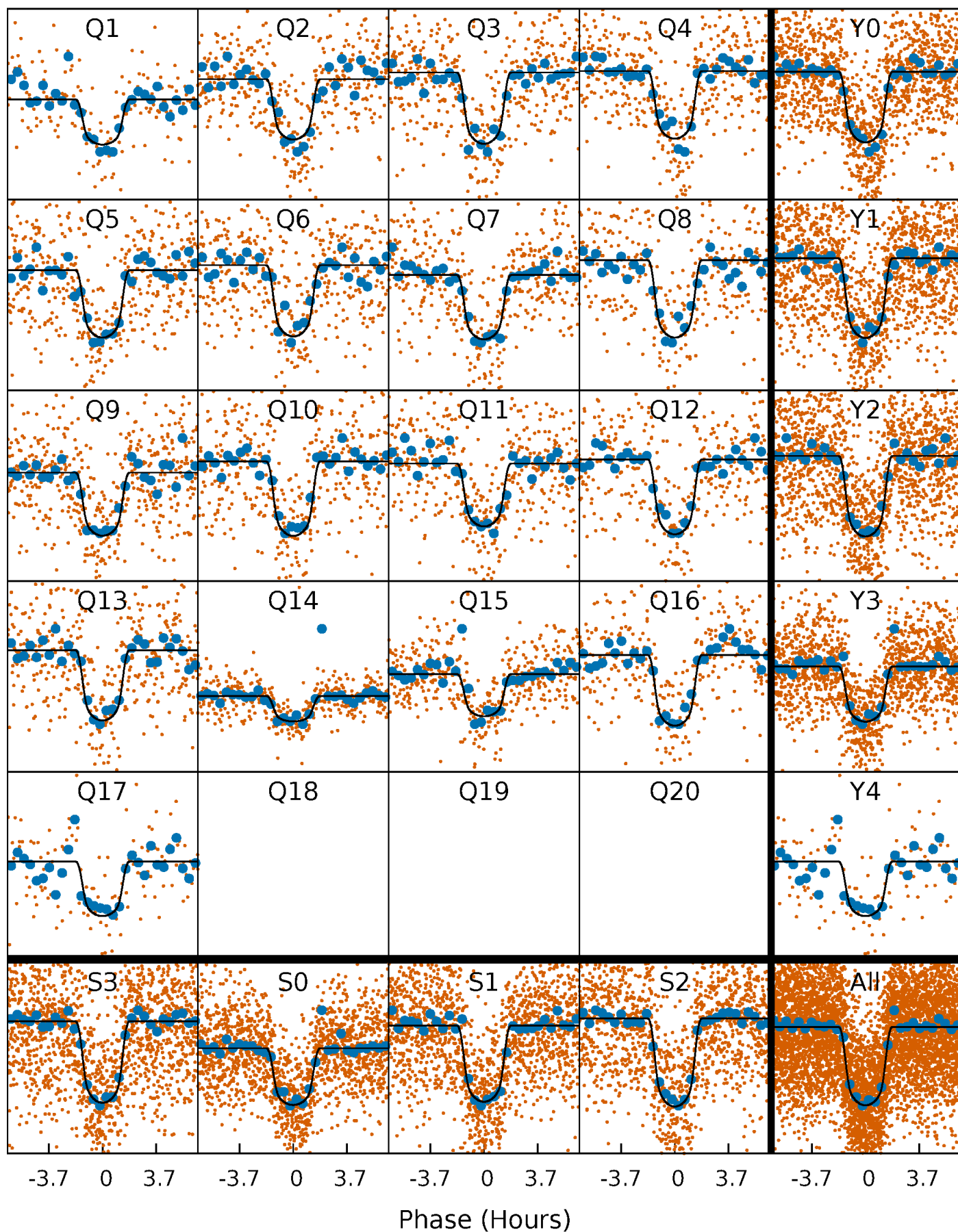
PDC Quarter-Phased Transit Curves

TCE 010601284-01 $P = 5.349570$ Days $T_0 = 134.357820$ (BKJD)



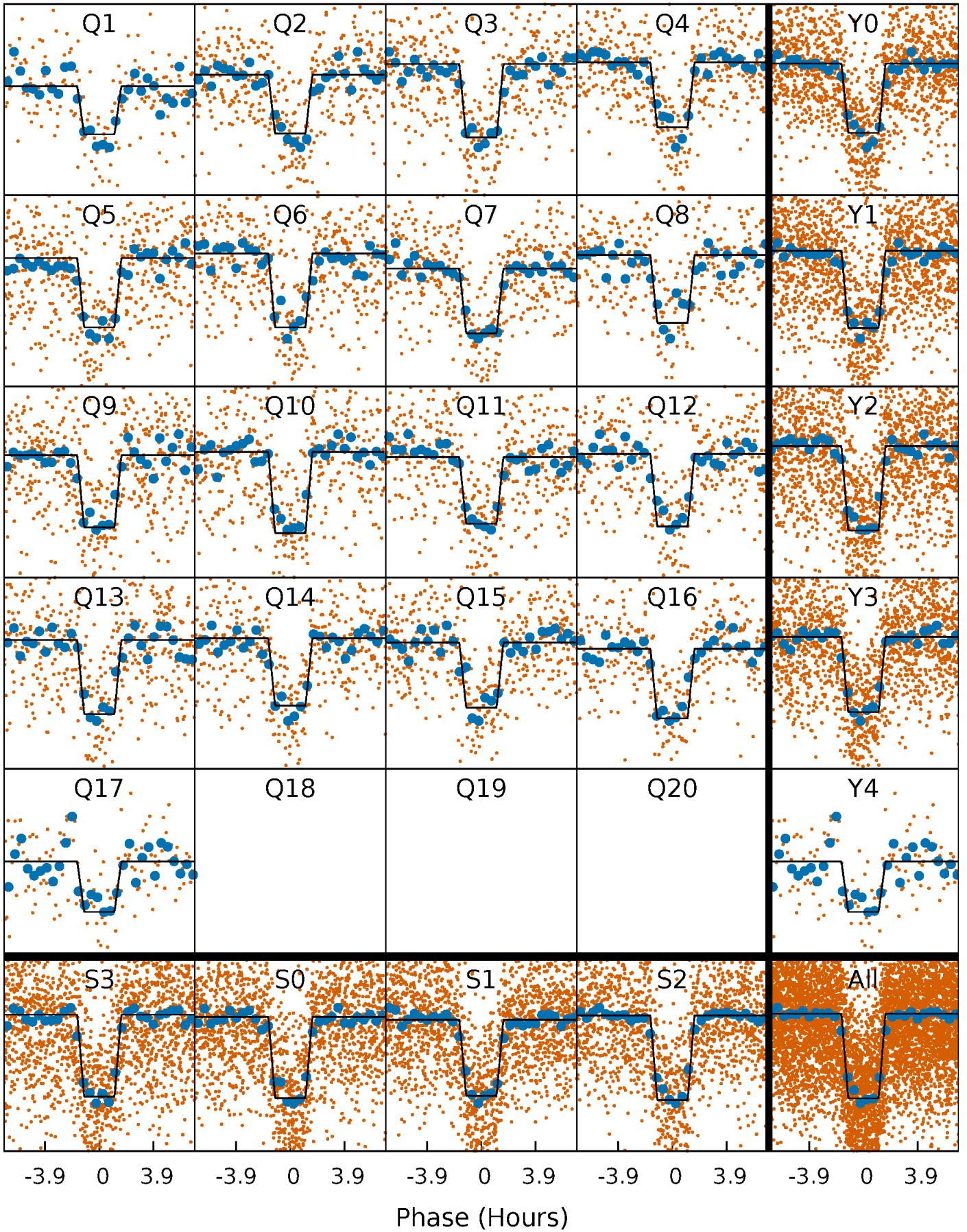
DV Quarter-Phased Transit Curves

TCE 010601284-01 P= 5.349570 Days $T_0=134.357820$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

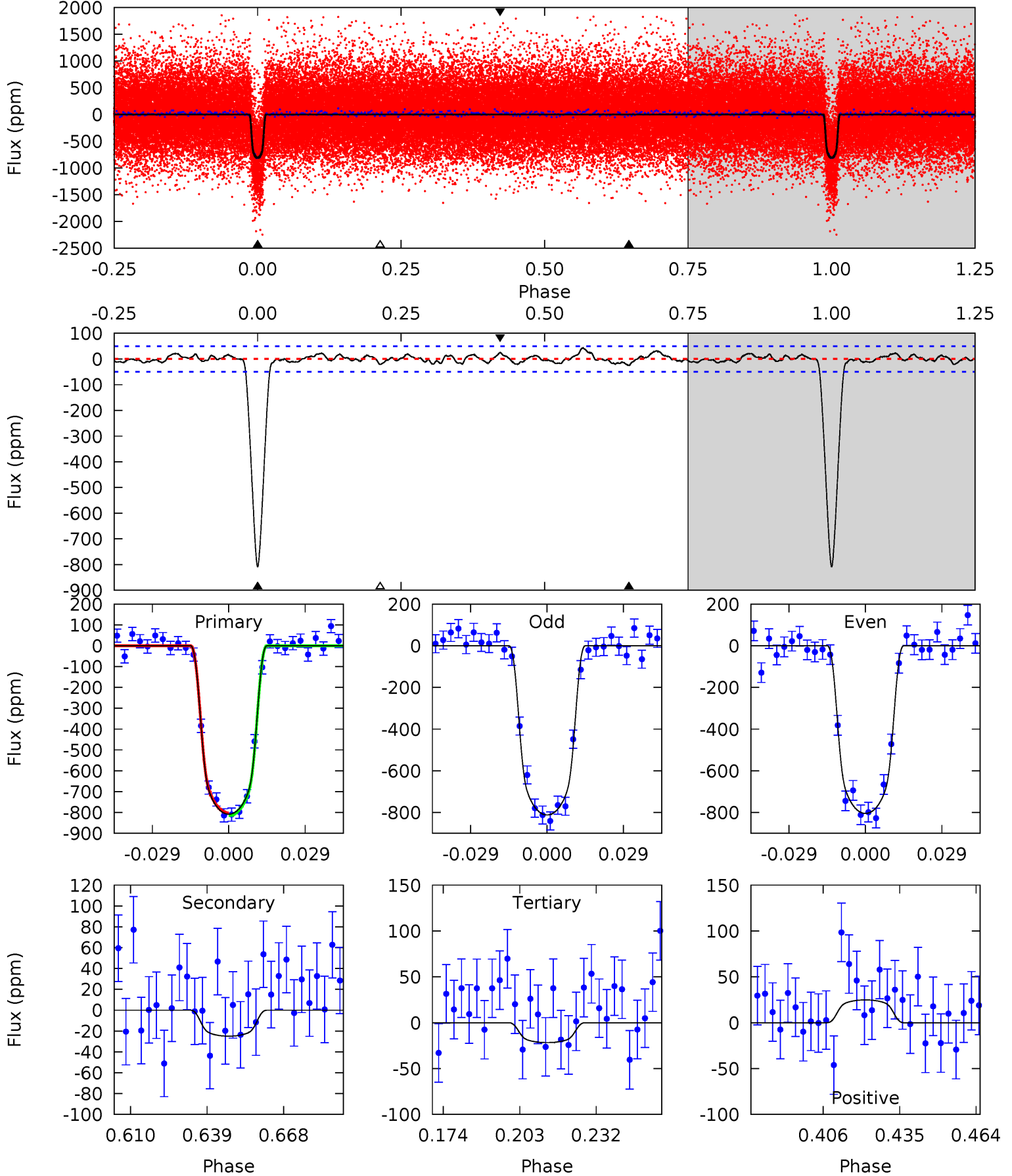
TCE 010601284-01 P= 5.349588 Days $T_0=134.355430$ (BKJD)



DV Model-Shift Uniqueness Test

010601284-01, P = 5.349570 Days, E = 129.008250 Days

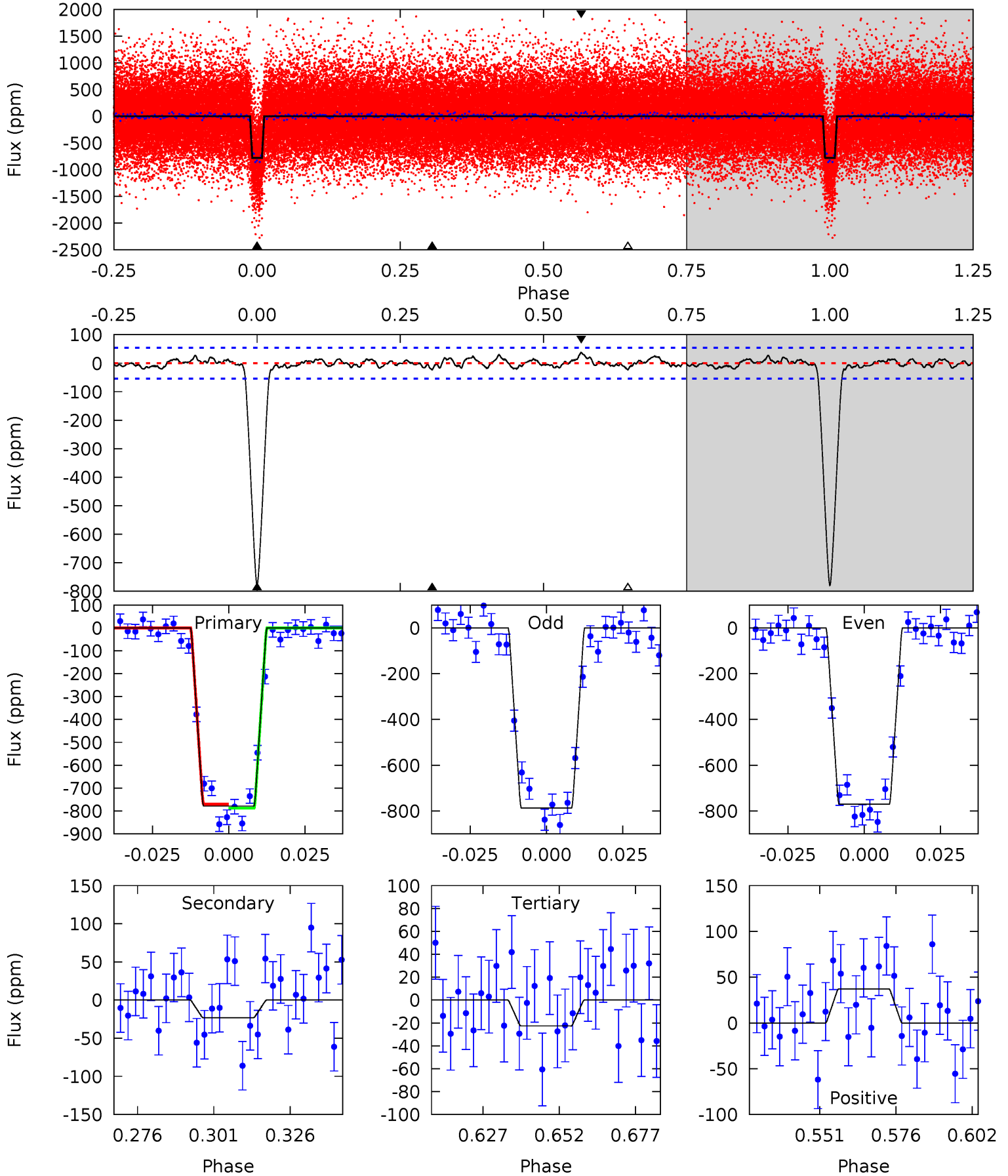
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
78.4	2.42	2.10	2.41	4.82	2.18	1.16	76.3	76.0	0.32	0.01	0.36	1.00	0.05	0.58



Alt Model-Shift Uniqueness Test

010601284-01, P = 5.349588 Days, E = 129.005842 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
69.8	2.07	2.02	3.33	4.85	2.24	1.00	67.8	66.5	0.05	-1.26	0.74	1.01	0.05	0.80



Stellar Parameters For KIC 010601284

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	5185^{+85}_{-77}	$4.440^{+0.098}_{-0.045}$	$0.160^{+0.150}_{-0.150}$	$0.910^{+0.057}_{-0.086}$	$0.831^{+0.058}_{-0.032}$	$1.553^{+0.613}_{-0.255}$
	+2%/-1%	+2%/-1%	+94%/-94%	+6%/-9%	+7%/-4%	+39%/-16%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 010601284-01 / KOI 0749.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-25 ± 10	$3.11^{+0.22}_{-0.23}$	1280^{+34}_{-35}	2759^{+150}_{-188}	$4.517^{+2.027}_{-1.830}$
Alt.	-23 ± 11	$2.77^{+0.24}_{-0.24}$	1277^{+36}_{-39}	2814^{+193}_{-241}	$5.183^{+3.044}_{-2.421}$

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

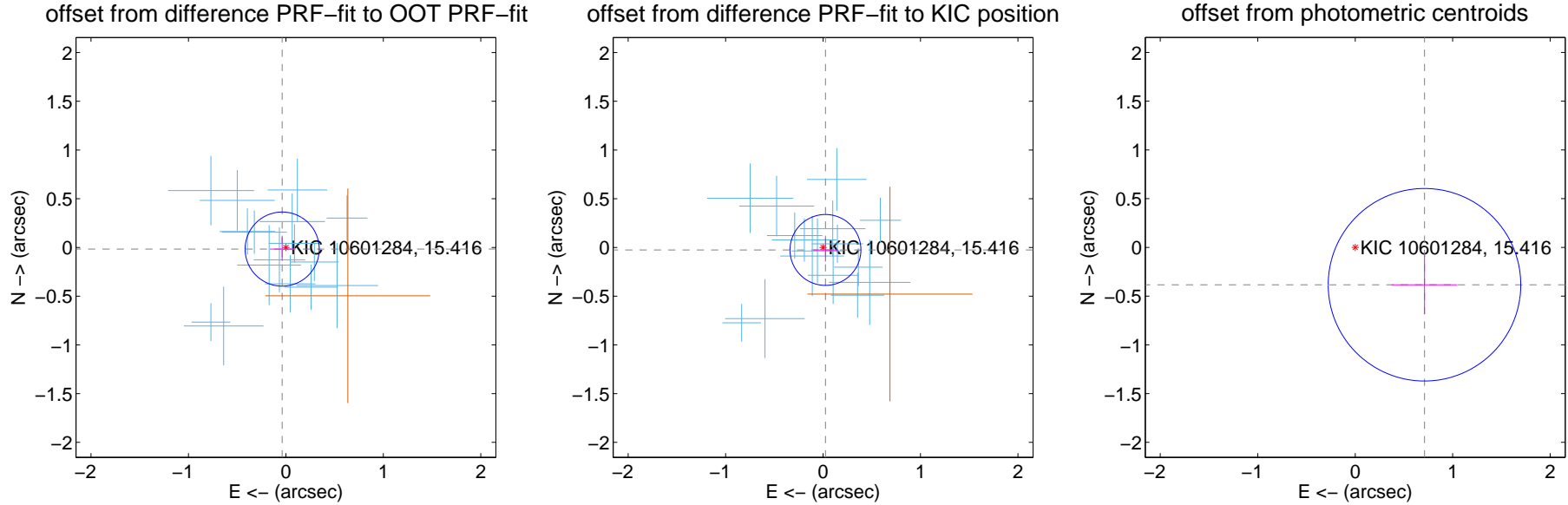
DV Centroid Data

Supplemental centroid analysis for 010601284-01. Kepler magnitude: 15.42. Transit SNR 54.58

There are 16 quarters with good PRF difference image offsets

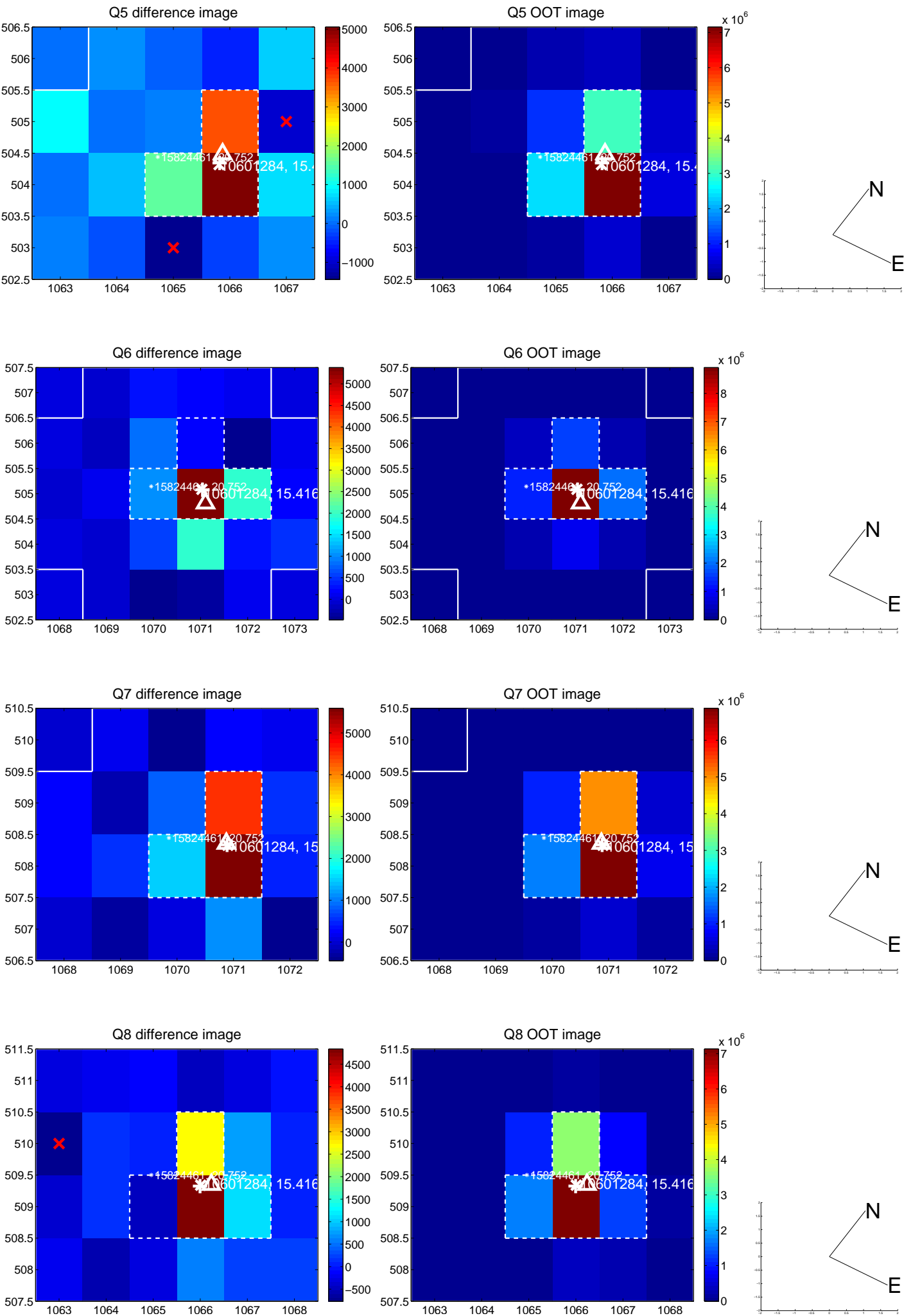
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.042 ± 0.127	0.33	0.038 ± 0.127	-0.017 ± 0.121
PRF-fit source offset from KIC position	0.036 ± 0.121	0.29	-0.025 ± 0.124	-0.026 ± 0.119
photometric centroid source offset	0.81 ± 0.33	2.45	-0.71 ± 0.34	-0.38 ± 0.30

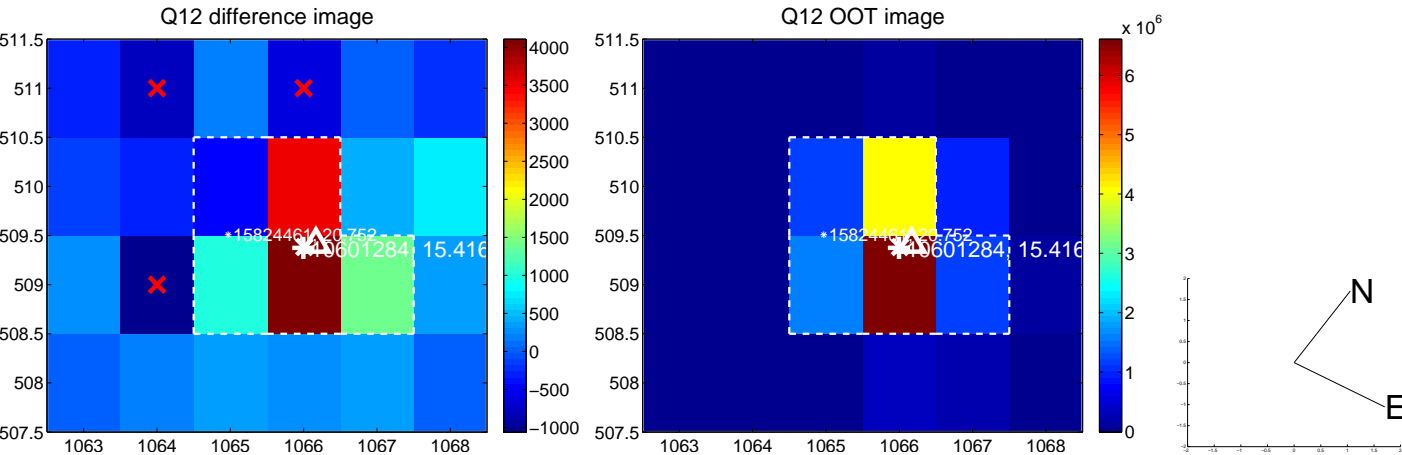
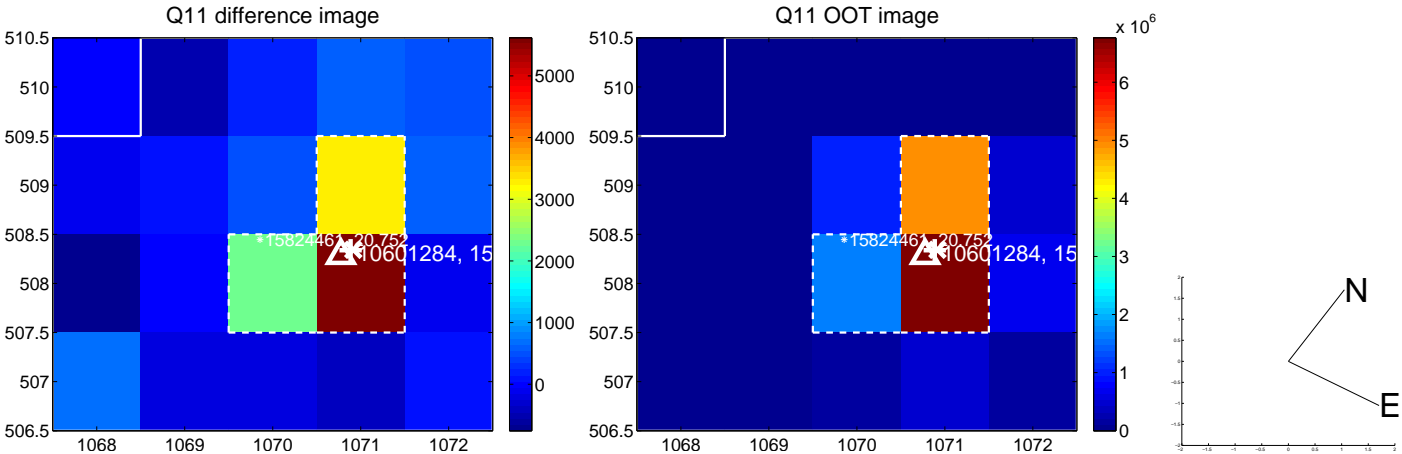
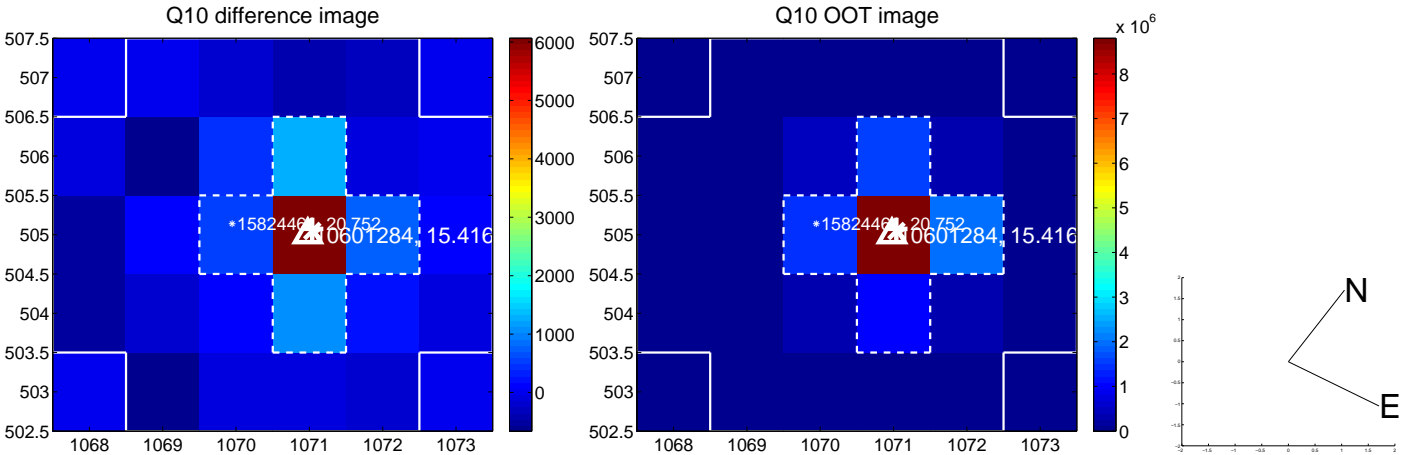
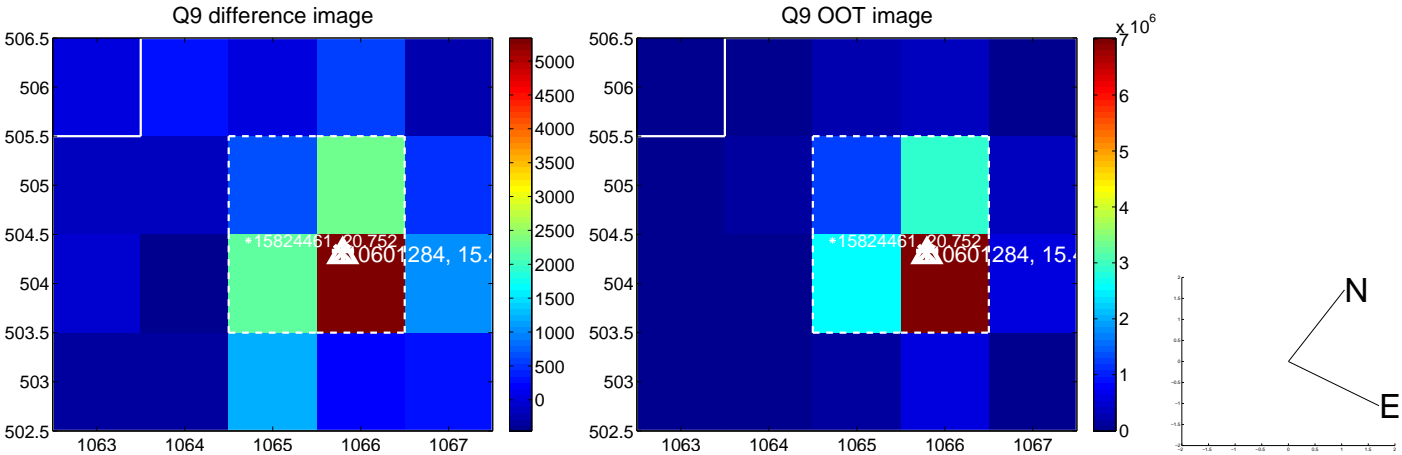


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

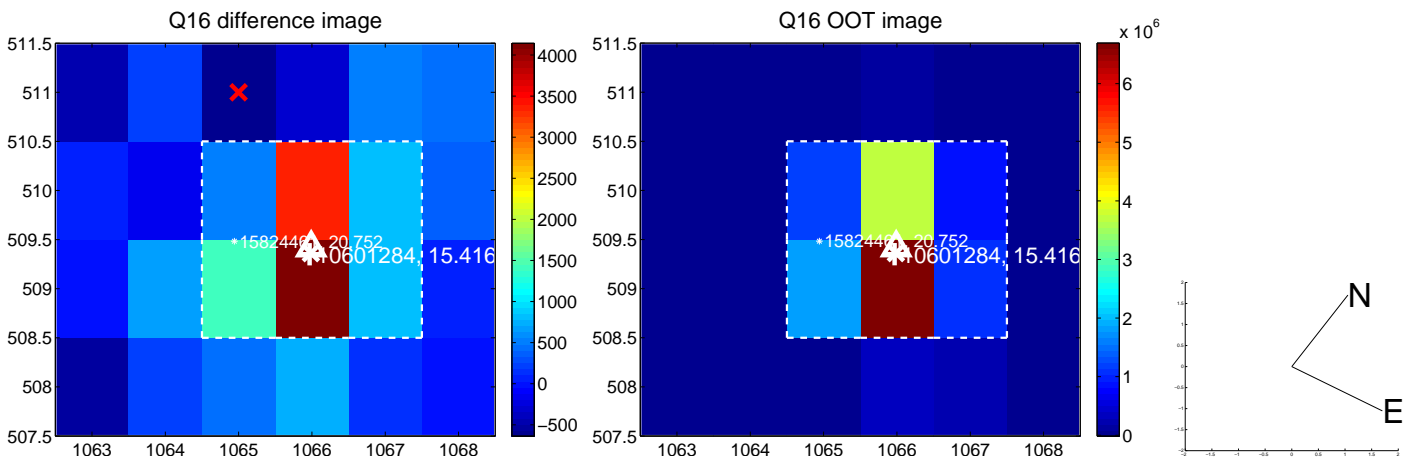
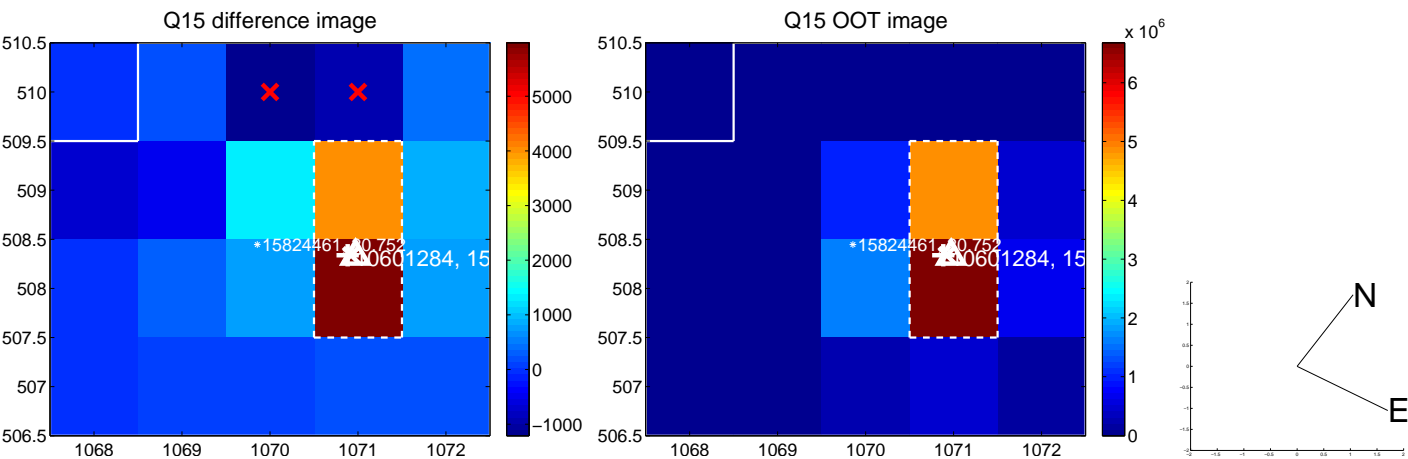
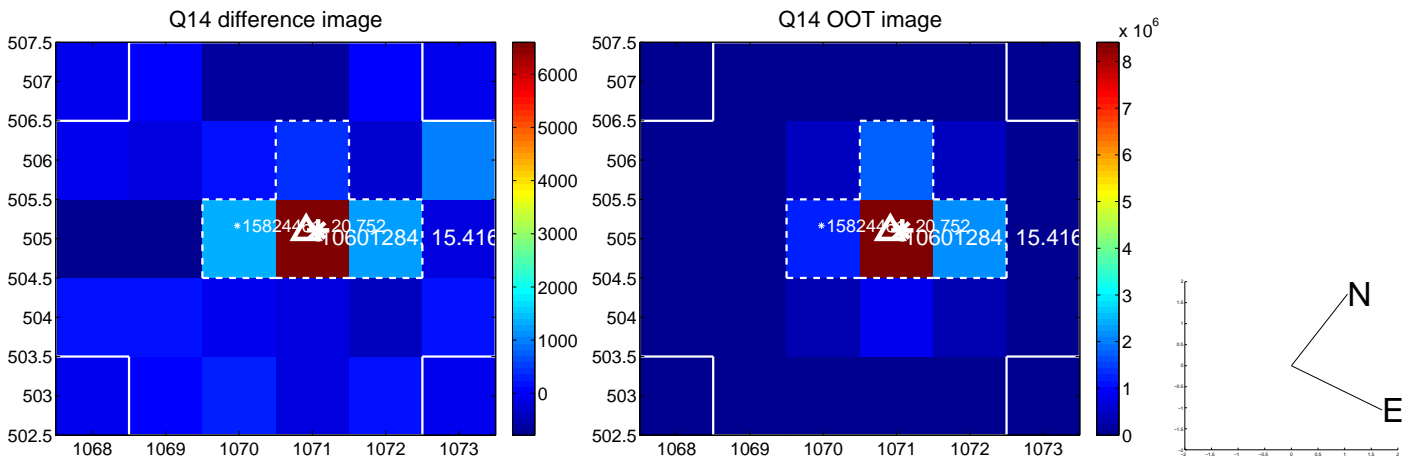
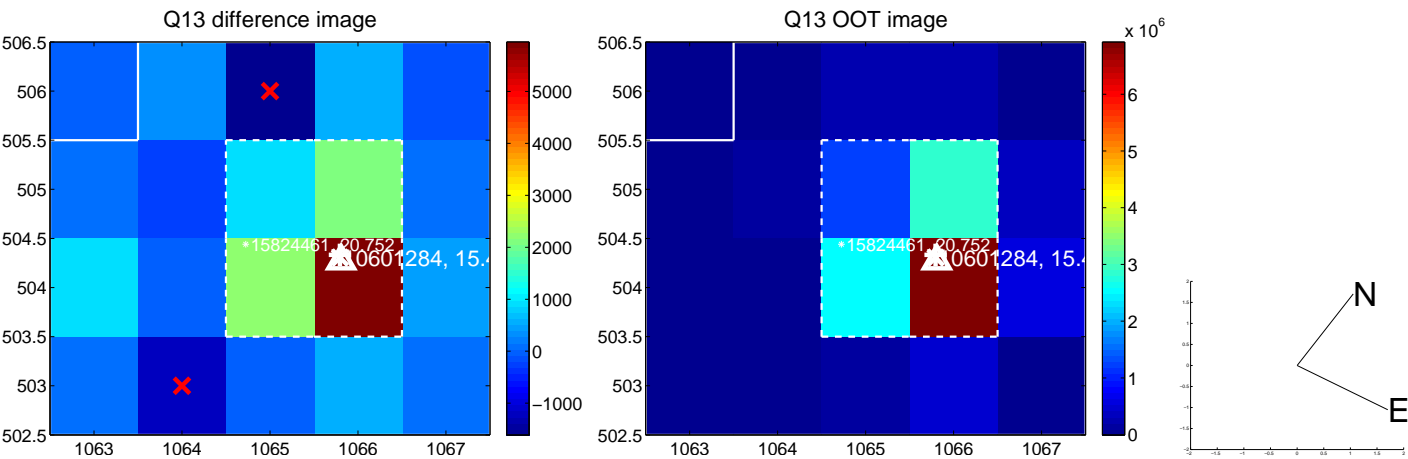
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

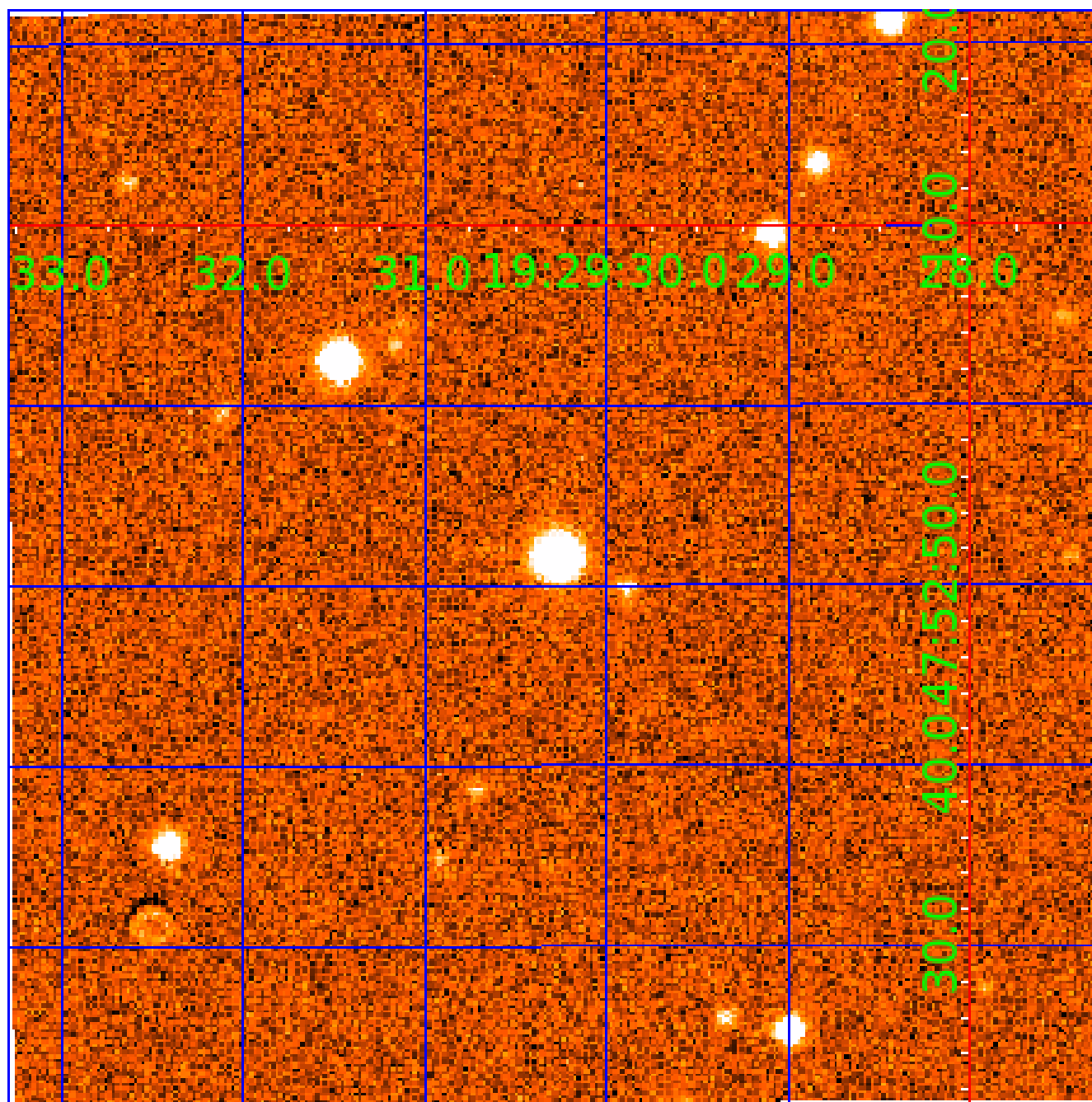


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010601284

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})
010601284-01	OBS	0749.01	5.349570	134.357820	815.6	3.279	48.5	54.6	0.91	5185	3.12	169.11
010601284-02	OBS	0749.02	3.941024	132.150747	339.1	2.842	22.7	24.9	0.91	5185	2.10	254.16
010601284-03	OBS	0749.03	8.108966	132.811850	187.2	3.502	9.8	10.0	0.91	5185	1.53	97.12

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010601284-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010601284-02	OBS	PC	0.98	0	0	0	0	NO_COMMENT
010601284-03	OBS	PC	0.97	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.

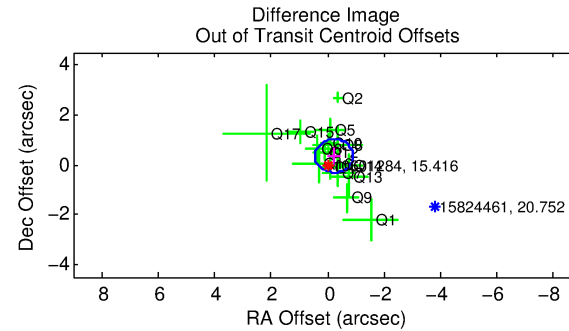
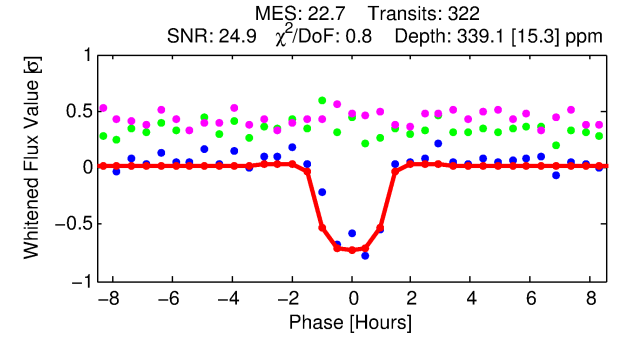
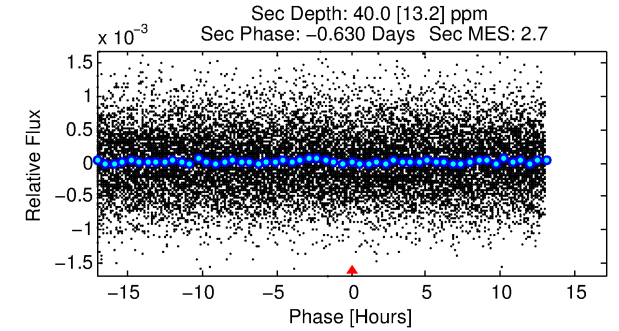
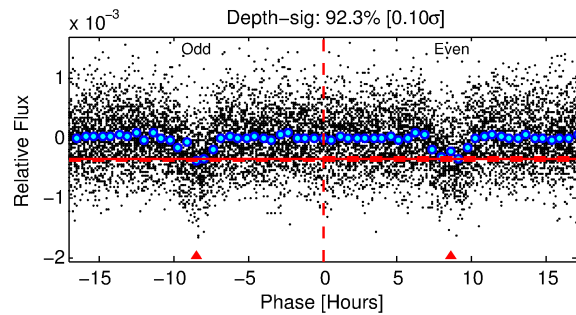
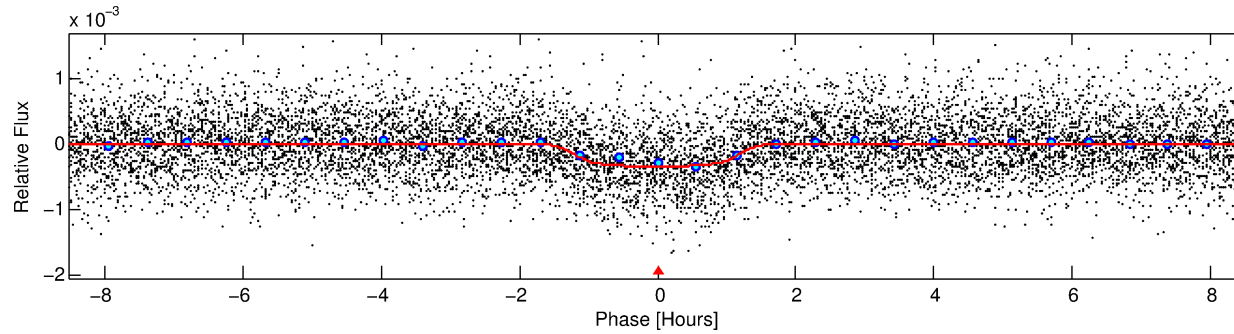
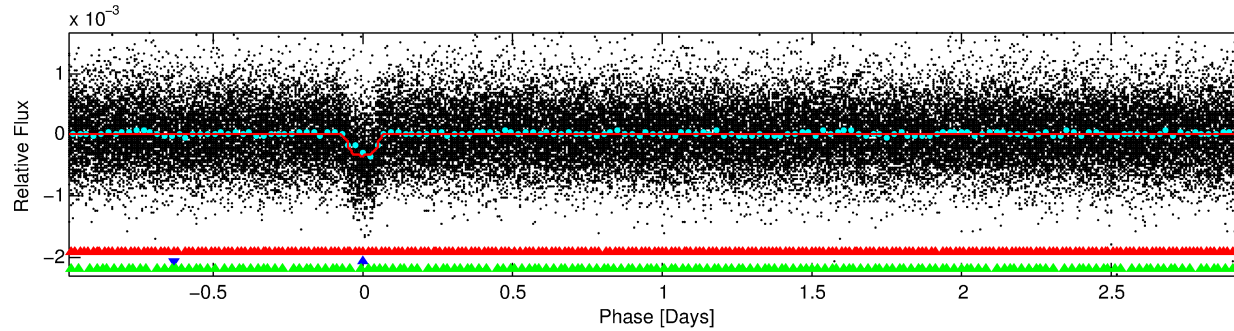
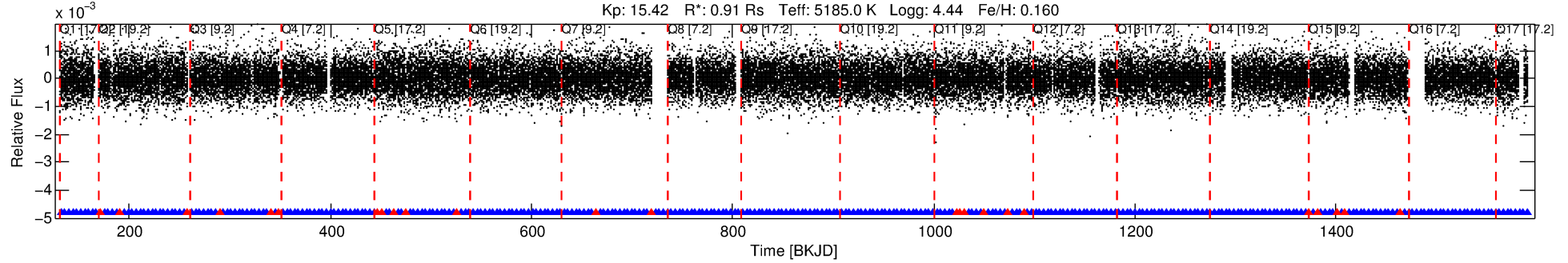
Ephemeris Match Information For 010601284-02

No Significant Match Found

DV One-Page Summary

KIC: 10601284 Candidate: 2 of 3 Period: 3.941 d
KOI: K00749.02 Name: Kepler-226b Corr: 0.945

Kp: 15.42 R*: 0.91 Rs Teff: 5185.0 K Logg: 4.44 Fe/H: 0.160



DV Fit Results:

Period = 3.94102 [0.00001] d
Epoch = 132.1507 [0.0019] BKJD
Rp/R* = 0.0211 [0.0028]
a/R* = 4.71 [2.45]
b = 0.92 [0.09]
Seff = 254.16 [44.68]
Teq = 1018 [45] K
Rp = 2.10 [0.34] Re
a = 0.0459 [0.0045] AU
Ag = 10.55 [4.78] [2.00σ]
Teffp = 2837 [304] K [5.93σ]

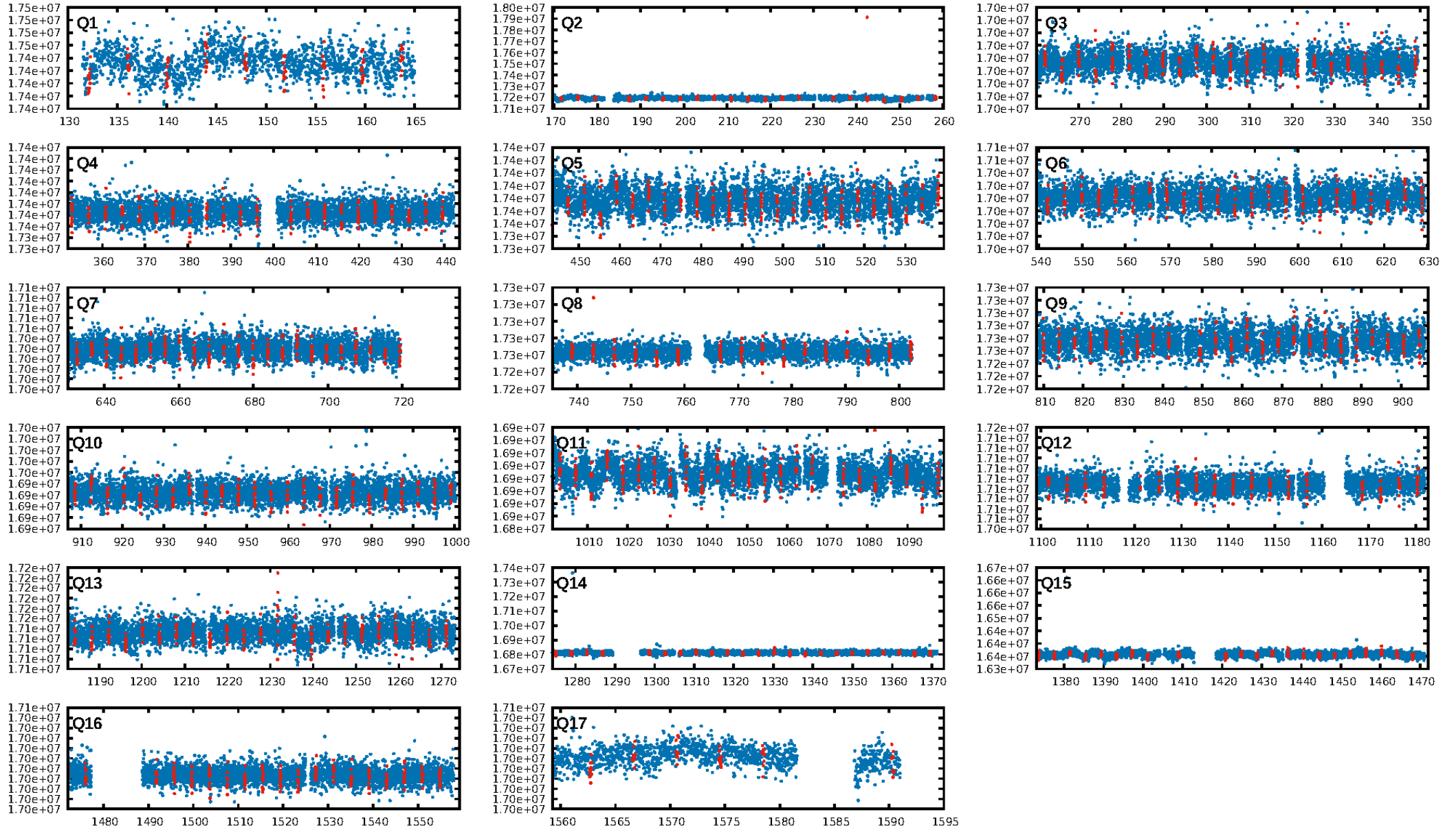
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [7.79σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 8.96e-113
RollingBand-fgt: 0.92 [285/309]
GhostDiagnostic-chr: -25.12
Centroid-sig: 46.4%
Centroid-so: 0.428 arcsec [0.64σ]
OotOffset-rm: 0.416 arcsec [1.87σ]
KicOffset-rm: 0.416 arcsec [2.11σ]
OotOffset-st: 4/2/4/5 [15]
KicOffset-st: 4/2/4/5 [15]
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DiffImageOverlap-fno: 1.00 [17/17]

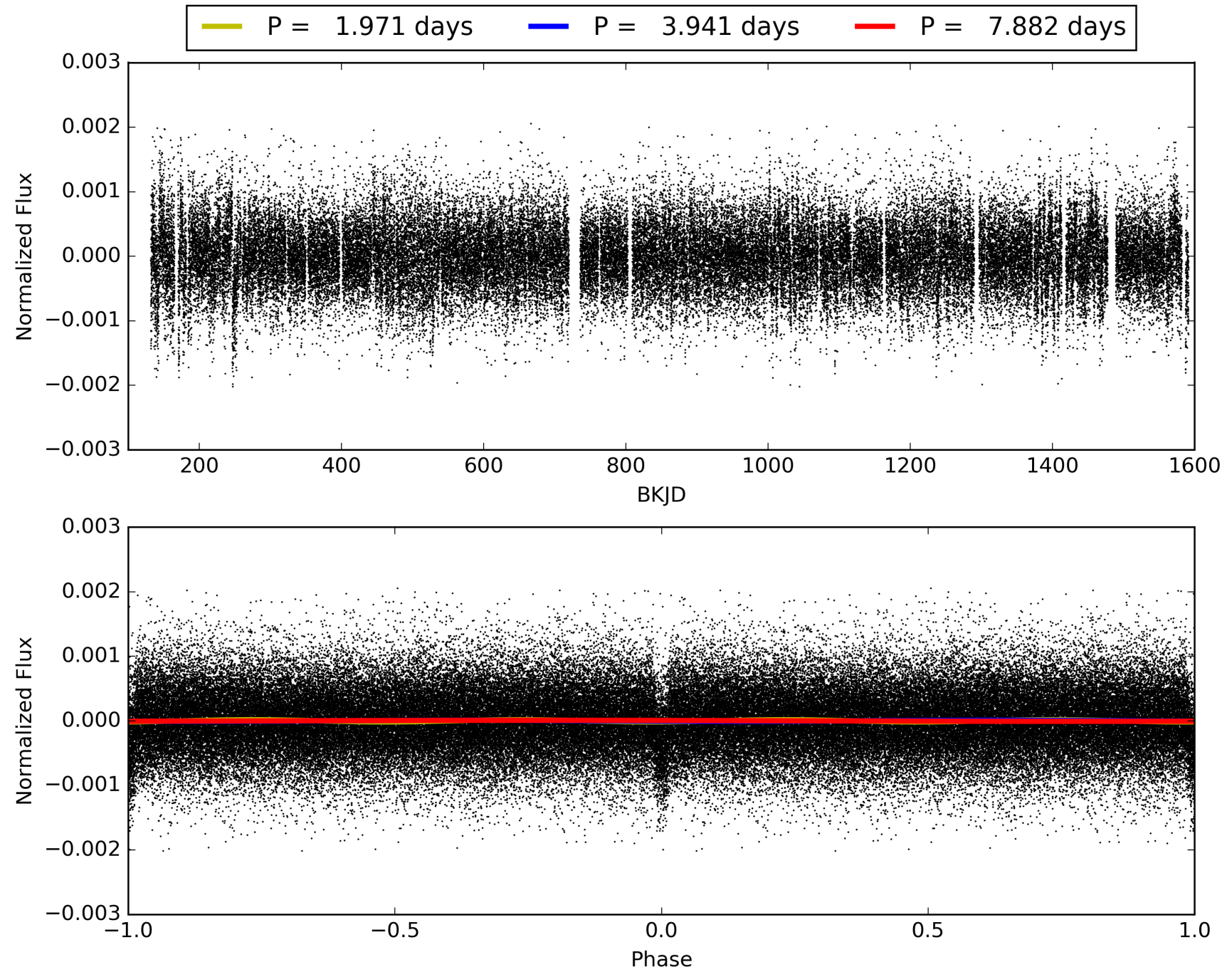
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 010601284-02, PDC Light Curves

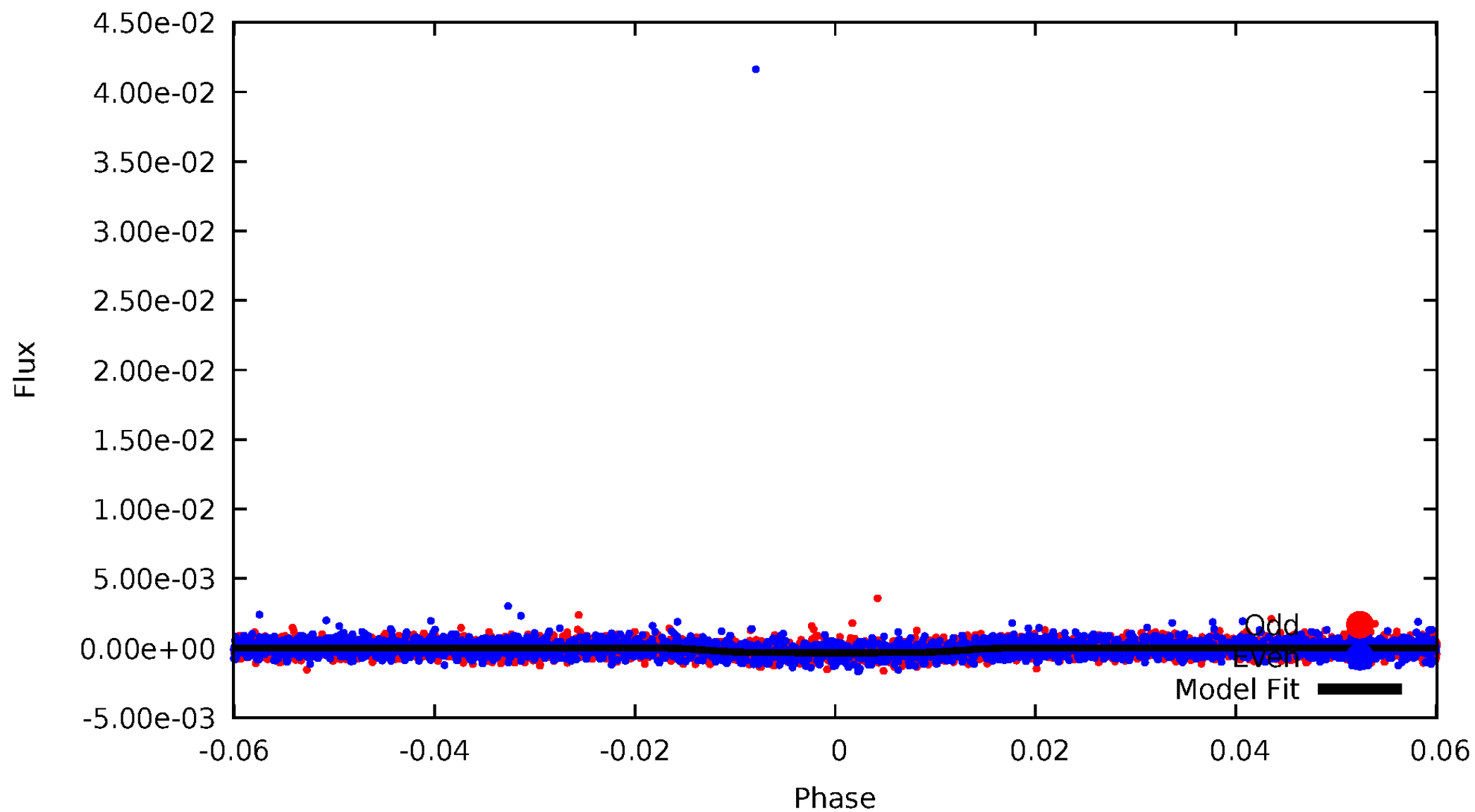


TCE 010601284-02



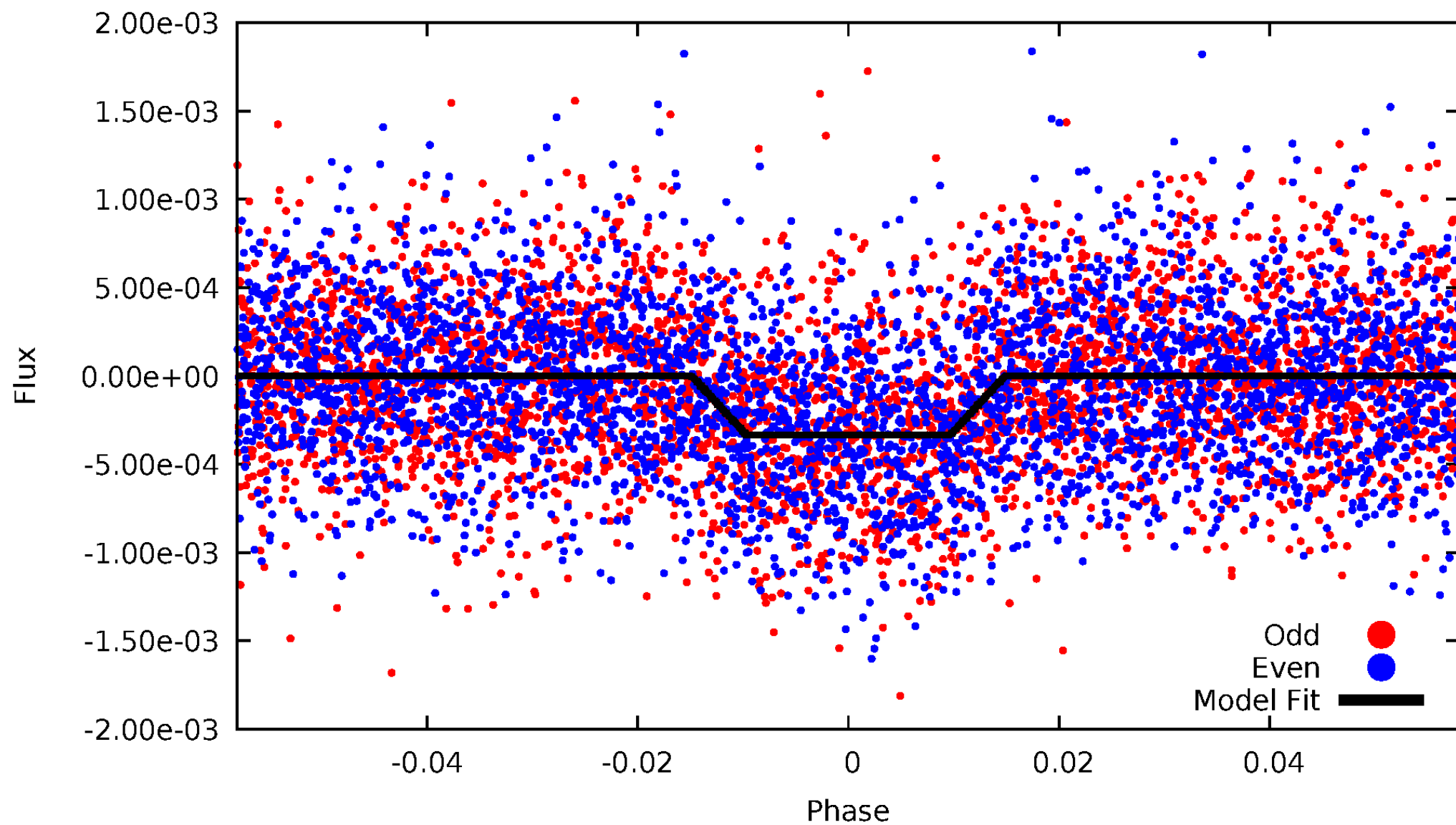
DV Odd/Even

TCE 010601284-02



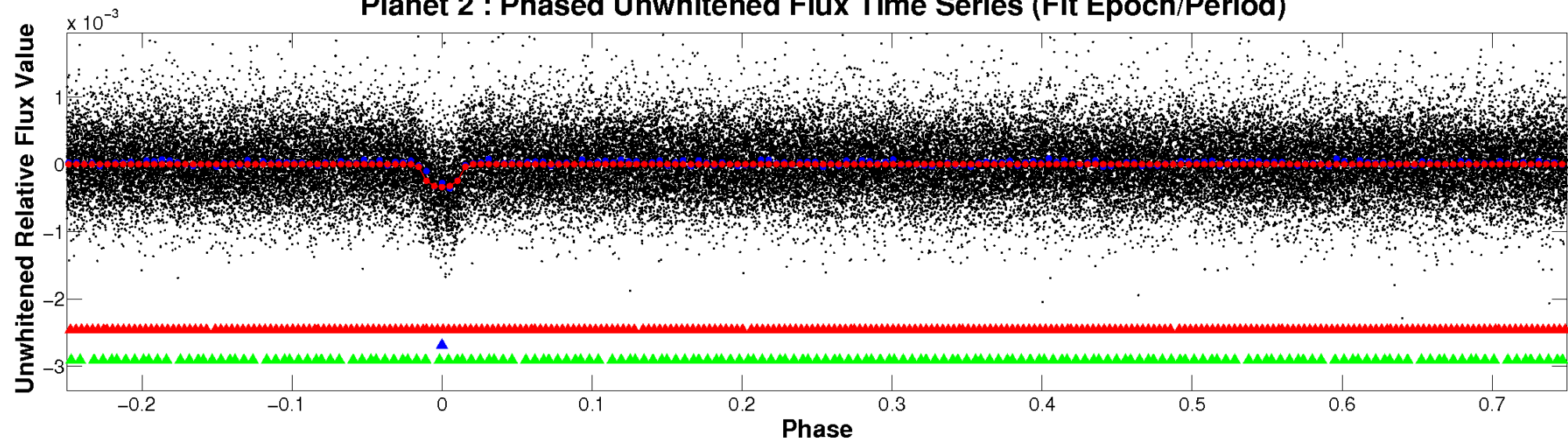
ALT Odd/Even

TCE 010601284-02

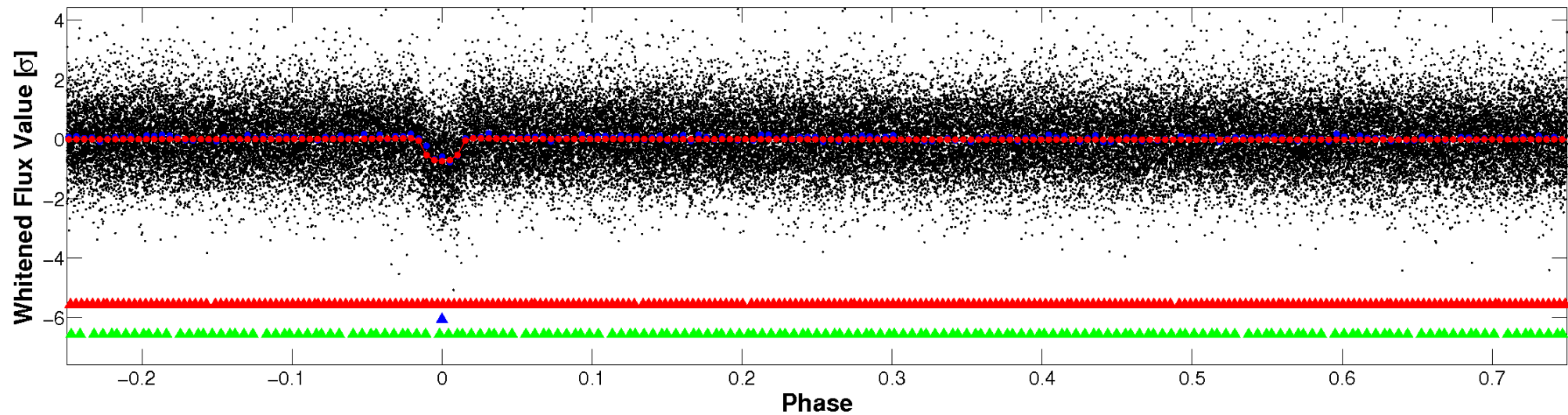


Non-Whitened Vs. Whitened Light Curve

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

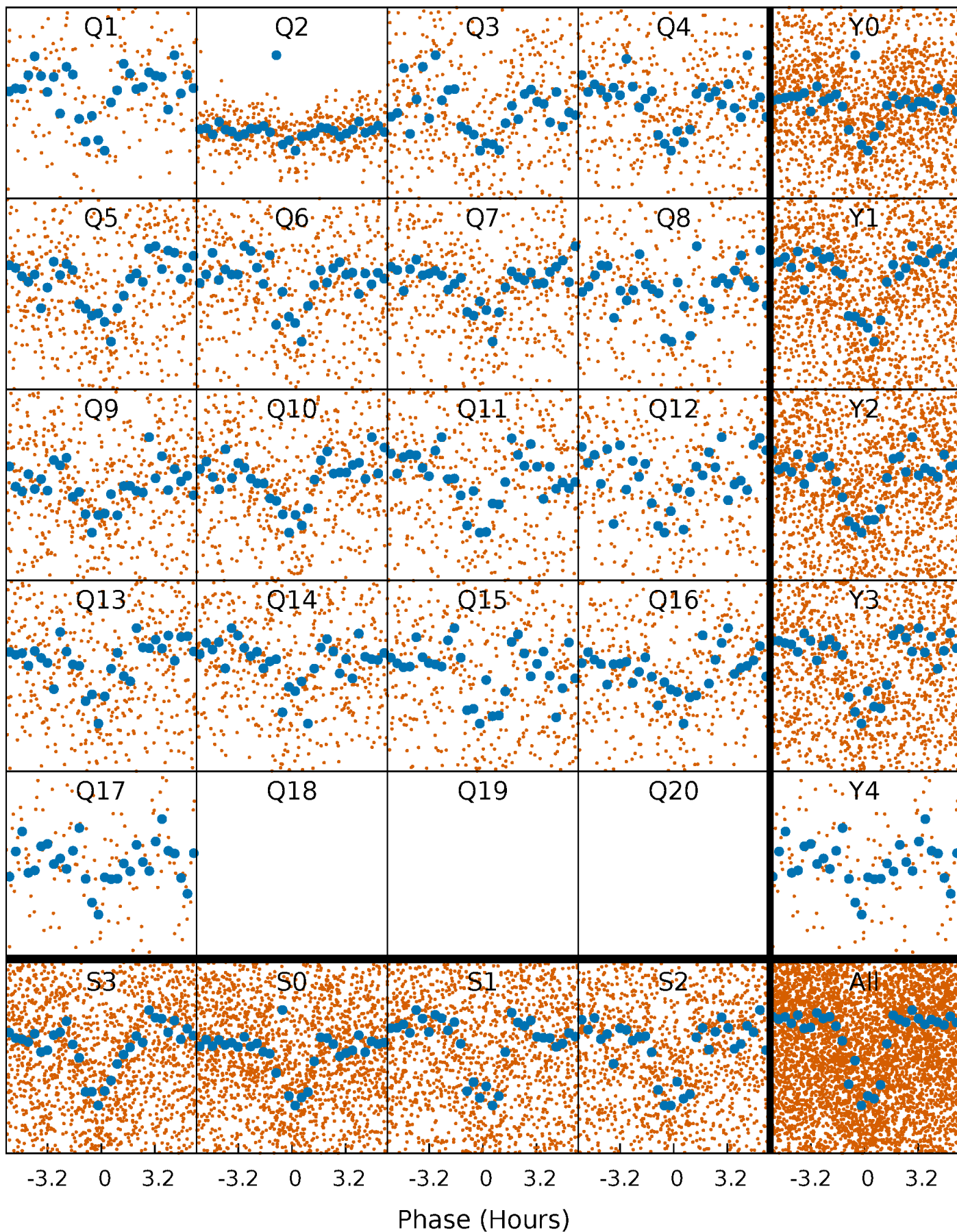


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



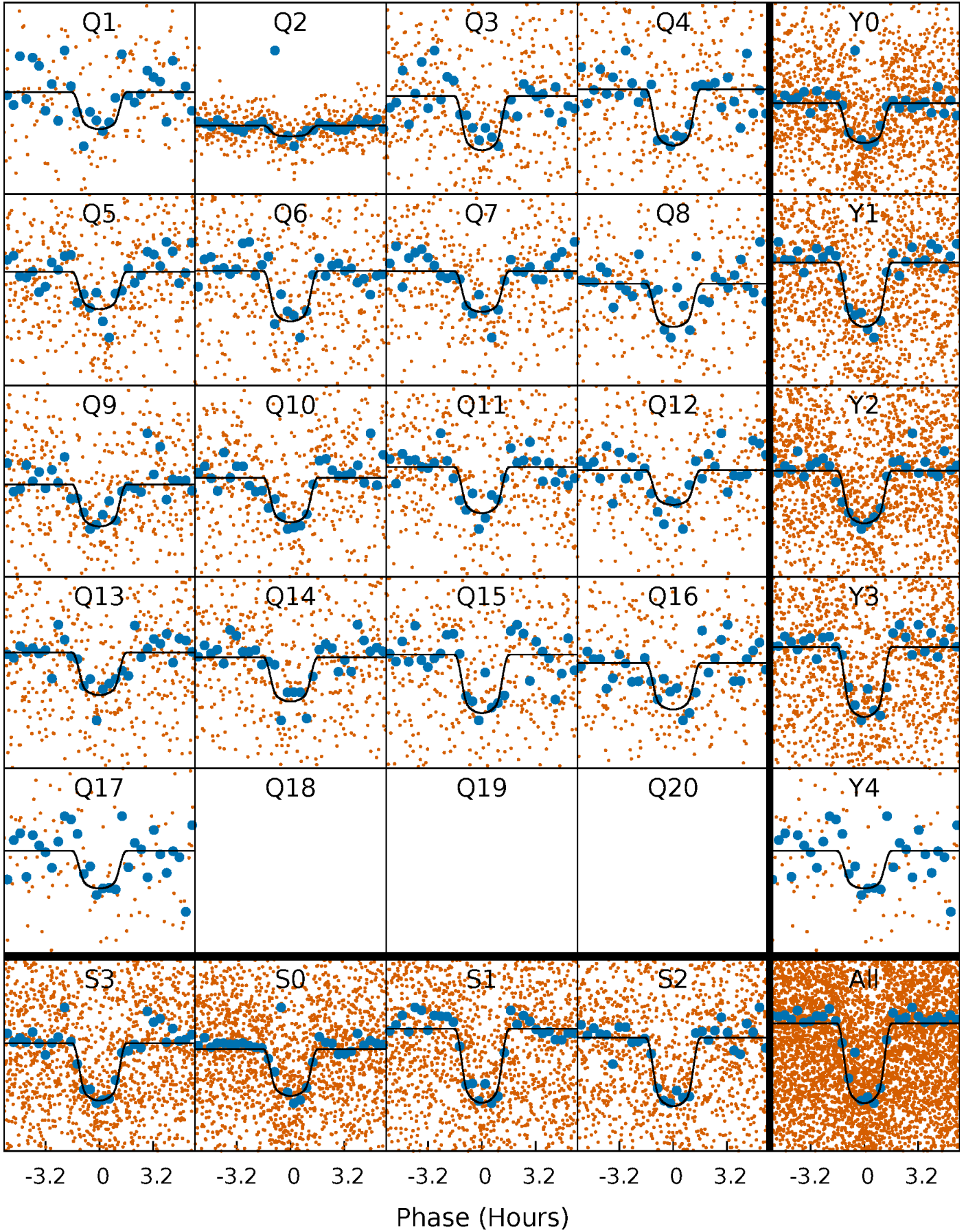
PDC Quarter-Phased Transit Curves

TCE 010601284-02 P= 3.941024 Days $T_0=132.150747$ (BKJD)



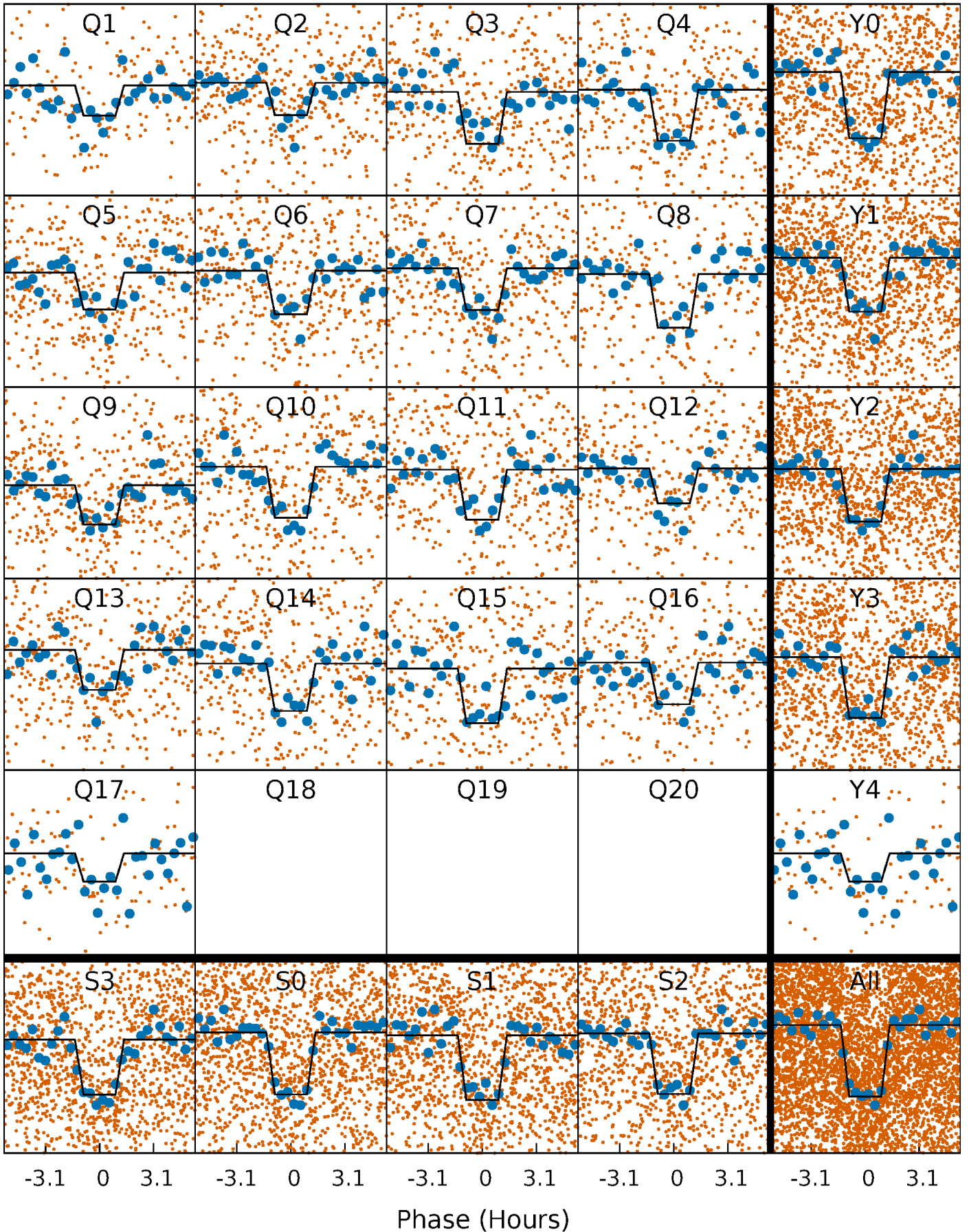
DV Quarter-Phased Transit Curves

TCE 010601284-02 P= 3.941024 Days $T_0=132.150747$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

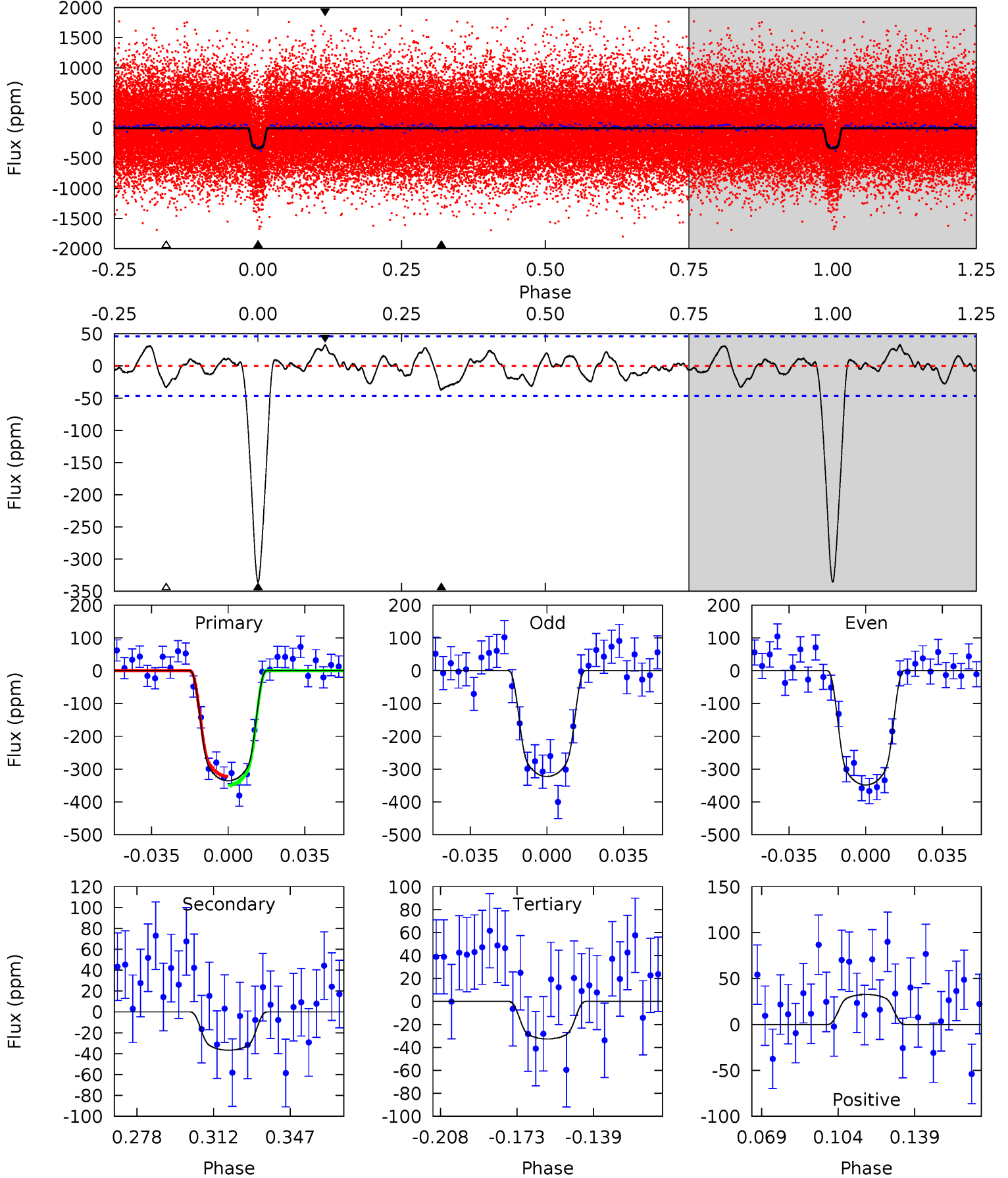
TCE 010601284-02 P= 3.941031 Days $T_0=132.149805$ (BKJD)



DV Model-Shift Uniqueness Test

010601284-02, P = 3.941024 Days, E = 128.209723 Days

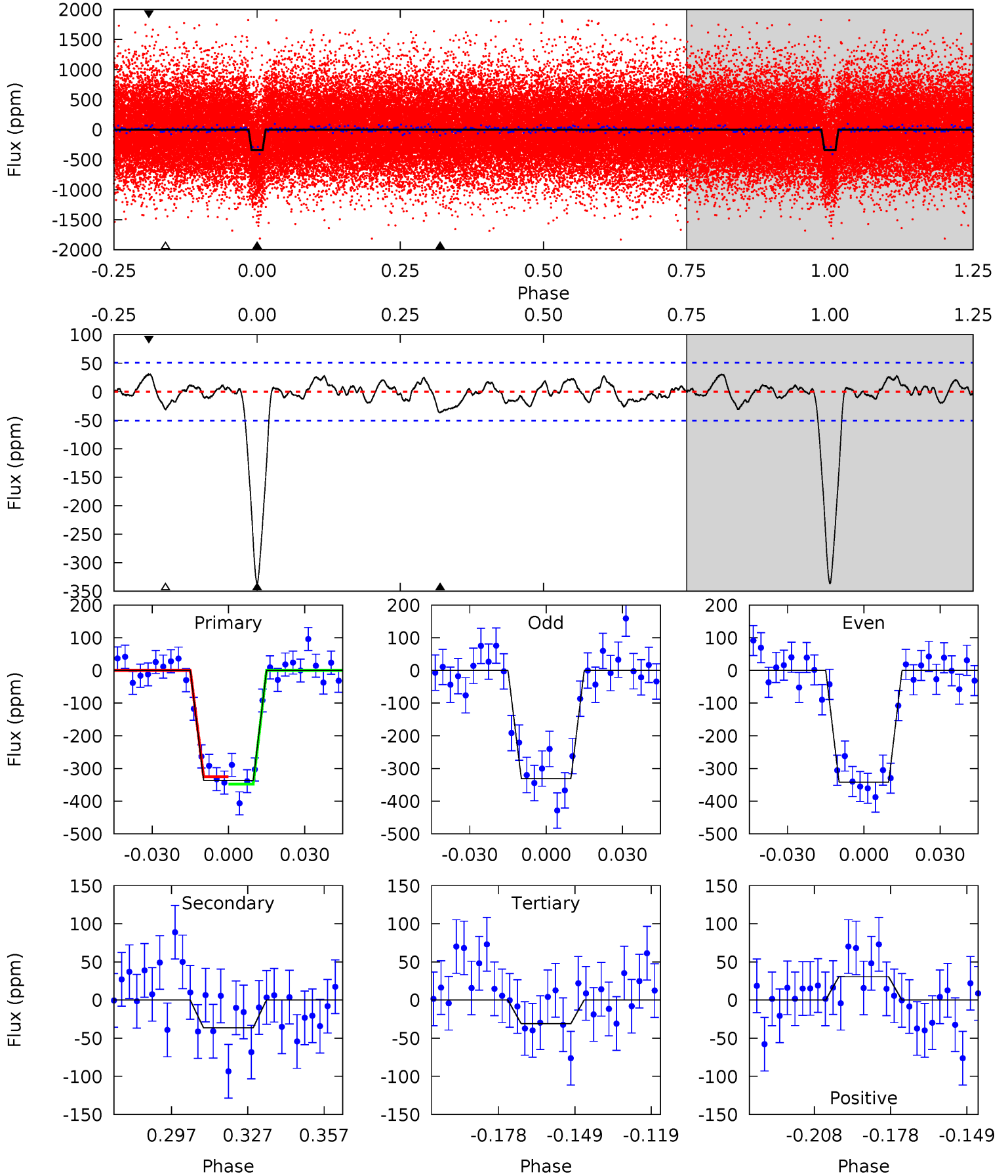
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
34.8	3.80	3.39	3.38	4.78	2.11	1.40	31.4	31.4	0.41	0.42	1.34	0.87	0.09	1.42



Alt Model-Shift Uniqueness Test

010601284-02, P = 3.941031 Days, E = 128.208774 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.9	3.46	2.95	2.91	4.81	2.17	1.19	29.0	29.0	0.51	0.55	0.53	1.00	0.08	1.09



Stellar Parameters For KIC 010601284

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5185^{+85}_{-77}	$4.440^{+0.098}_{-0.045}$	$0.160^{+0.150}_{-0.150}$	$0.910^{+0.057}_{-0.086}$	$0.831^{+0.058}_{-0.032}$	$1.553^{+0.613}_{-0.255}$
	+2%/-1%	+2%/-1%	+94%/-94%	+6%/-9%	+7%/-4%	+39%/-16%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 010601284-02 / KOI 0749.02

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-37 ± 10	$2.06^{+0.29}_{-0.28}$	1416^{+38}_{-47}	3292^{+202}_{-193}	$9.960^{+4.520}_{-3.230}$
Alt.	-36 ± 11	$1.79^{+0.32}_{-0.31}$	1417^{+39}_{-44}	3407^{+285}_{-224}	13^{+8}_{-4}

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 $A_{obs} \gg 1.0$

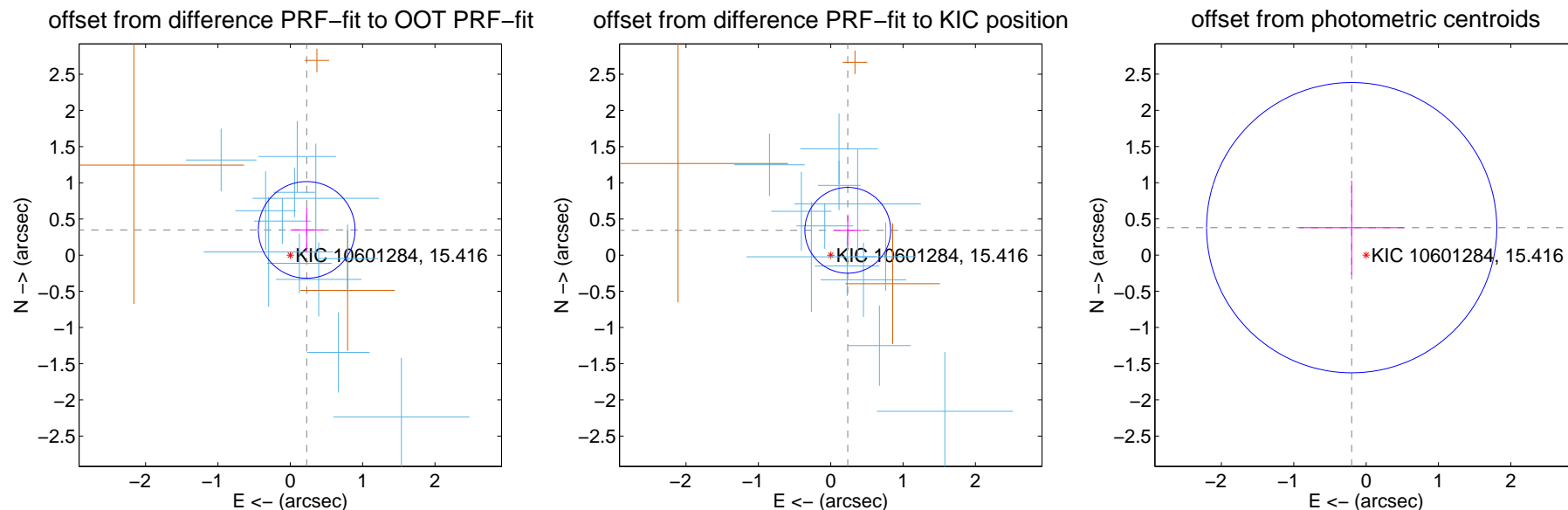
DV Centroid Data

Supplemental centroid analysis for 010601284-02. Kepler magnitude: 15.42. Transit SNR 24.90

There are 12 quarters with good PRF difference image offsets

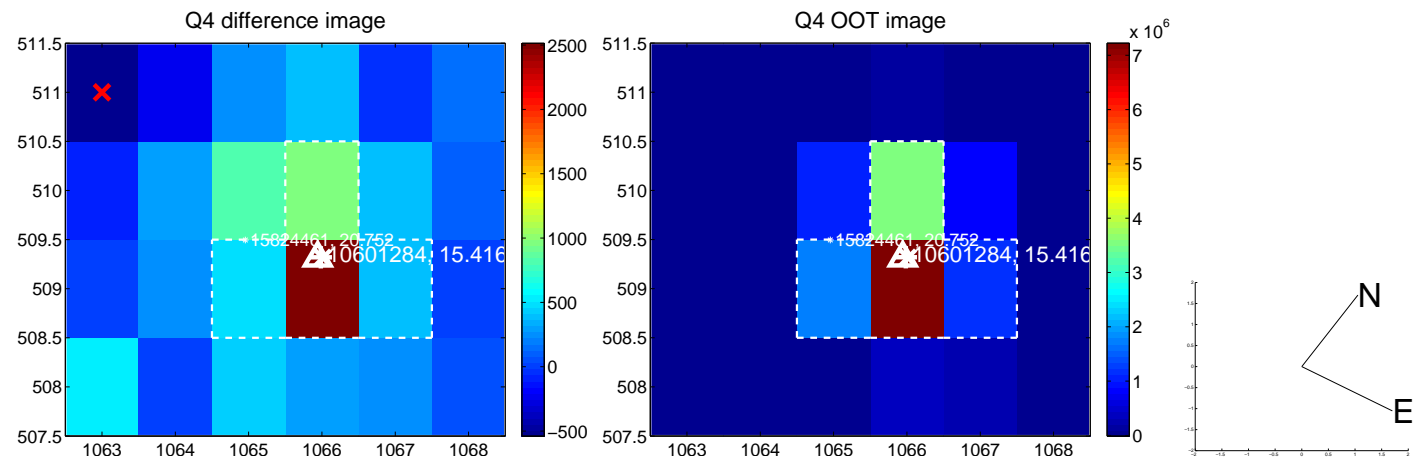
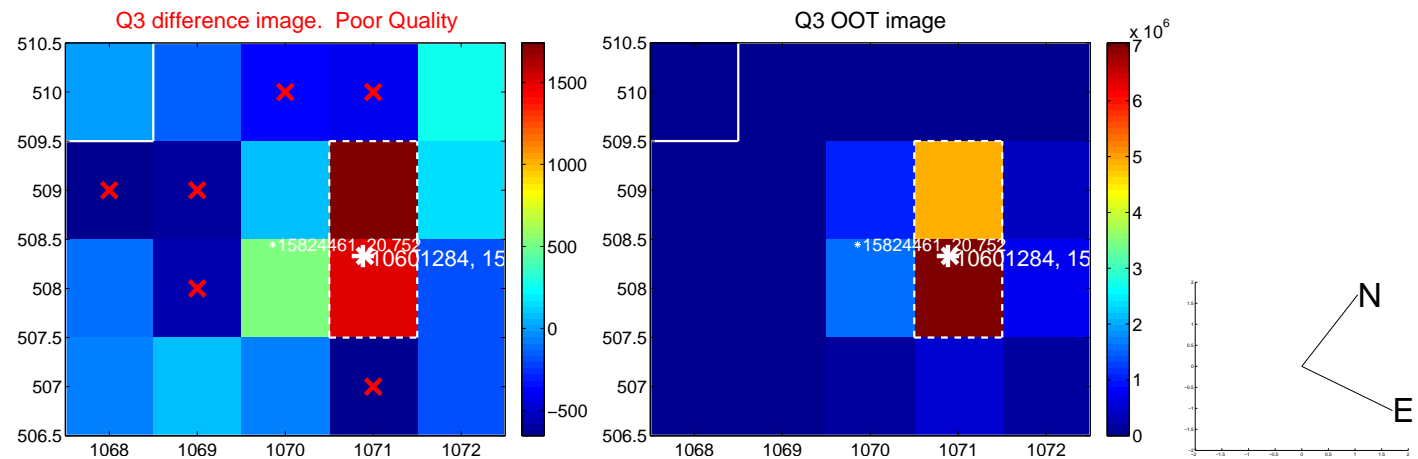
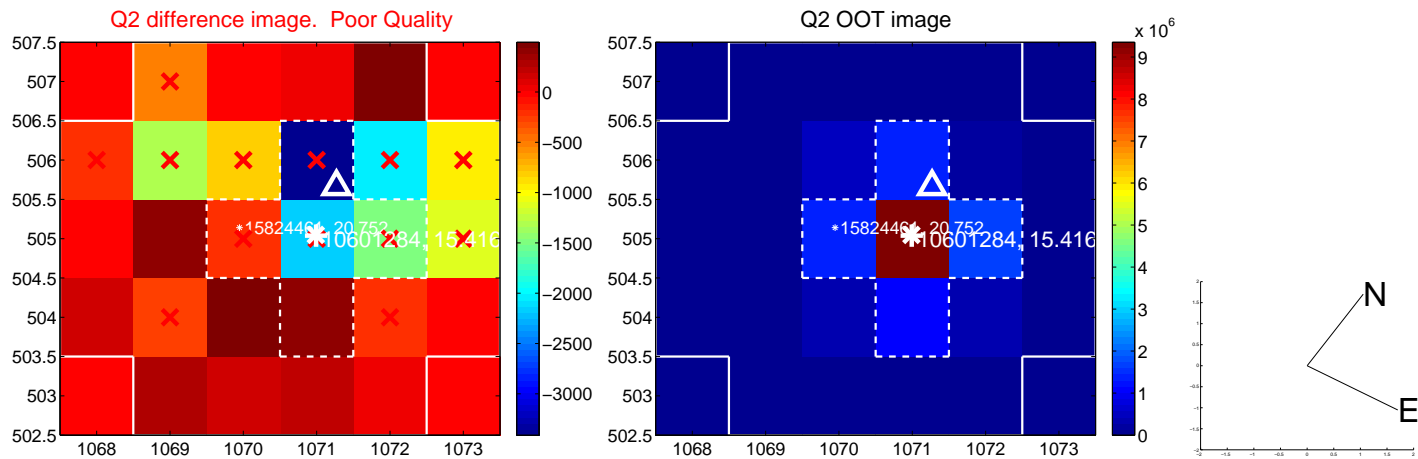
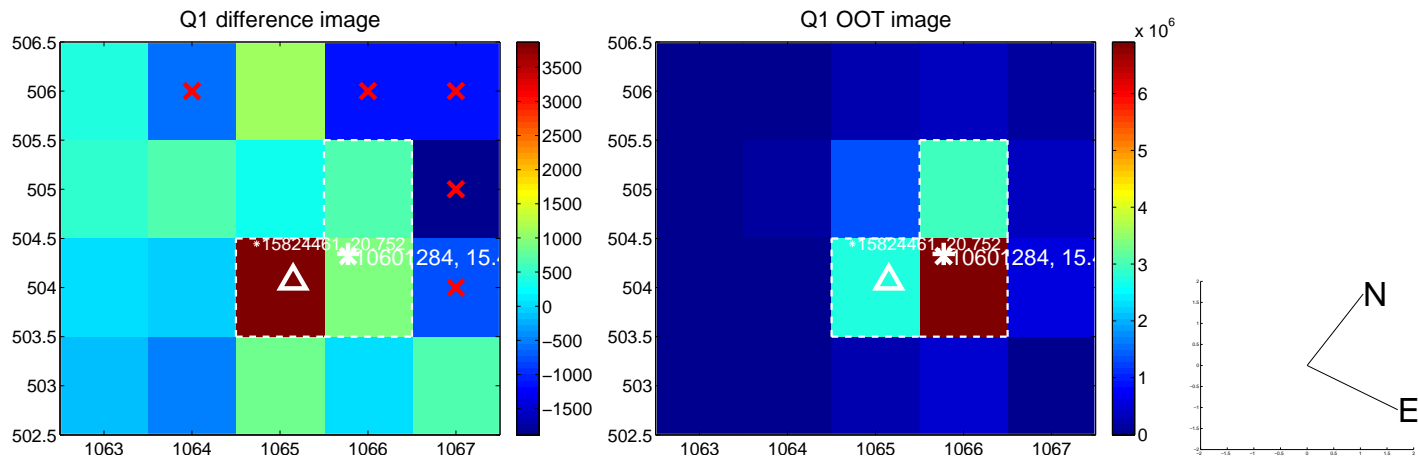
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.416 ± 0.223	1.87	-0.227 ± 0.224	0.349 ± 0.313
PRF-fit source offset from KIC position	0.416 ± 0.198	2.11	-0.236 ± 0.189	0.343 ± 0.201
photometric centroid source offset	0.43 ± 0.67	0.64	0.20 ± 0.72	0.38 ± 0.65

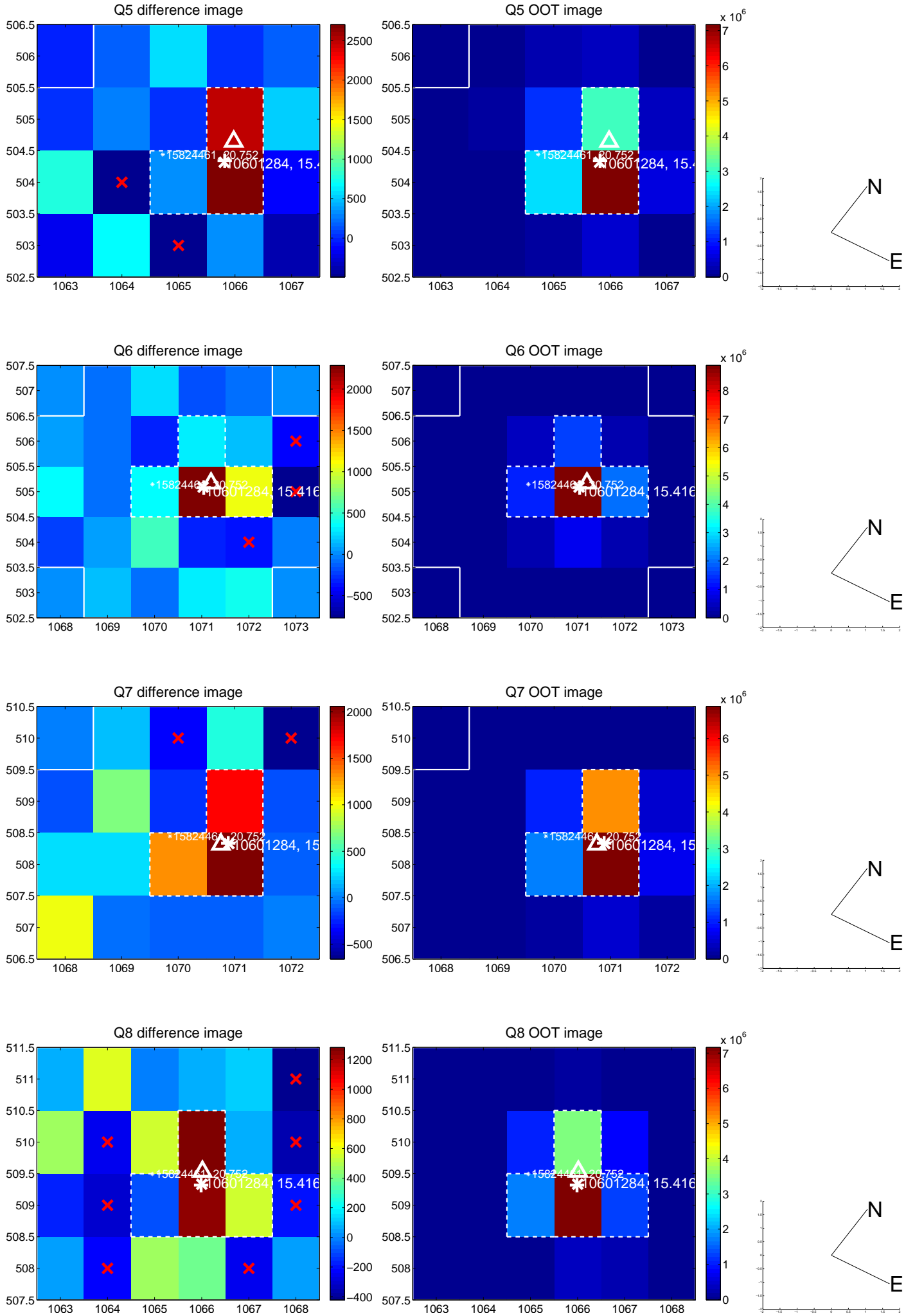


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

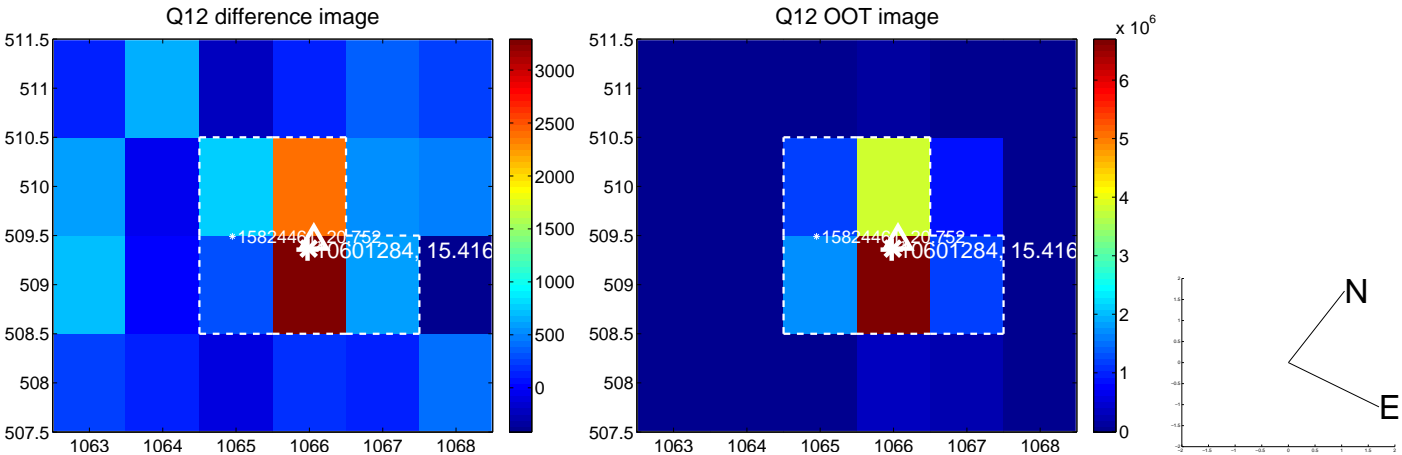
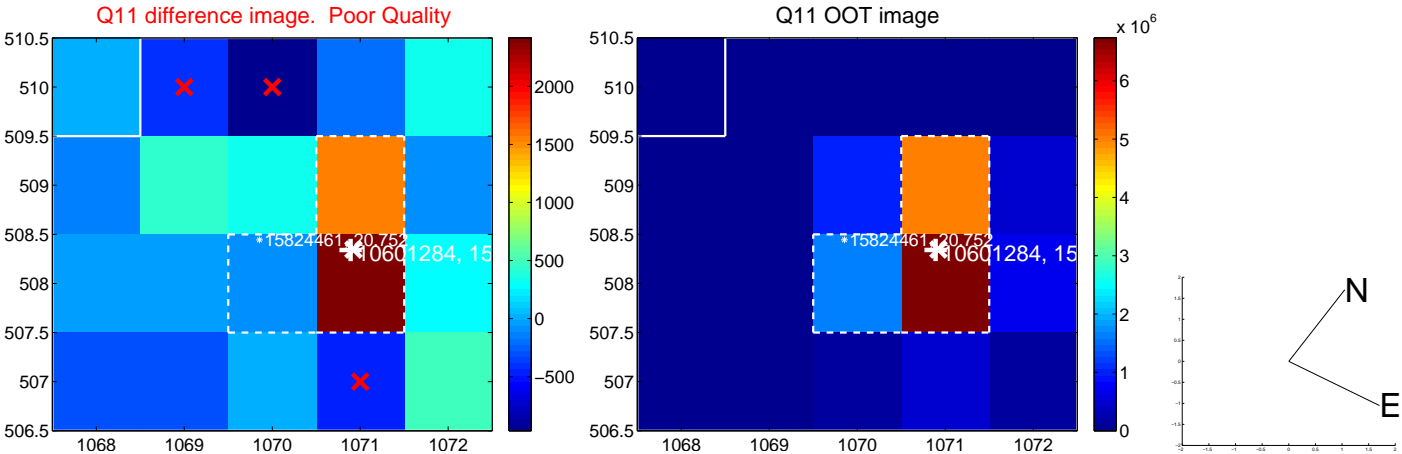
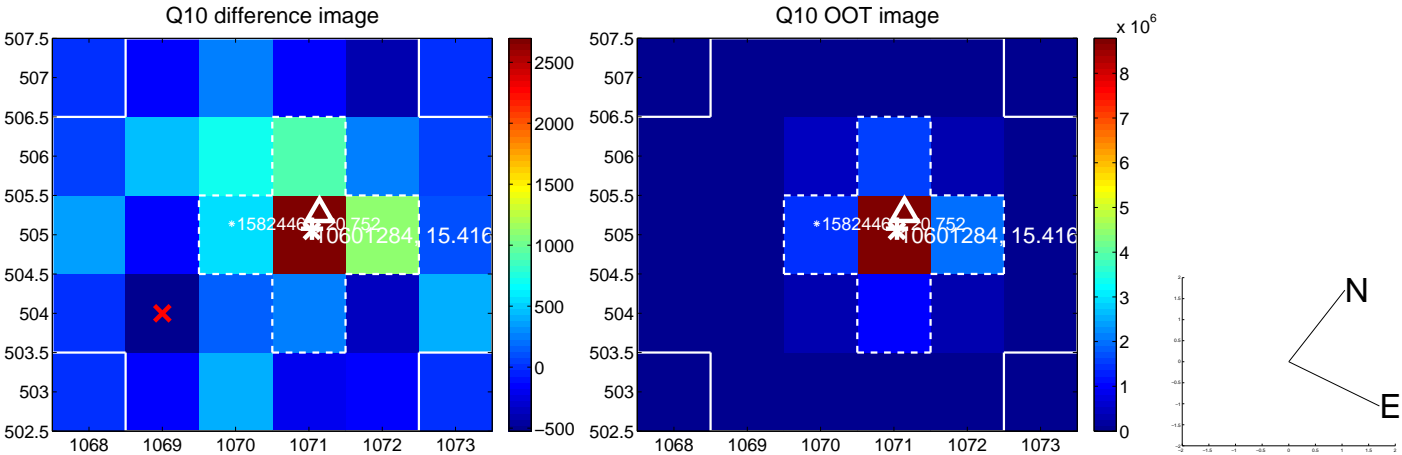
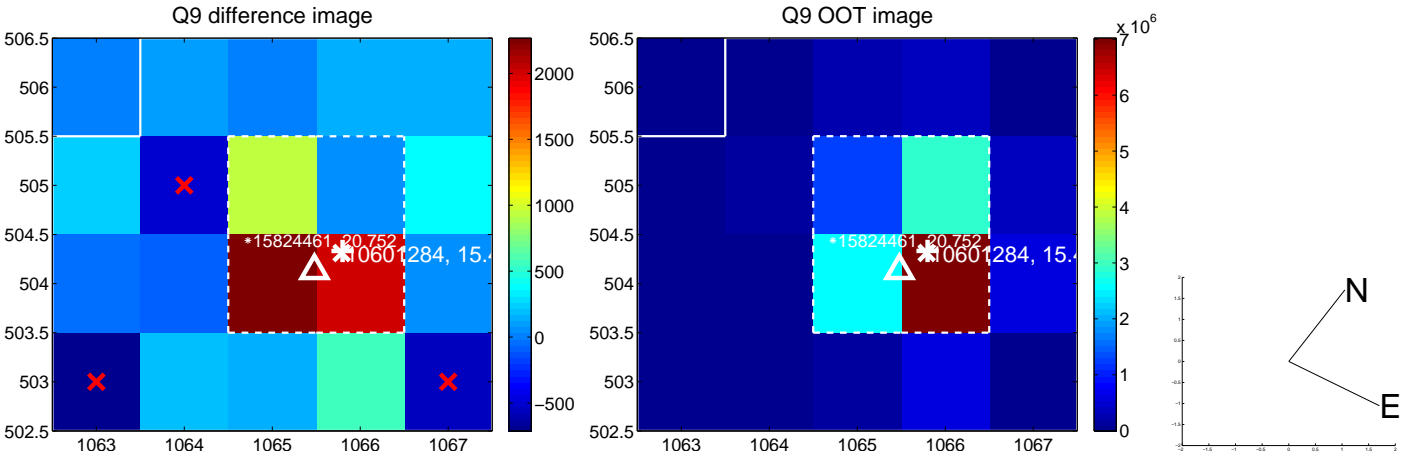
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



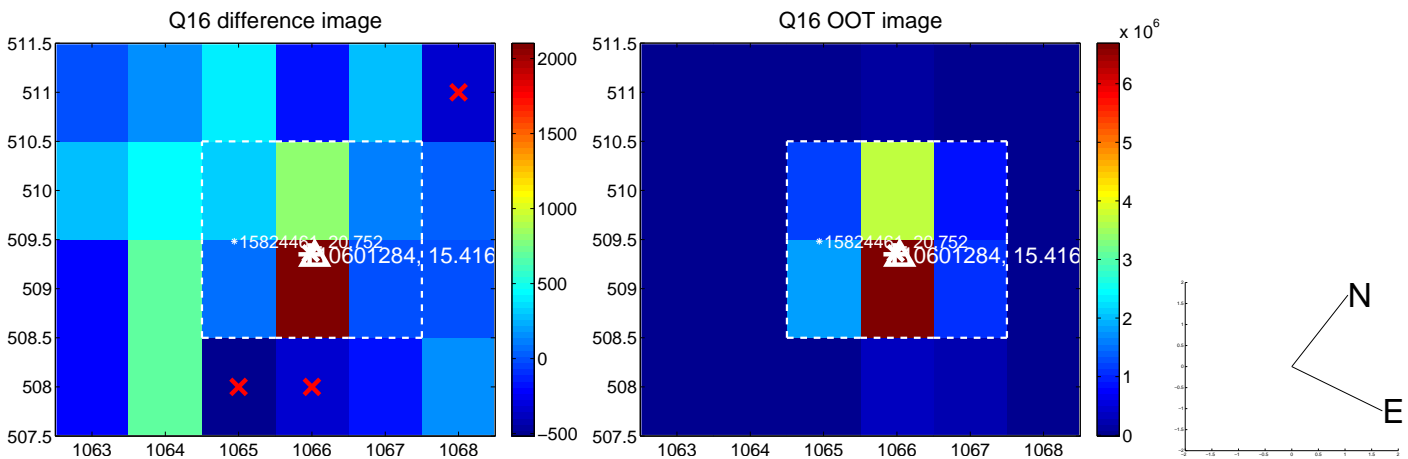
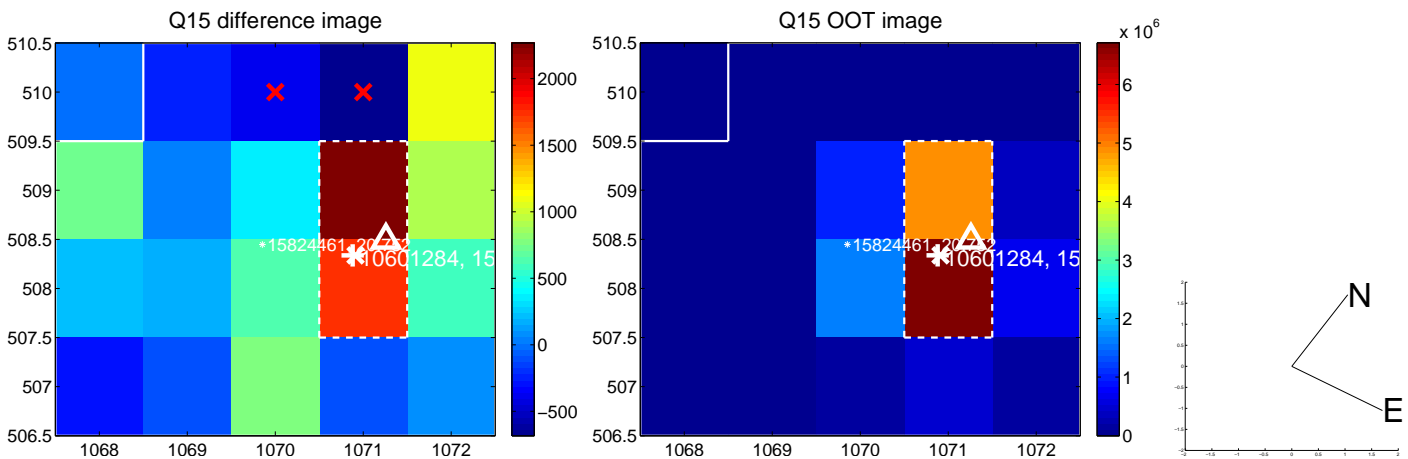
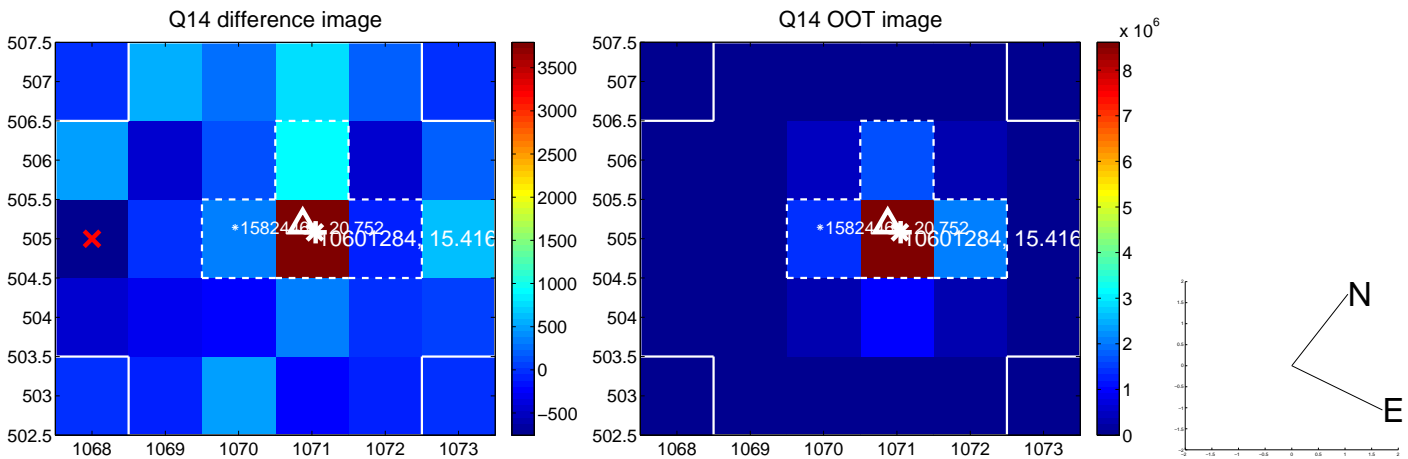
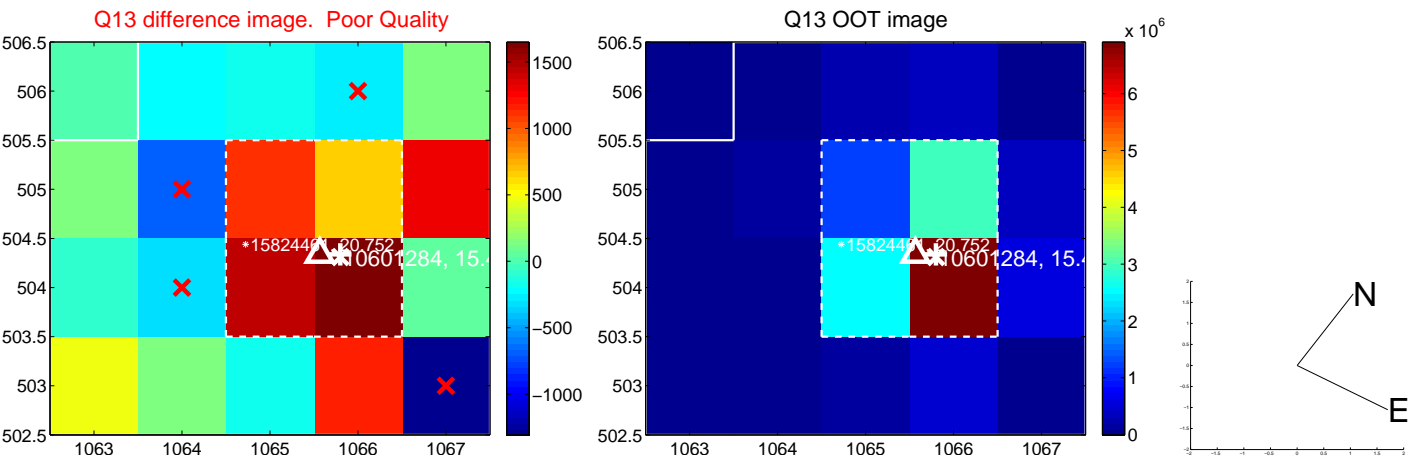
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



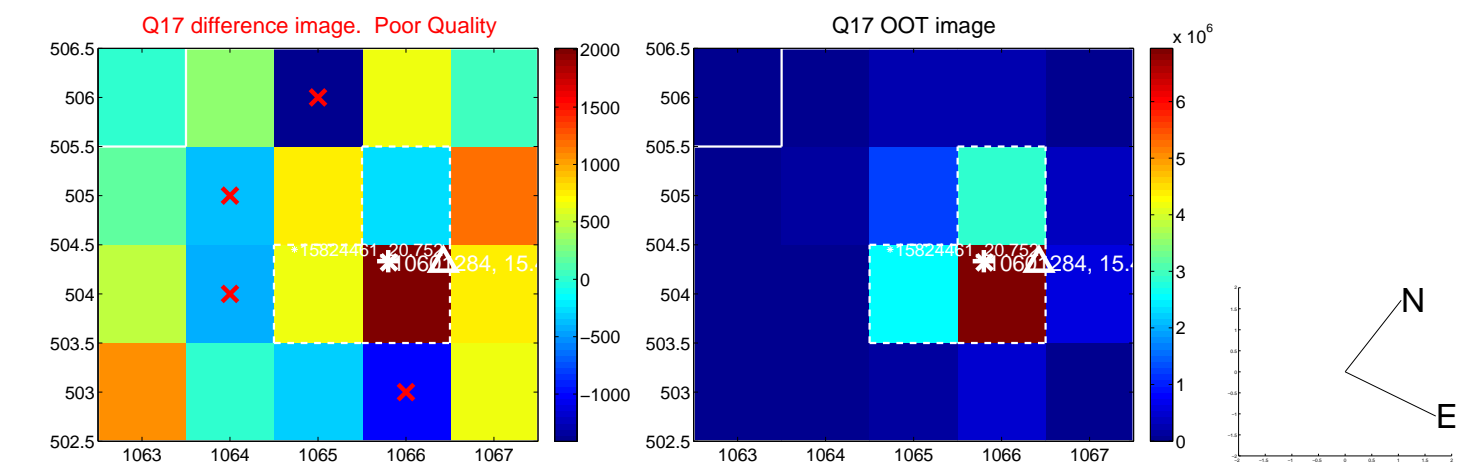
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



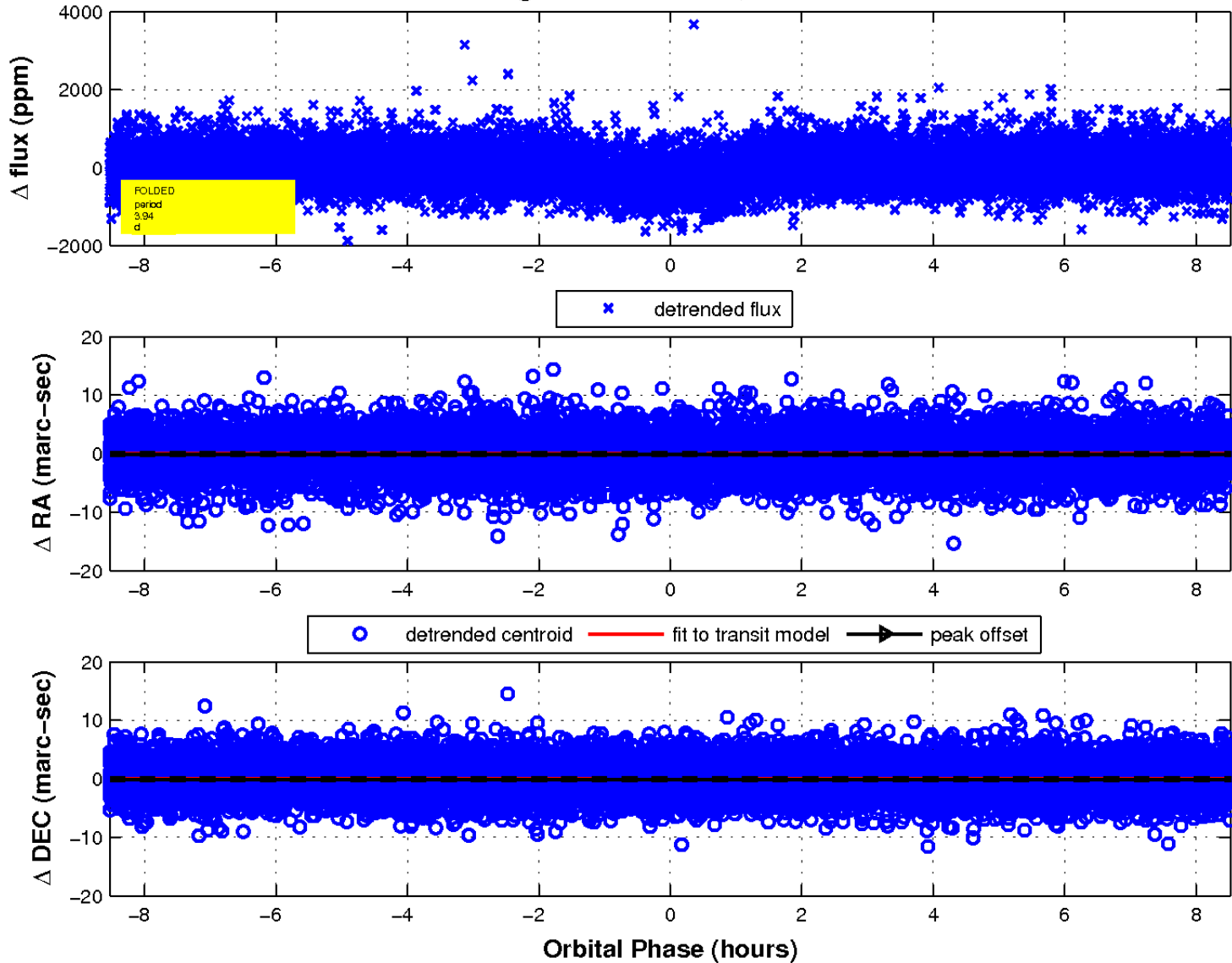
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

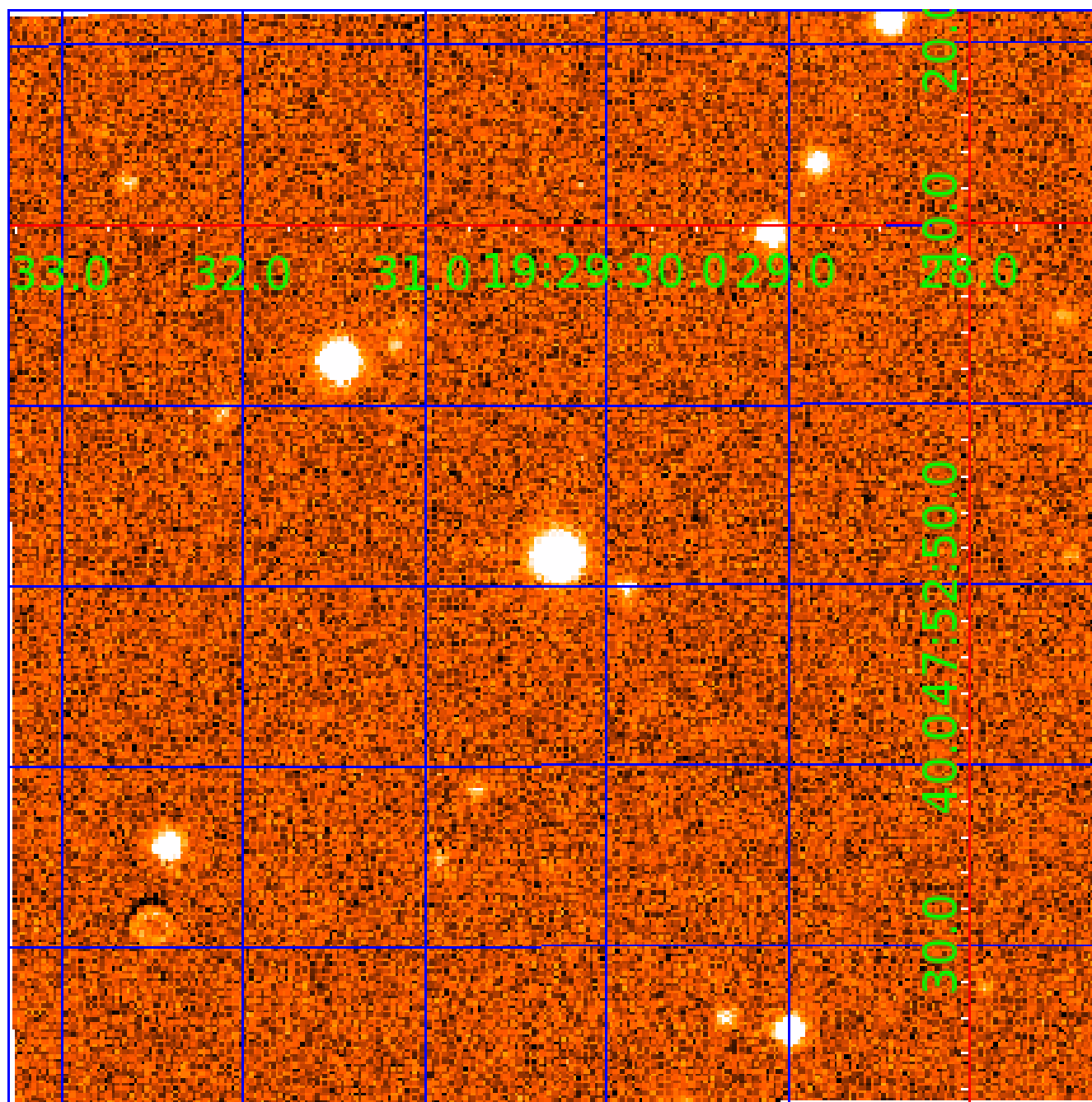


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 010601284

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})
010601284-01	OBS	0749.01	5.349570	134.357820	815.6	3.279	48.5	54.6	0.91	5185	3.12	169.11
010601284-02	OBS	0749.02	3.941024	132.150747	339.1	2.842	22.7	24.9	0.91	5185	2.10	254.16
010601284-03	OBS	0749.03	8.108966	132.811850	187.2	3.502	9.8	10.0	0.91	5185	1.53	97.12

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010601284-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010601284-02	OBS	PC	0.98	0	0	0	0	NO_COMMENT
010601284-03	OBS	PC	0.97	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.

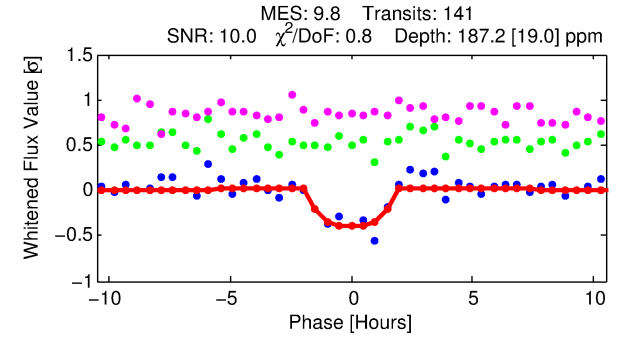
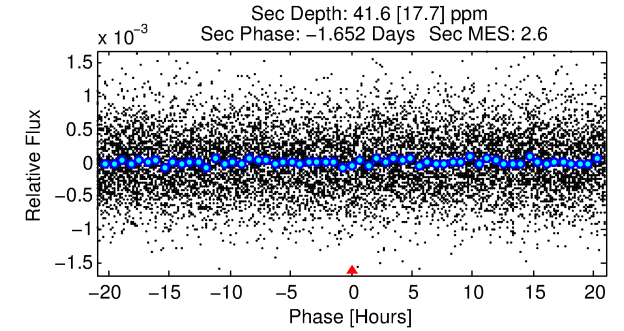
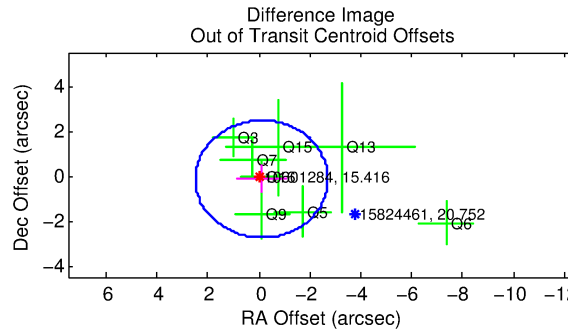
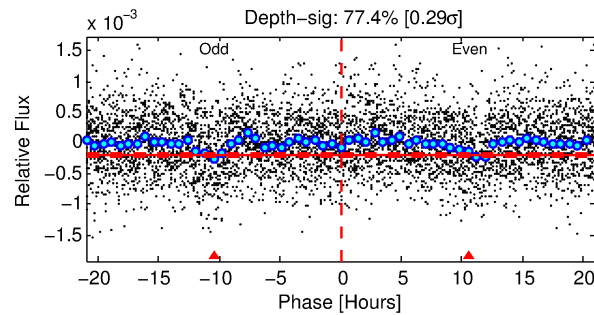
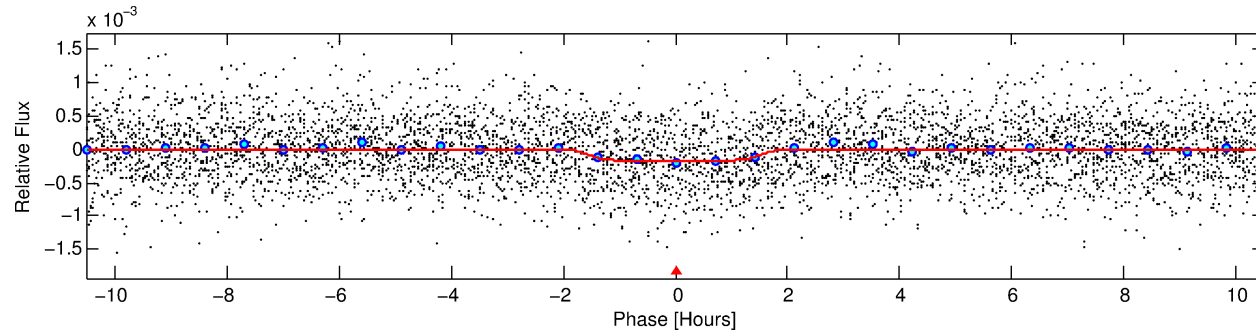
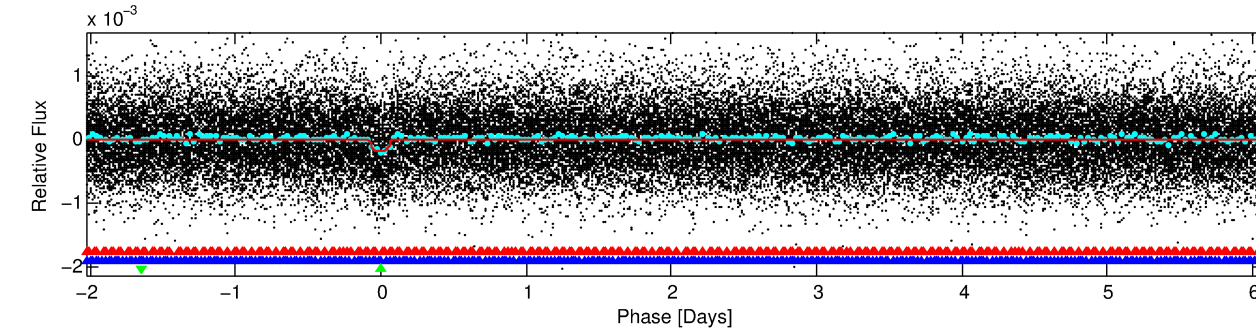
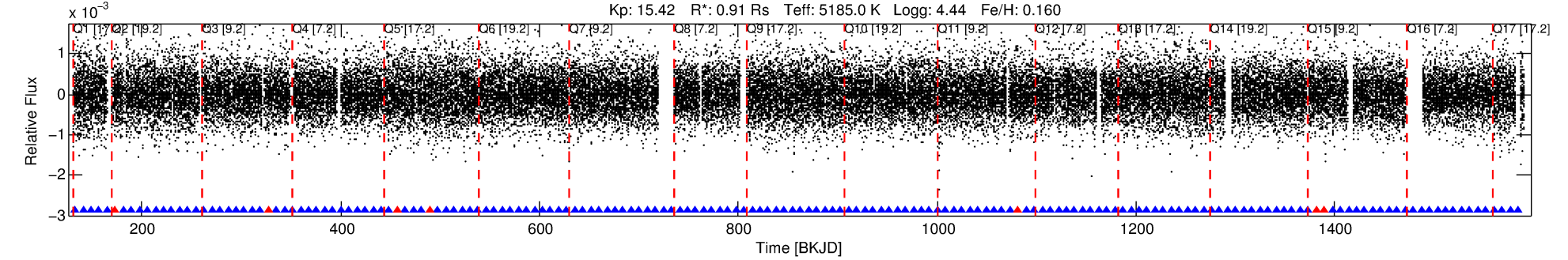
Ephemeris Match Information For 010601284-03

No Significant Match Found

DV One-Page Summary

KIC: 10601284 Candidate: 3 of 3 Period: 8.109 d
KOI: K00749.03 Name: Kepler-226d Corr: 0.974

Kp: 15.42 R*: 0.91 Rs Teff: 5185.0 K Logg: 4.44 Fe/H: 0.160



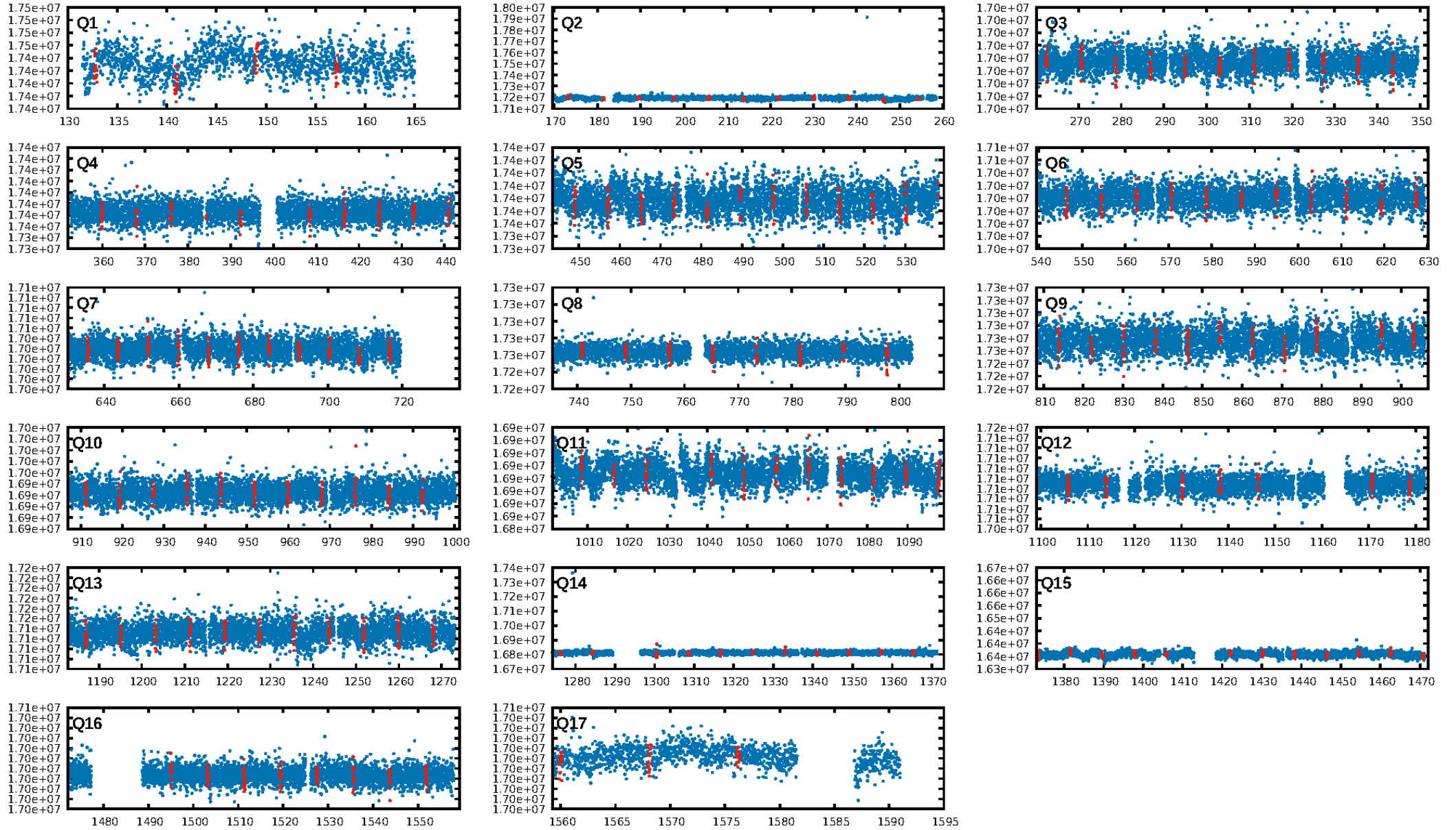
DV Fit Results:

Period = 8.10897 [0.00007] d
Epoch = 132.8118 [0.0069] BKJD
Rp/R* = 0.0154 [0.0078]
a/R* = 8.01 [16.79]
b = 0.91 [0.41]
Seff = 97.12 [17.07]
Teff = 800 [35] K
Rp = 1.53 [0.79] Re
a = 0.0743 [0.0073] AU
Ag = 54.01 [60.26] [0.88σ]
Teffp = 3355 [927] K [2.75σ]

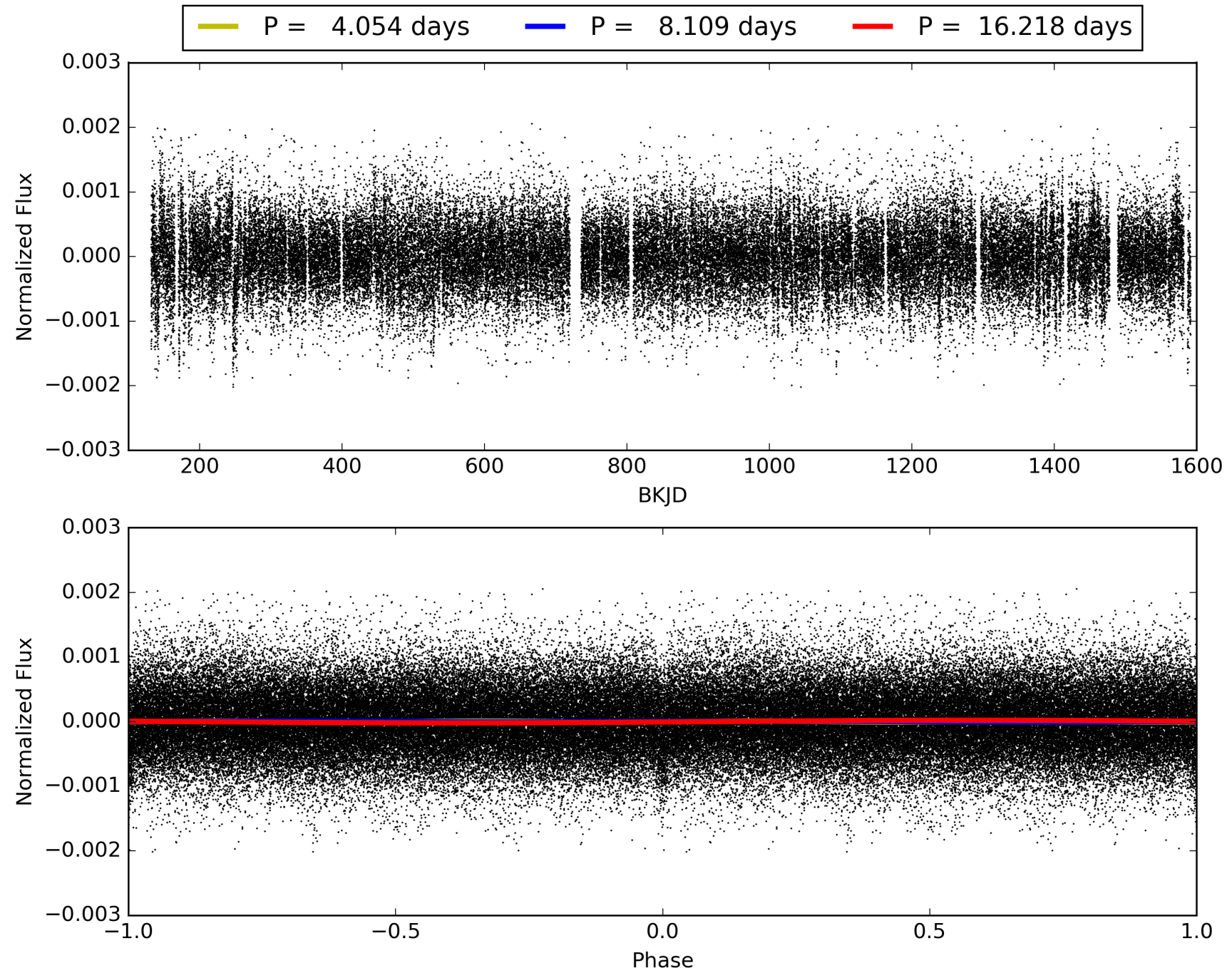
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [13.80σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.71e-22
RollingBand-fgt: 0.95 [128/135]
GhostDiagnostic-chr: 94.51
Centroid-sig: 1.3%
Centroid-so: 3.794 arcsec [2.21σ]
OotOffset-rm: 0.179 arcsec [0.21σ]
KicOffset-rm: 0.216 arcsec [0.22σ]
OotOffset-st: 1/3/1/3 [8]
KicOffset-st: 1/3/1/3 [8]
DiffImageQuality-fgm: 0.38 [3/8]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 010601284-03, PDC Light Curves

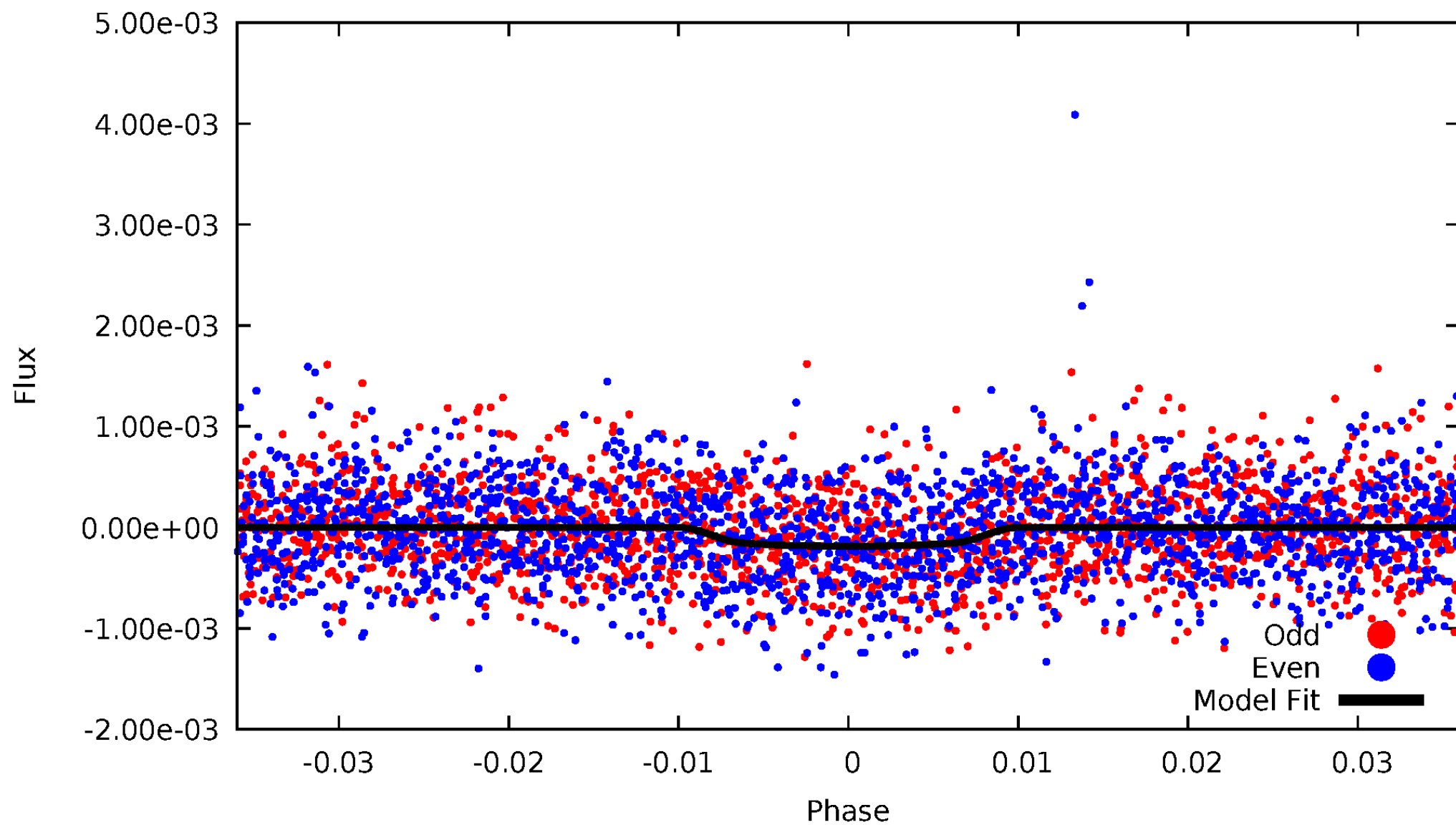


TCE 010601284-03



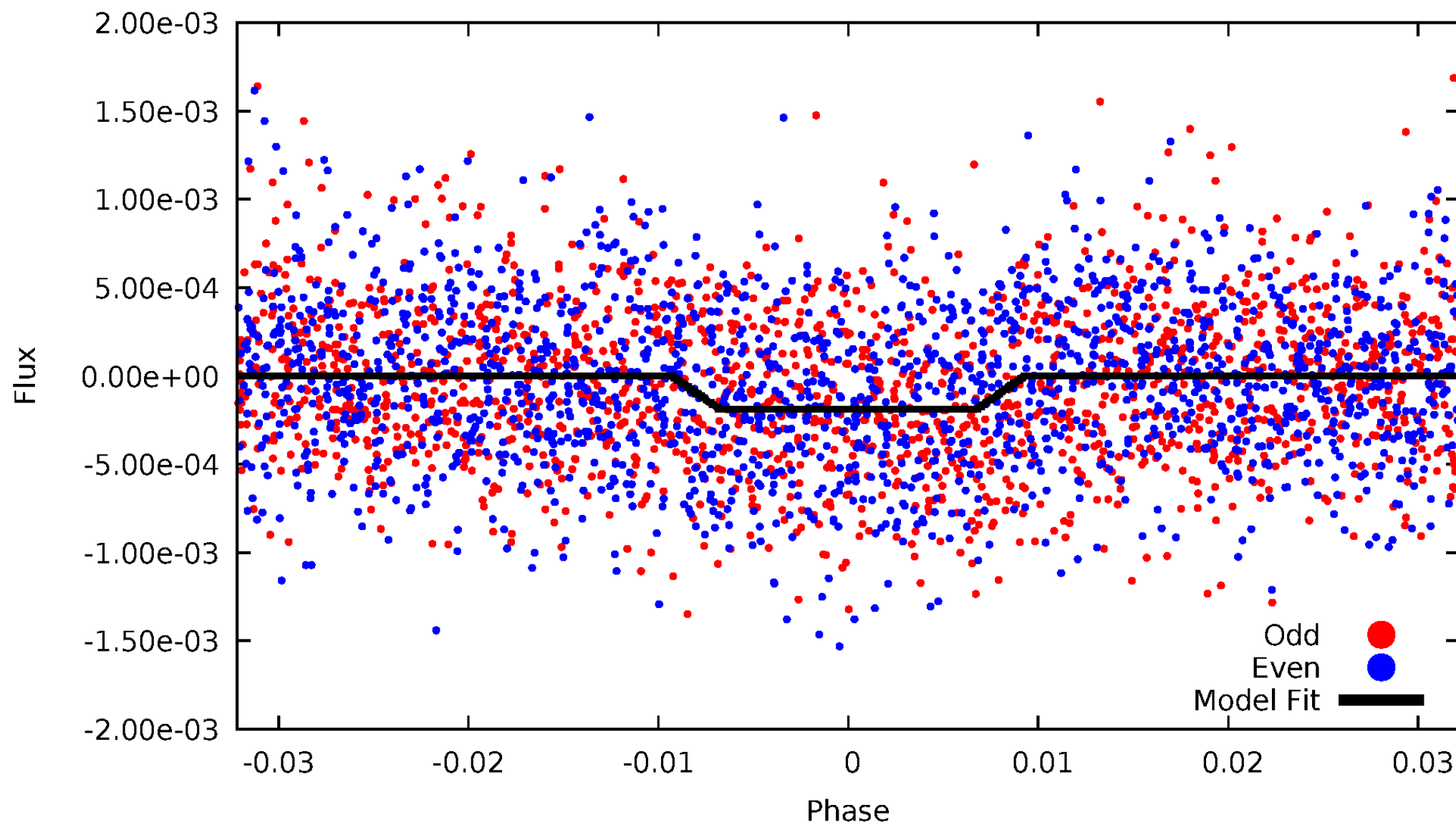
DV Odd/Even

TCE 010601284-03

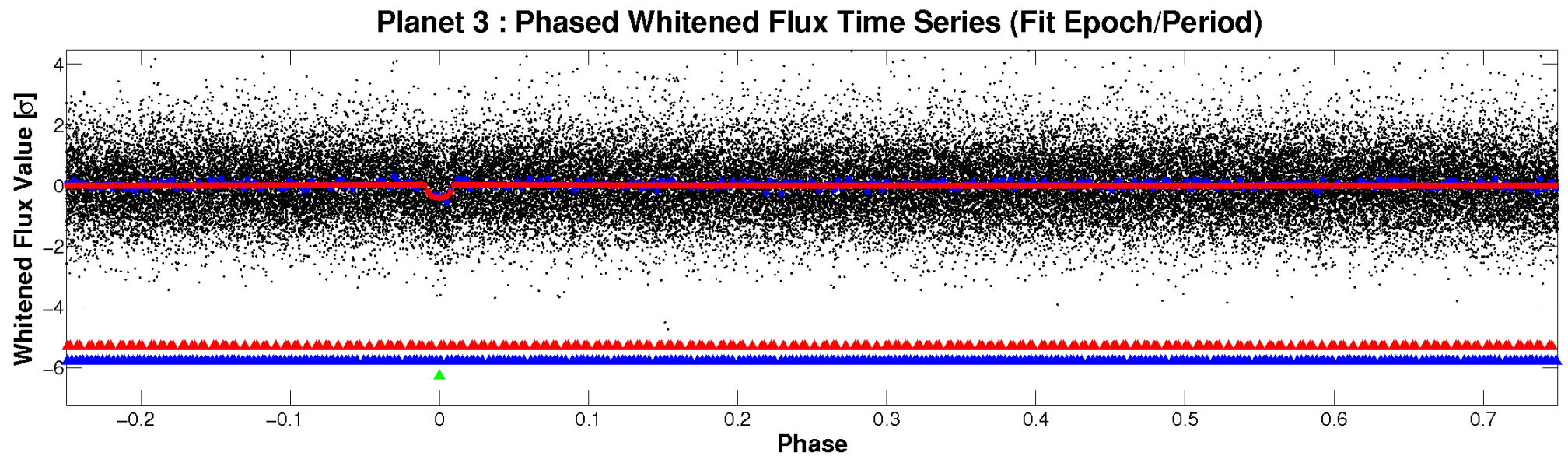
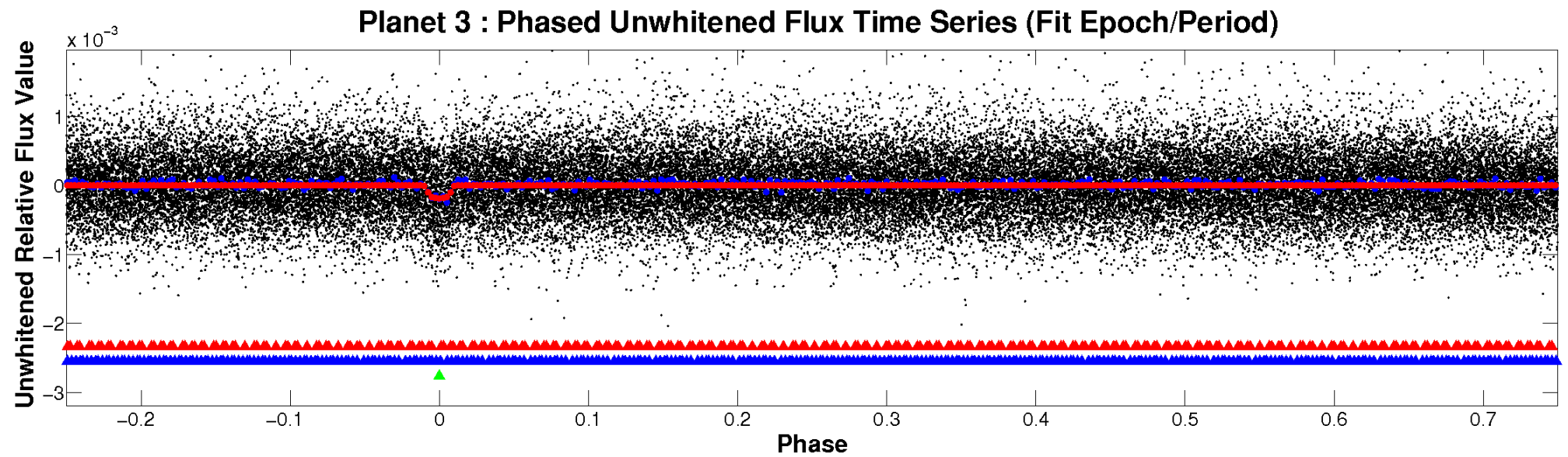


ALT Odd/Even

TCE 010601284-03

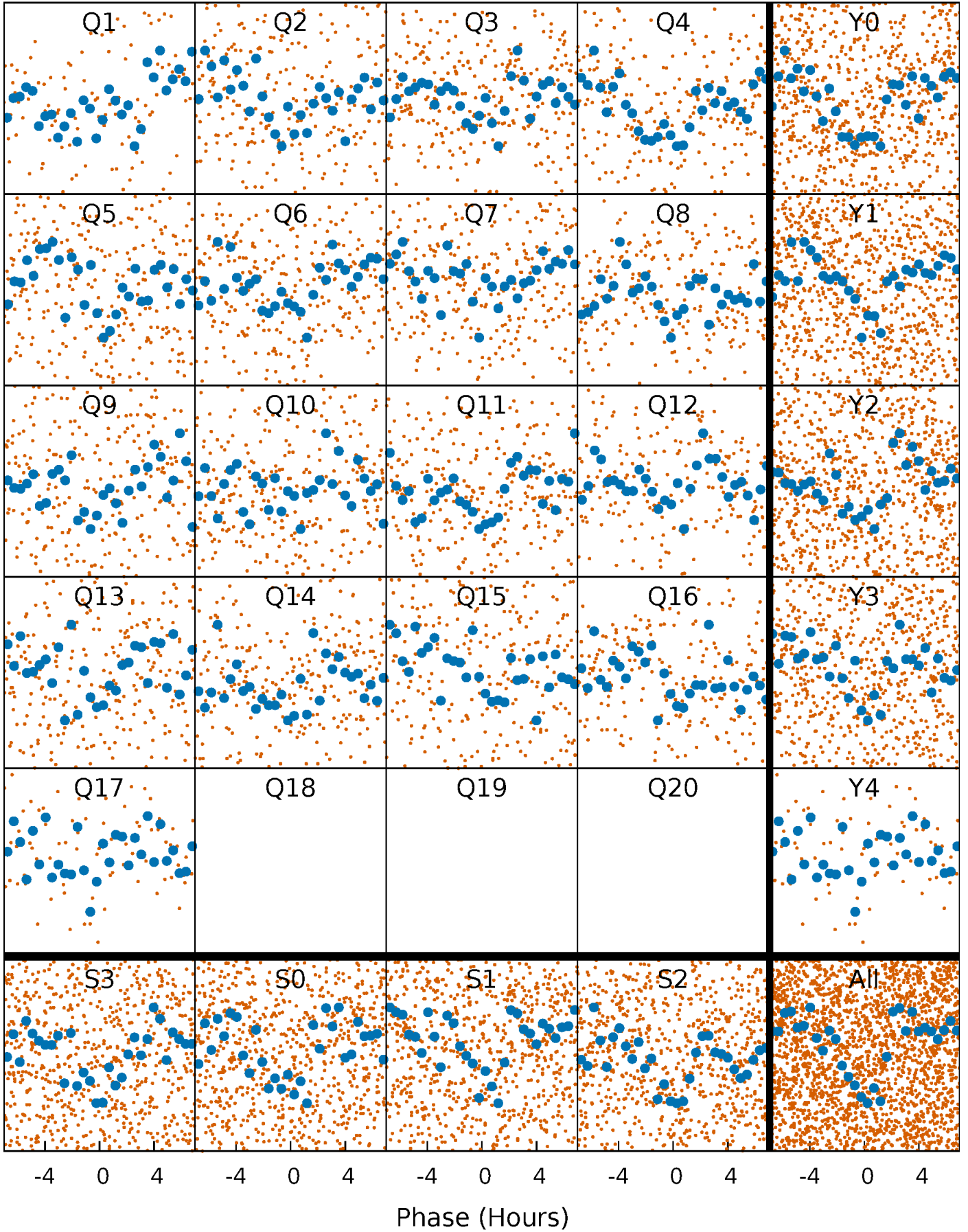


Non-Whitened Vs. Whitened Light Curve



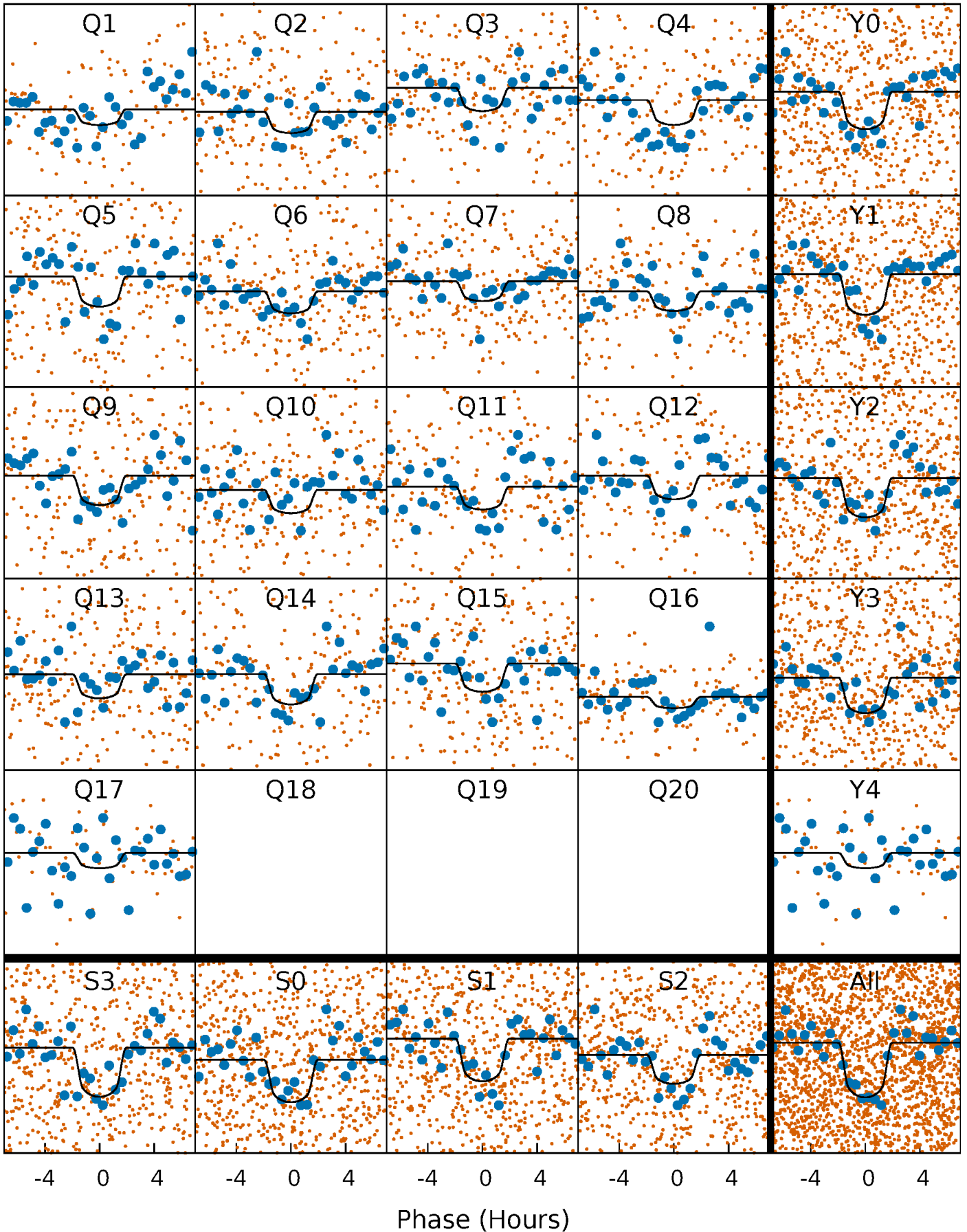
PDC Quarter-Phased Transit Curves

TCE 010601284-03 $P = 8.108966$ Days $T_0 = 132.811850$ (BKJD)



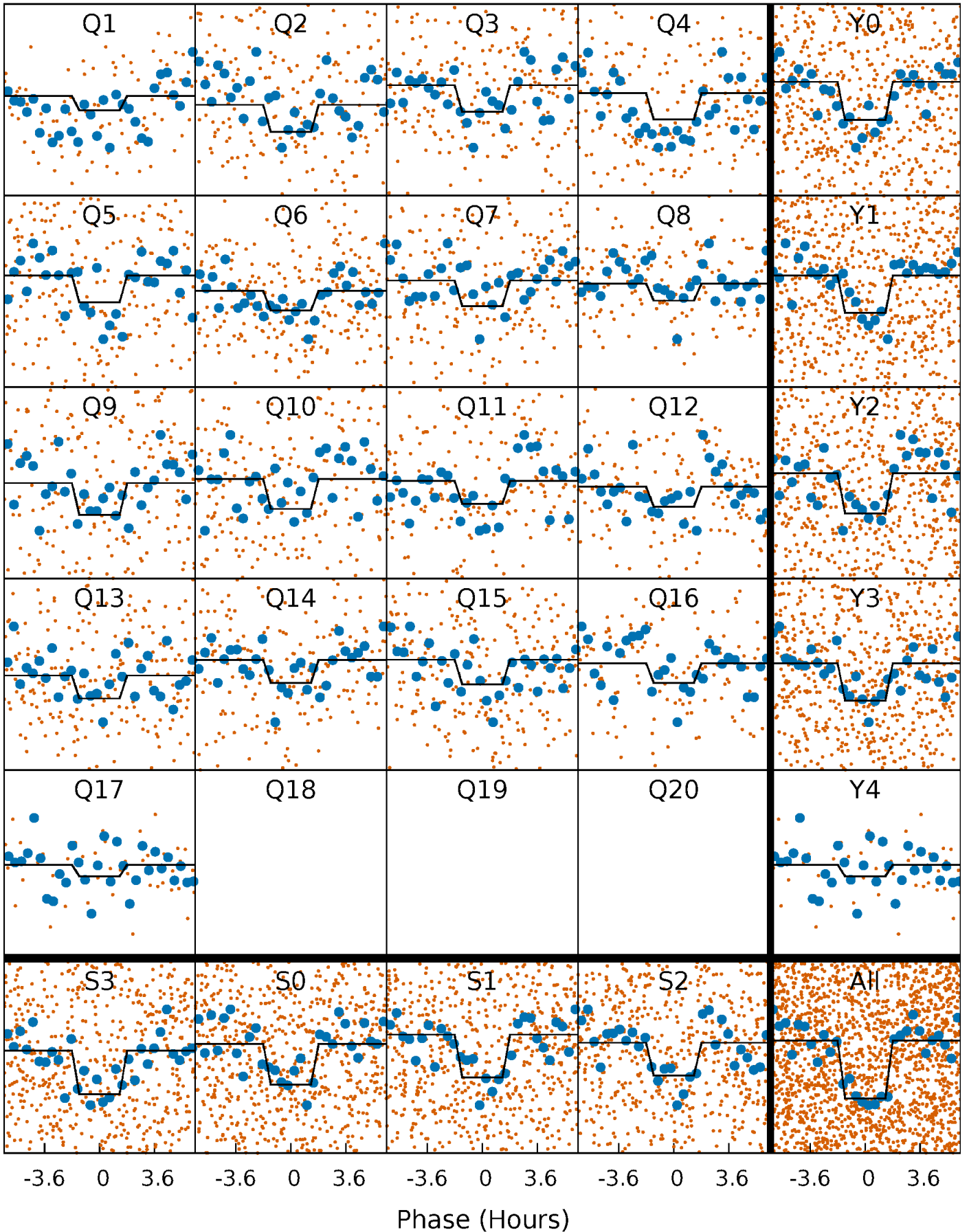
DV Quarter-Phased Transit Curves

TCE 010601284-03 $P = 8.108966$ Days $T_0 = 132.811850$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

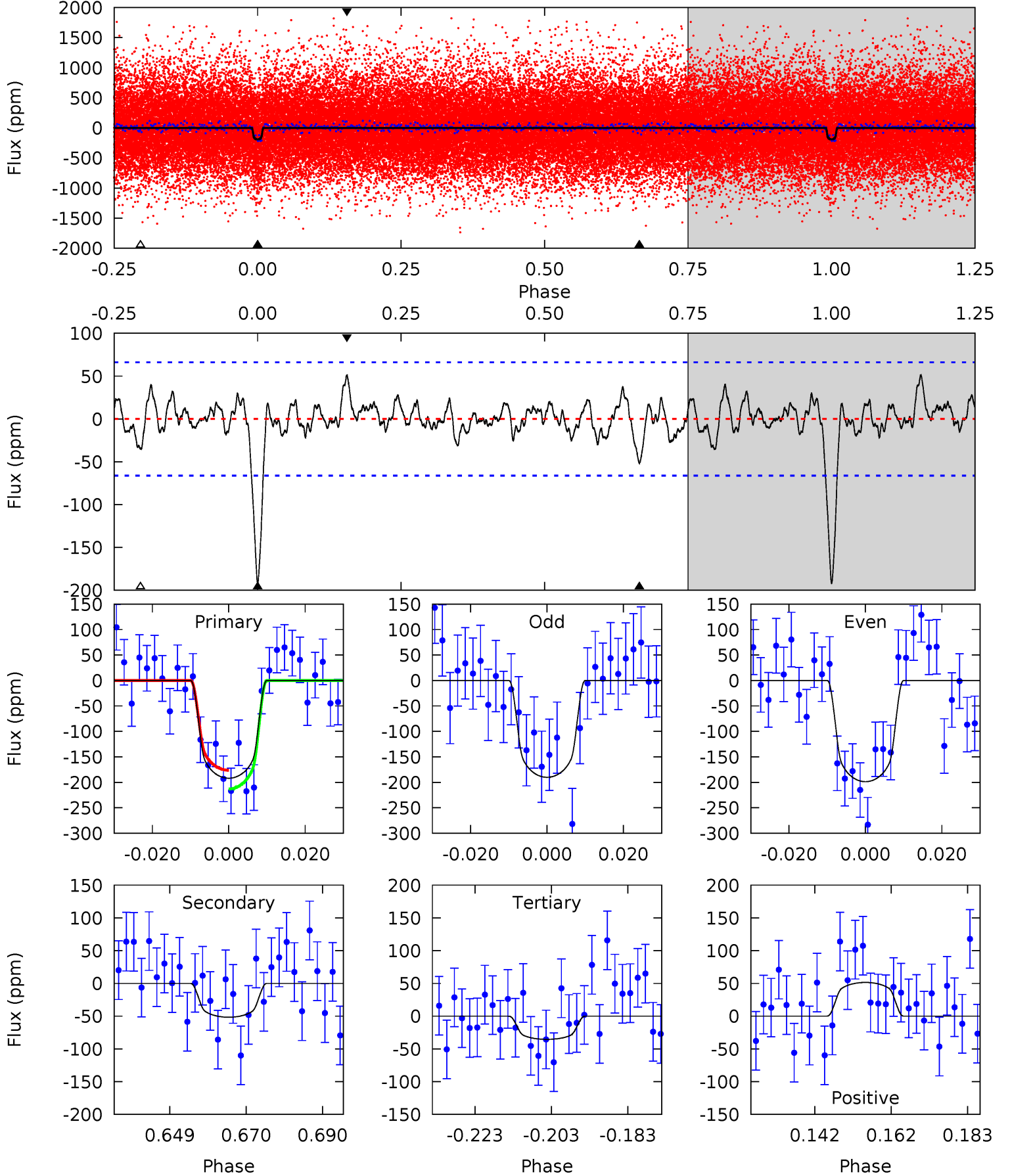
TCE 010601284-03 $P = 8.109039$ Days $T_0 = 132.802583$ (BKJD)



DV Model-Shift Uniqueness Test

010601284-03, P = 8.108966 Days, E = 124.702884 Days

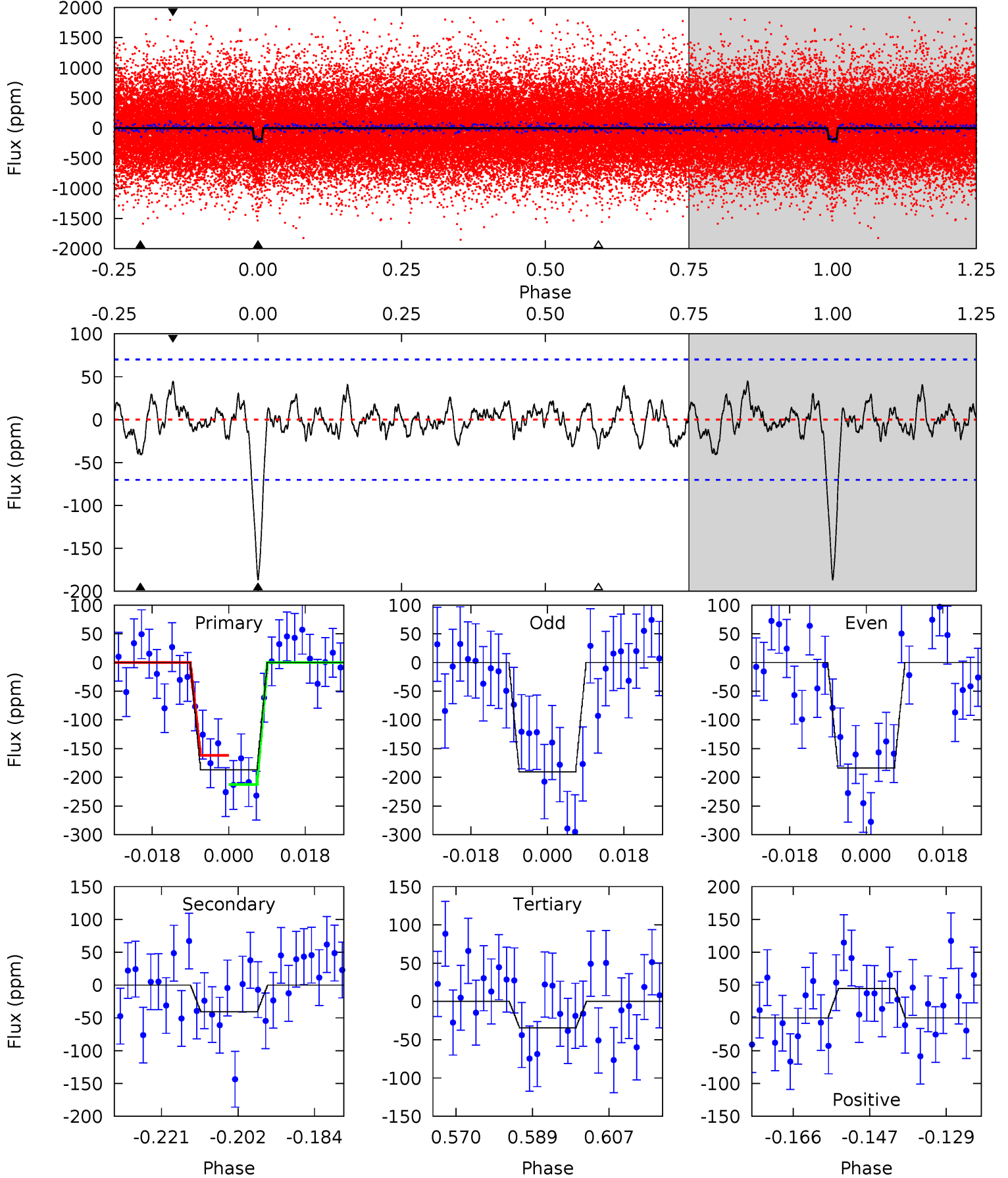
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.2	3.82	2.62	3.80	4.89	2.32	1.07	11.6	10.4	1.20	0.02	0.32	1.17	0.21	1.36



Alt Model-Shift Uniqueness Test

010601284-03, P = 8.109039 Days, E = 124.693544 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.1	2.85	2.40	3.13	4.91	2.36	1.00	10.7	9.95	0.45	-0.28	0.23	1.07	0.19	1.78



Stellar Parameters For KIC 010601284

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5185^{+85}_{-77}	$4.440^{+0.098}_{-0.045}$	$0.160^{+0.150}_{-0.150}$	$0.910^{+0.057}_{-0.086}$	$0.831^{+0.058}_{-0.032}$	$1.553^{+0.613}_{-0.255}$
	+2%/-1%	+2%/-1%	+94%/-94%	+6%/-9%	+7%/-4%	+39%/-16%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 010601284-03 / KOI 0749.03

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-52 ± 14	$1.51^{+0.79}_{-0.67}$	1112^{+29}_{-36}	3865^{+911}_{-535}	69^{+161}_{-41}
Alt.	-41 ± 14	$1.40^{+0.76}_{-0.76}$	1112^{+31}_{-33}	3808^{+1334}_{-541}	62^{+239}_{-37}

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

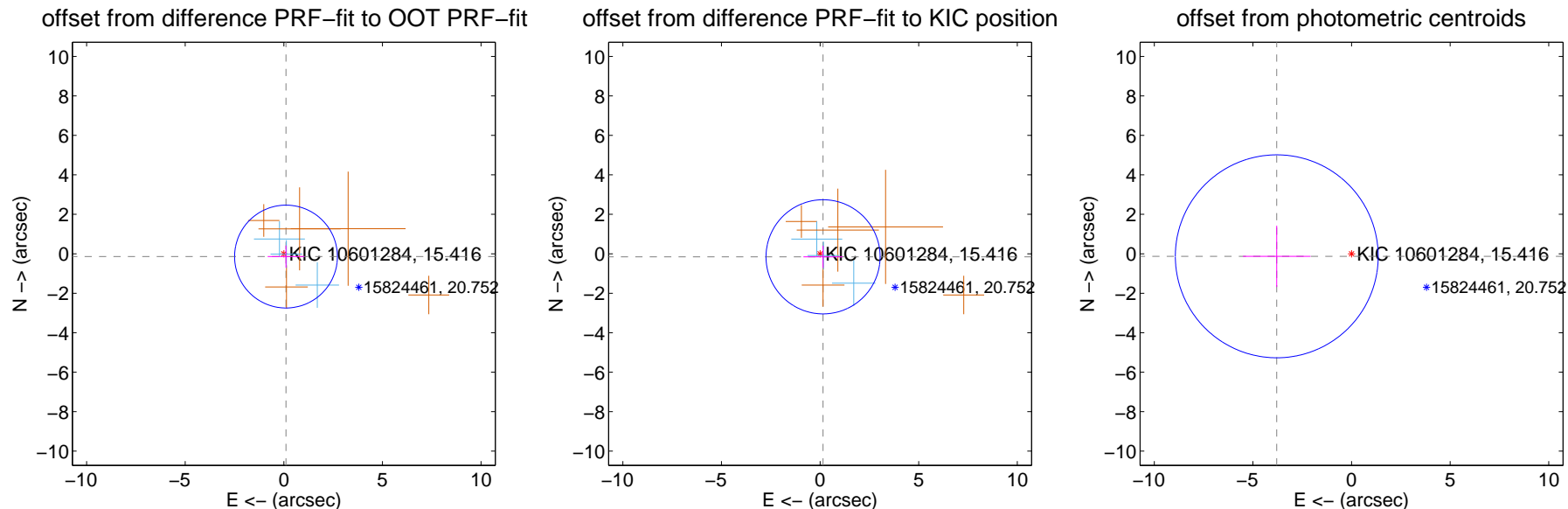
DV Centroid Data

Supplemental centroid analysis for 010601284-03. Kepler magnitude: 15.42. Transit SNR 9.95

There are 3 quarters with good PRF difference image offsets

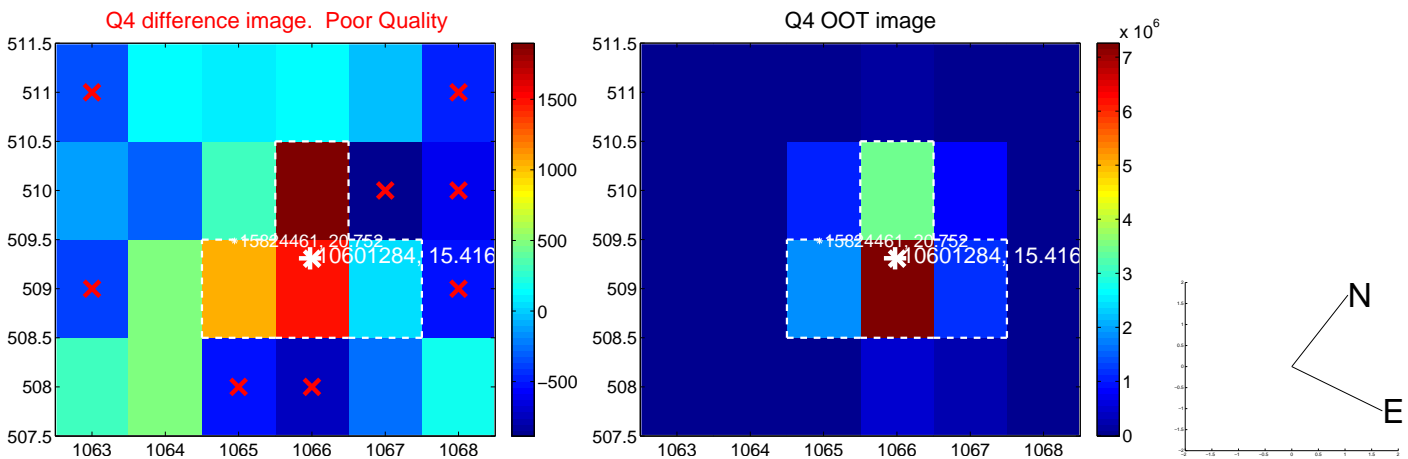
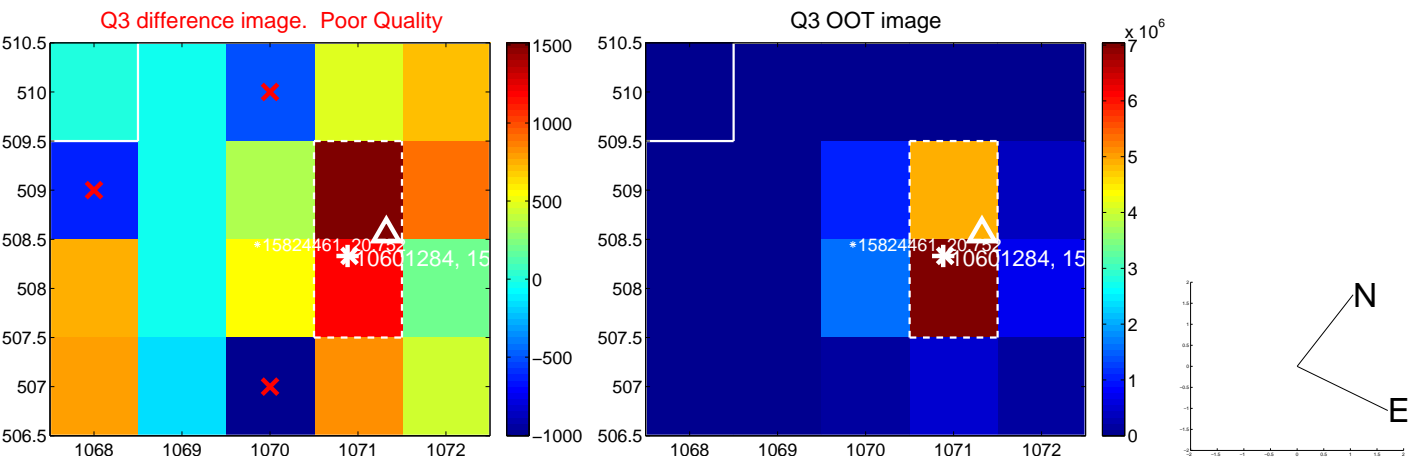
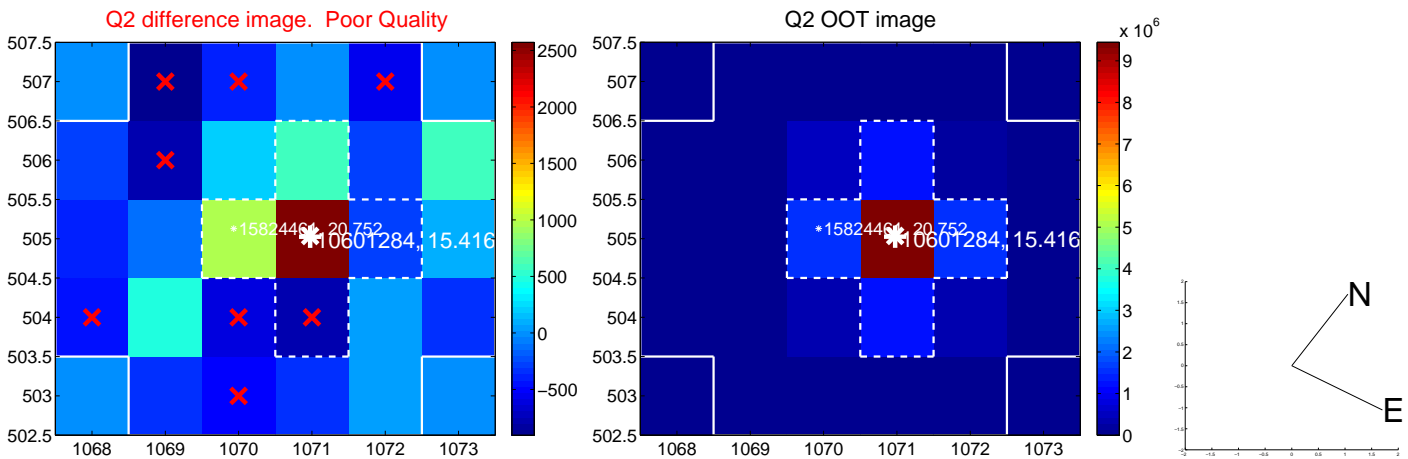
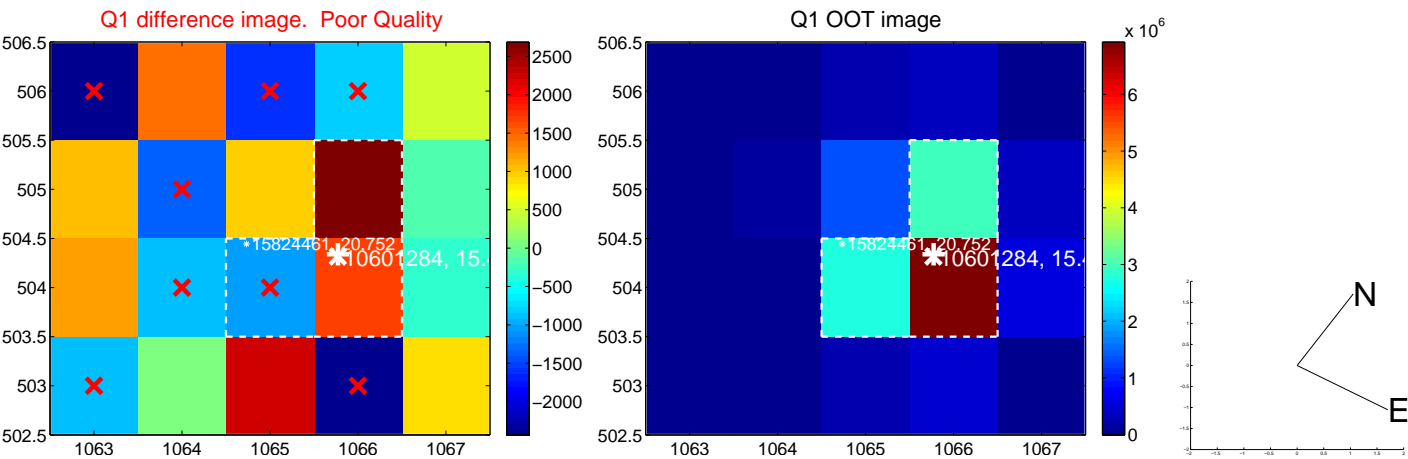
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.179 ± 0.869	0.21	-0.110 ± 0.929	-0.142 ± 0.562
PRF-fit source offset from KIC position	0.216 ± 0.964	0.22	-0.151 ± 0.995	-0.154 ± 0.558
photometric centroid source offset	3.79 ± 1.71	2.21	3.79 ± 1.71	-0.13 ± 1.55

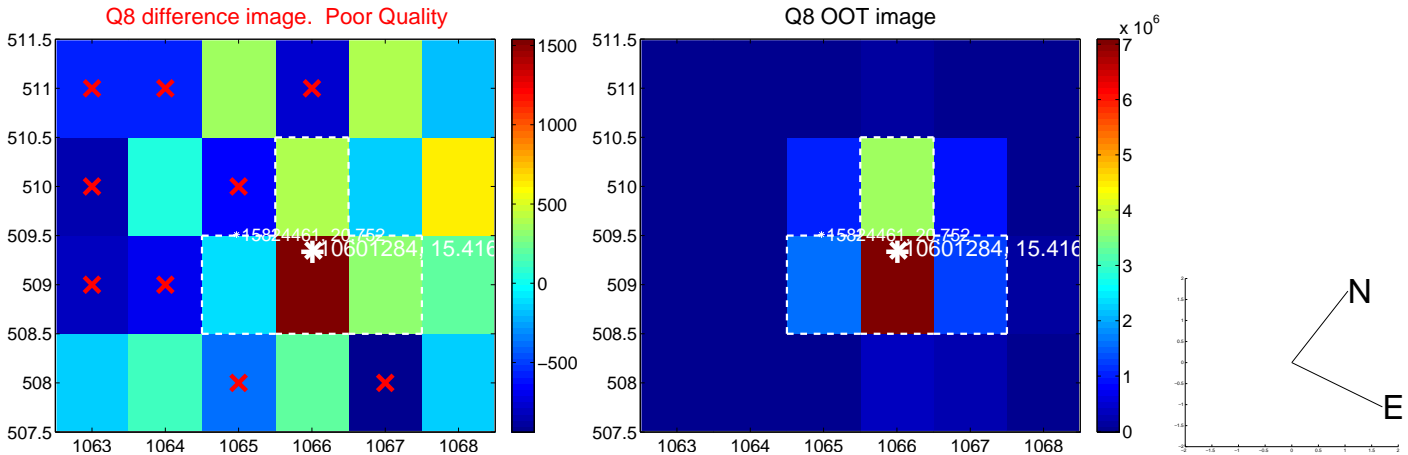
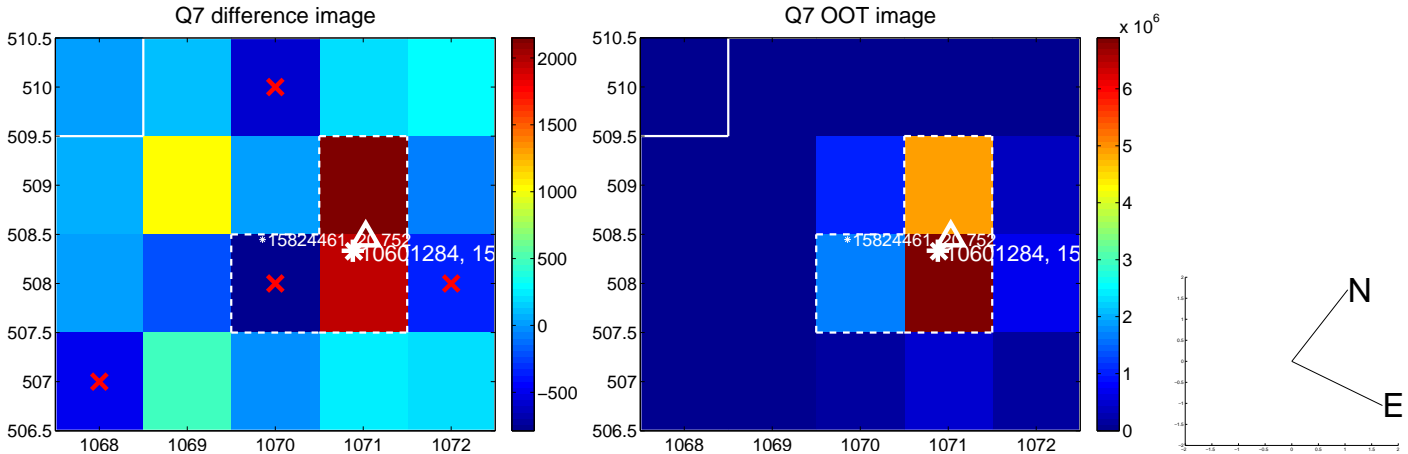
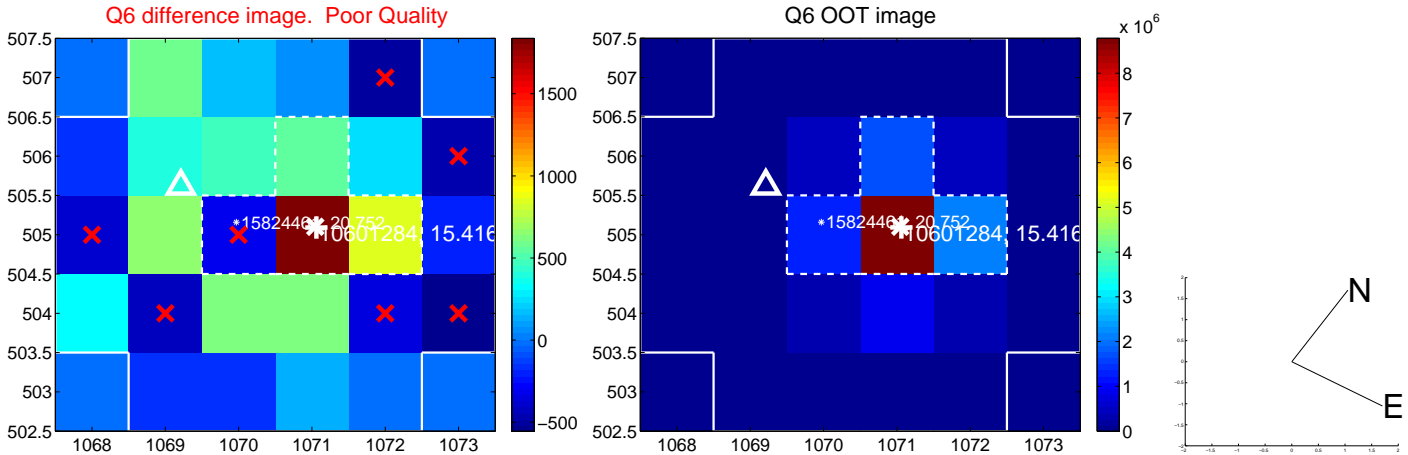
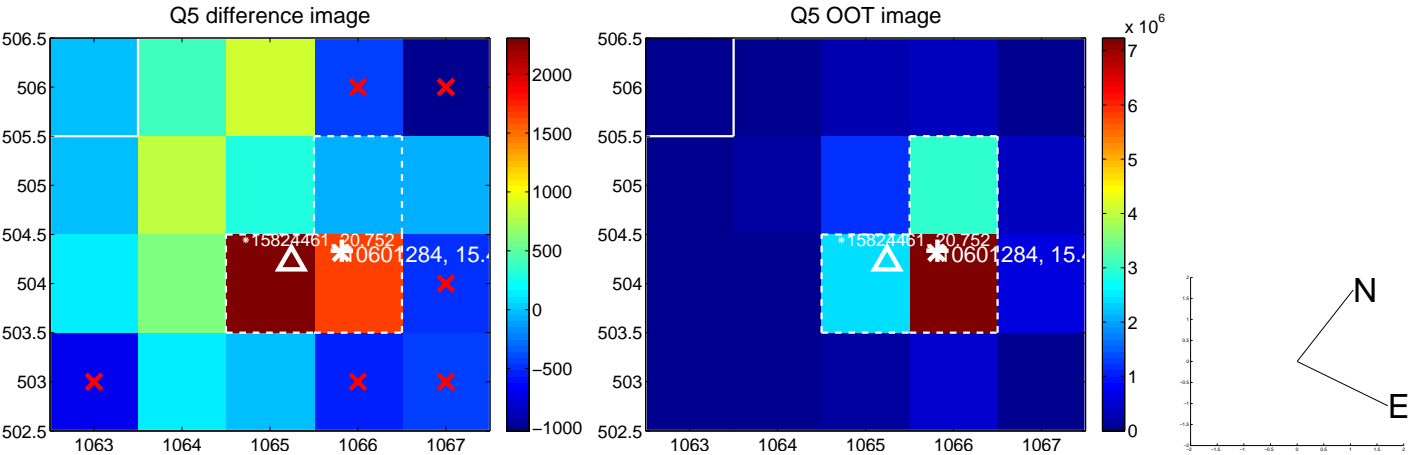


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

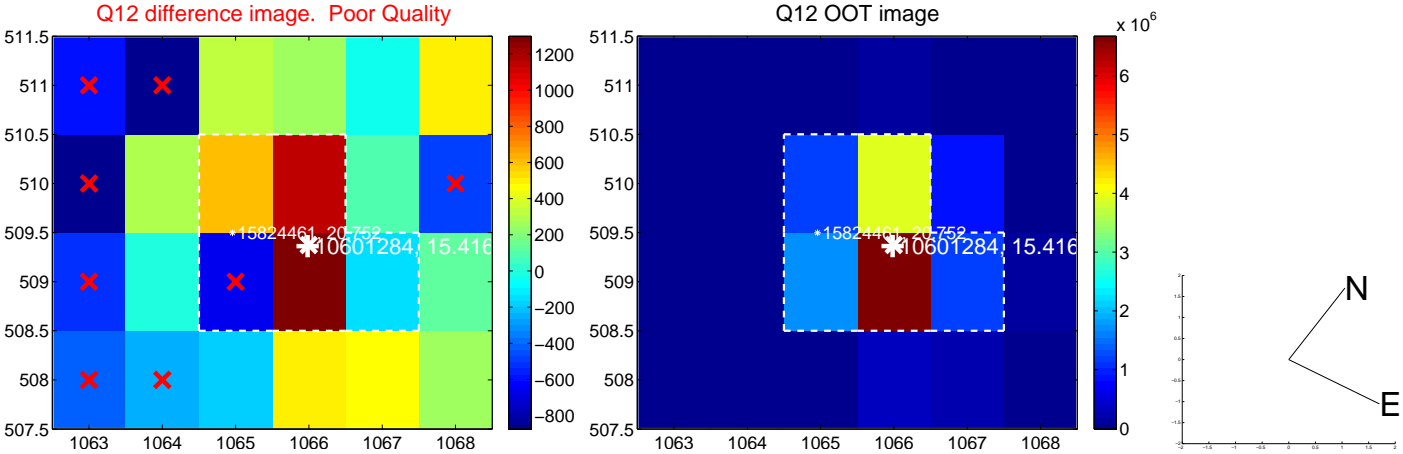
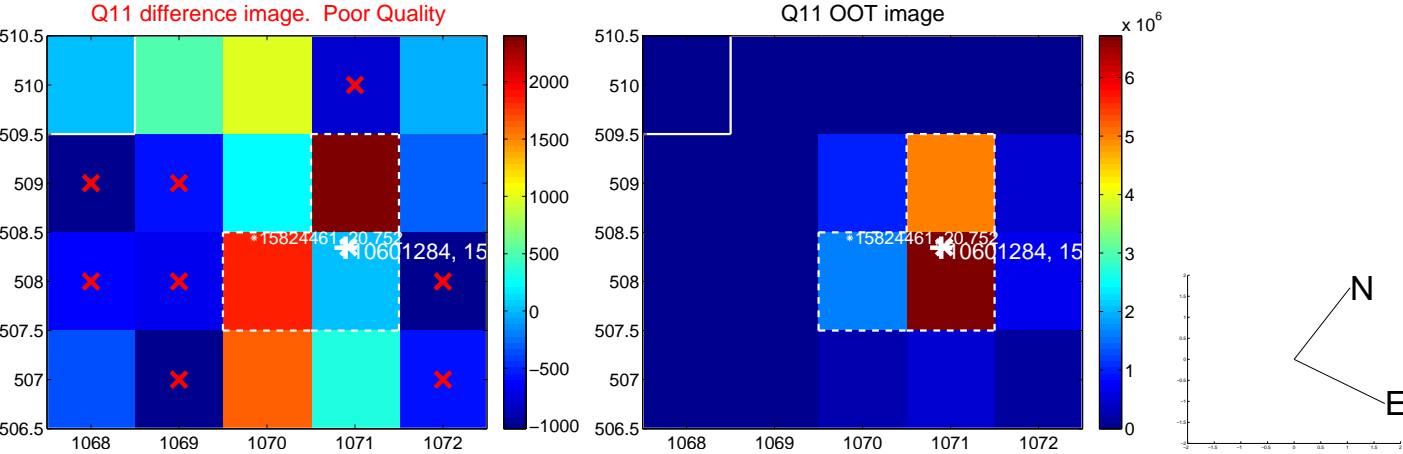
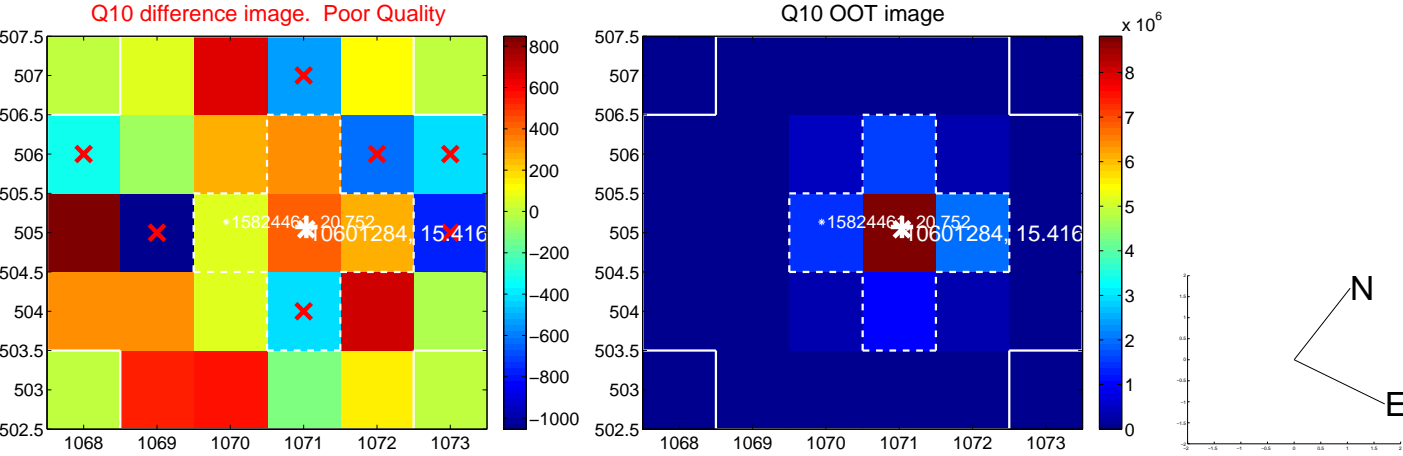
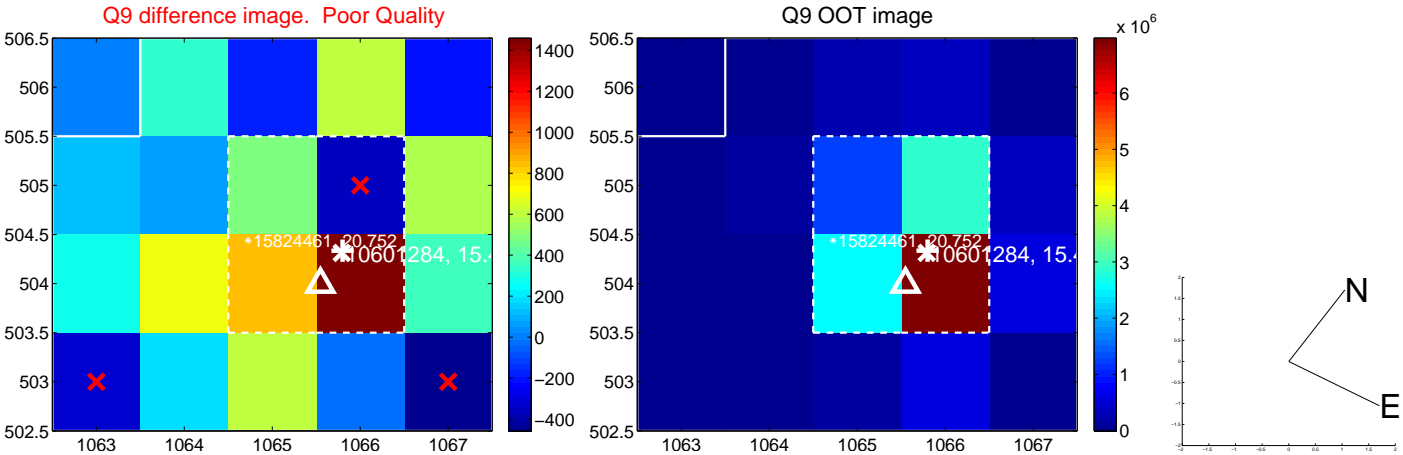
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



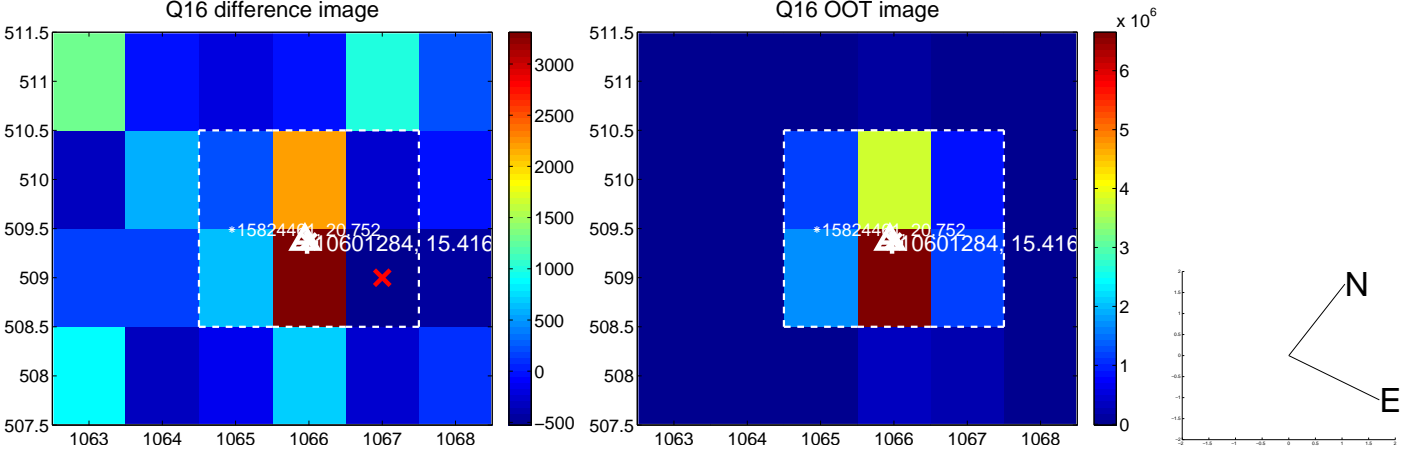
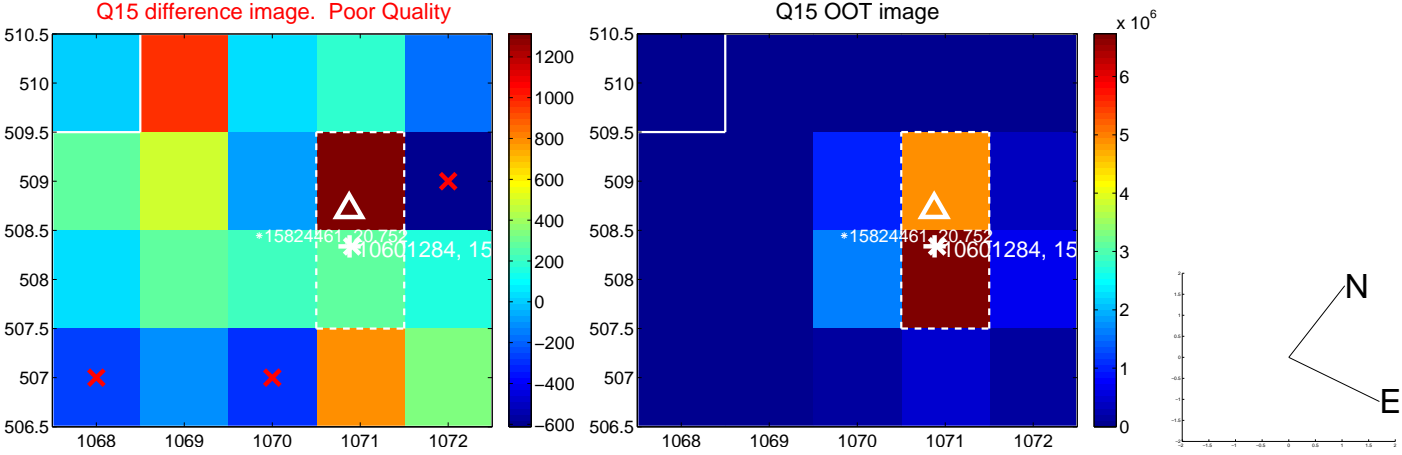
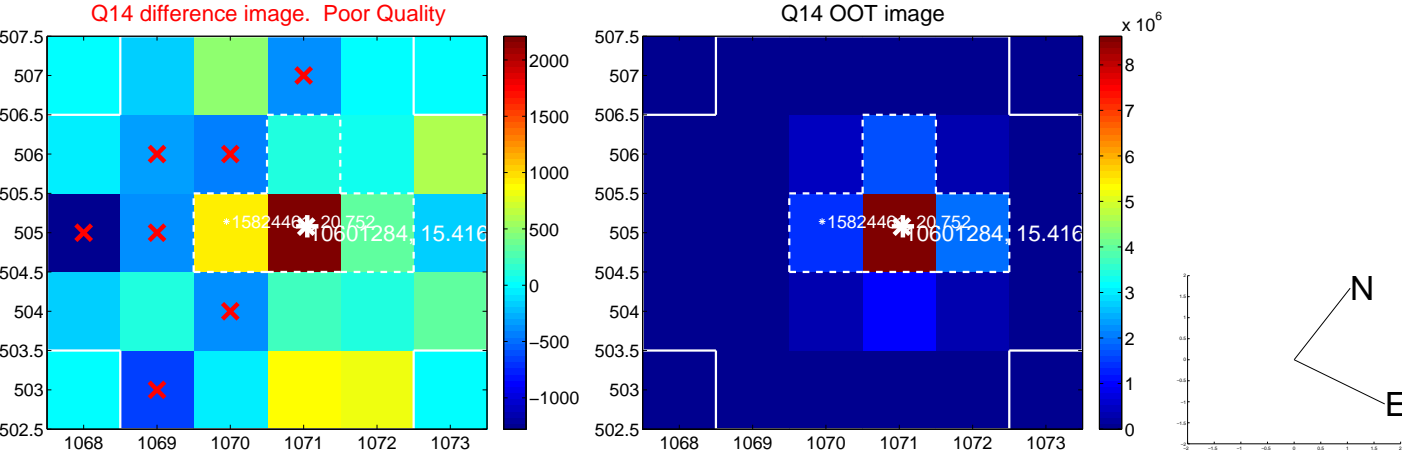
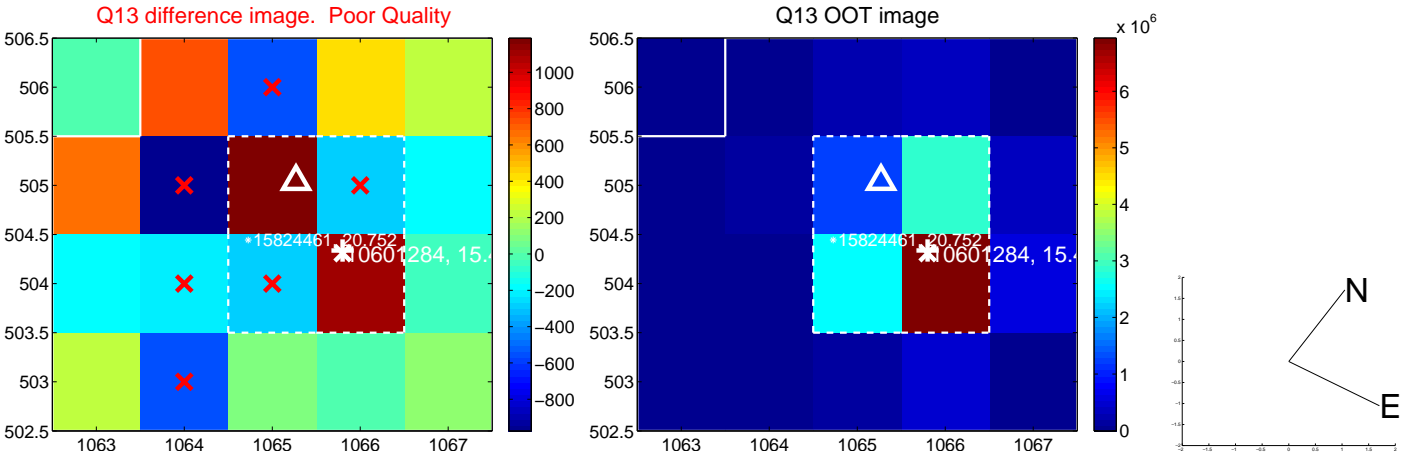
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



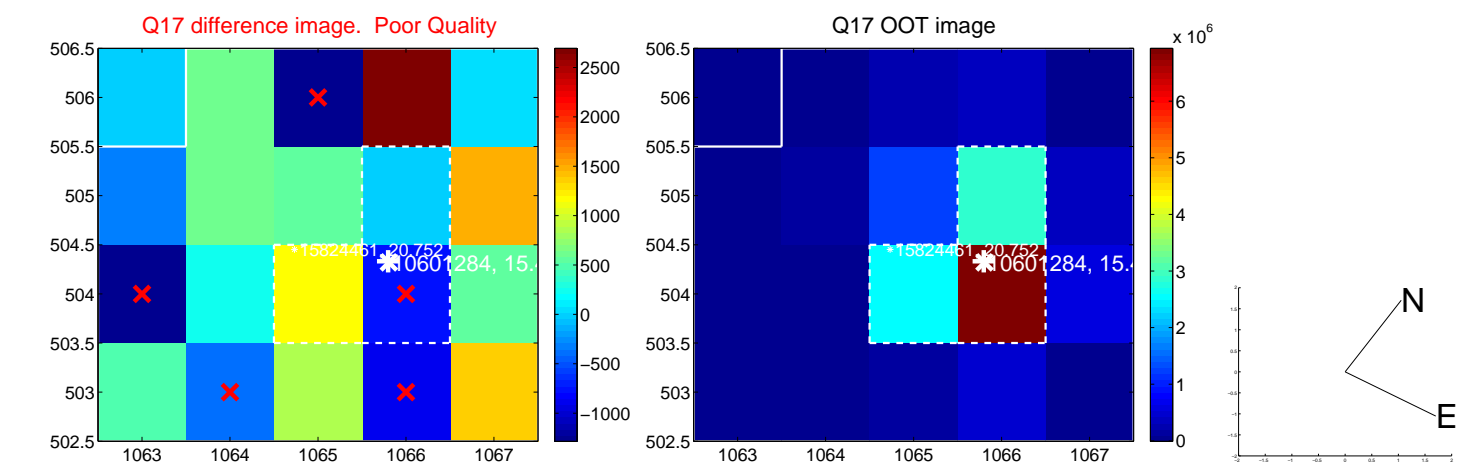
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



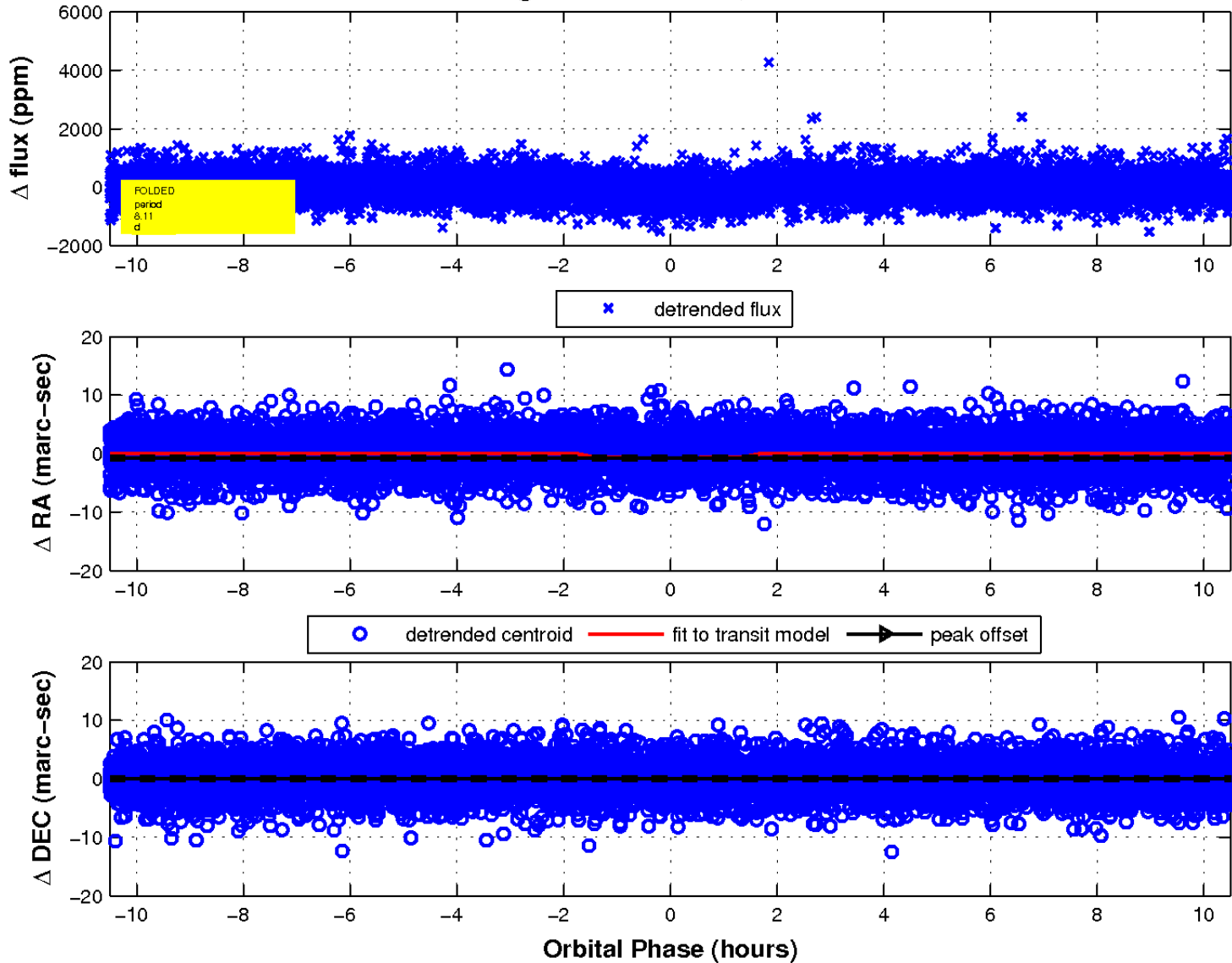
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

