

KIC 006021193

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})
006021193-01	OBS	2148.01	11.932038	142.108729	182.2	6.288	23.4	25.3	1.39	5711	2.05	158.61
006021193-02	OBS	2148.02	7.542342	132.962419	124.0	4.863	19.1	19.4	1.39	5711	1.81	292.38
006021193-03	OBS	2148.03	3.614602	134.695901	61.9	3.236	11.1	11.8	1.39	5711	1.30	779.62

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006021193-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006021193-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006021193-03	OBS	PC	0.75	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.

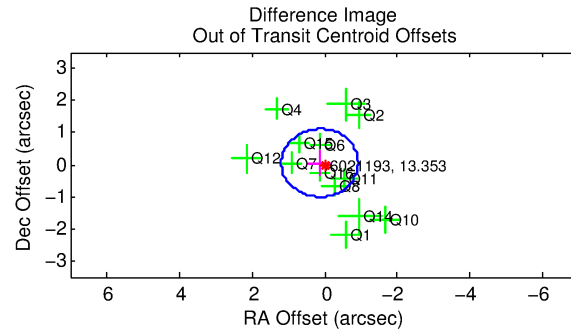
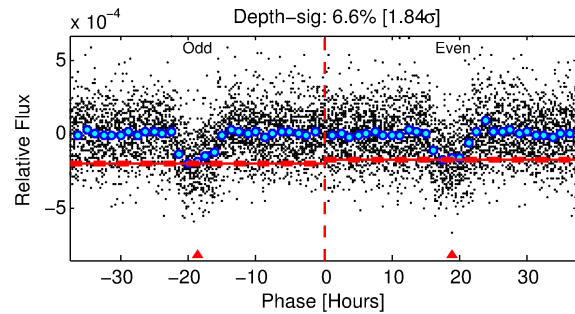
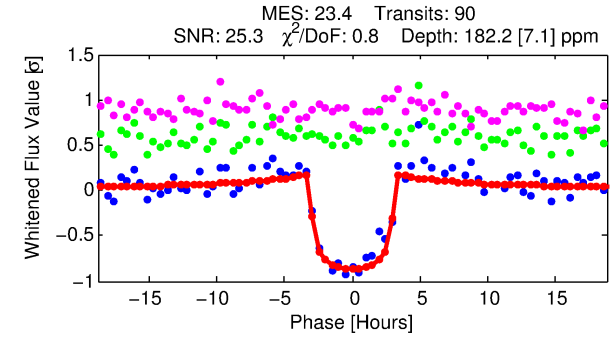
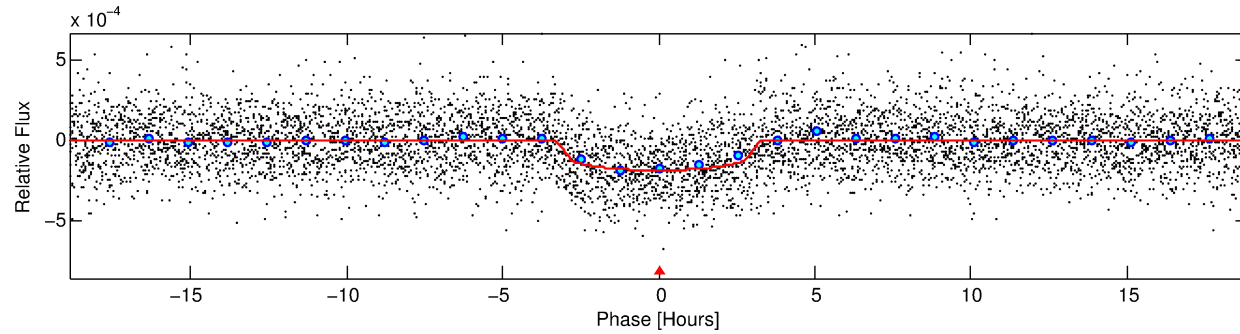
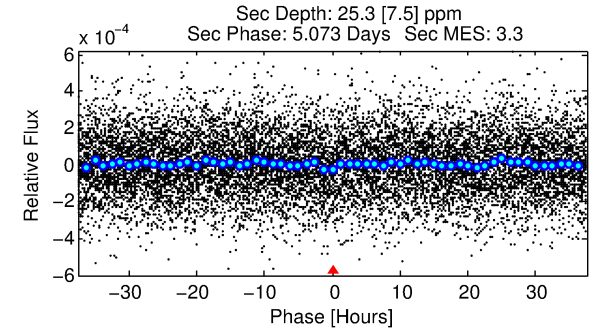
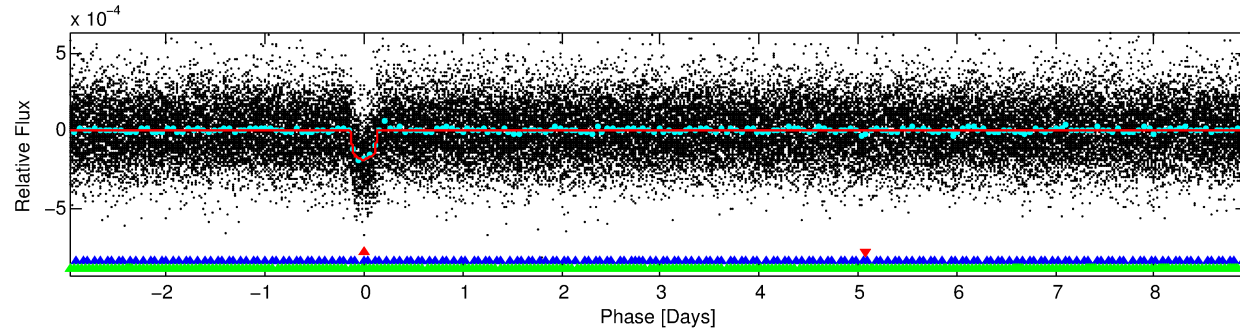
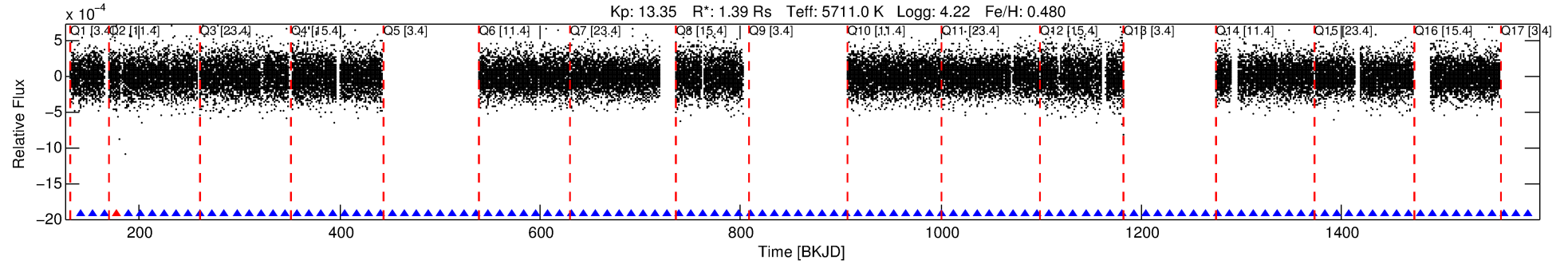
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006021193-01

No Significant Match Found

DV One-Page Summary

KIC: 6021193 Candidate: 1 of 3 Period: 11.932 d
KOI: K02148.01 Name: Kepler-363d Corr: 0.993



DV Fit Results:

Period = 11.93204 [0.00006] d
Epoch = 142.1087 [0.0038] BKJD
Rp/R* = 0.0135 [0.0037]
a/R* = 9.71 [11.01]
b = 0.76 [0.64]
Seff = 158.61 [43.11]
Teq = 905 [61] K
Rp = 2.05 [0.68] Re
a = 0.1078 [0.0182] AU
Ag = 38.44 [26.16] [1.43σ]
Teffp = 3484 [552] K [4.64σ]

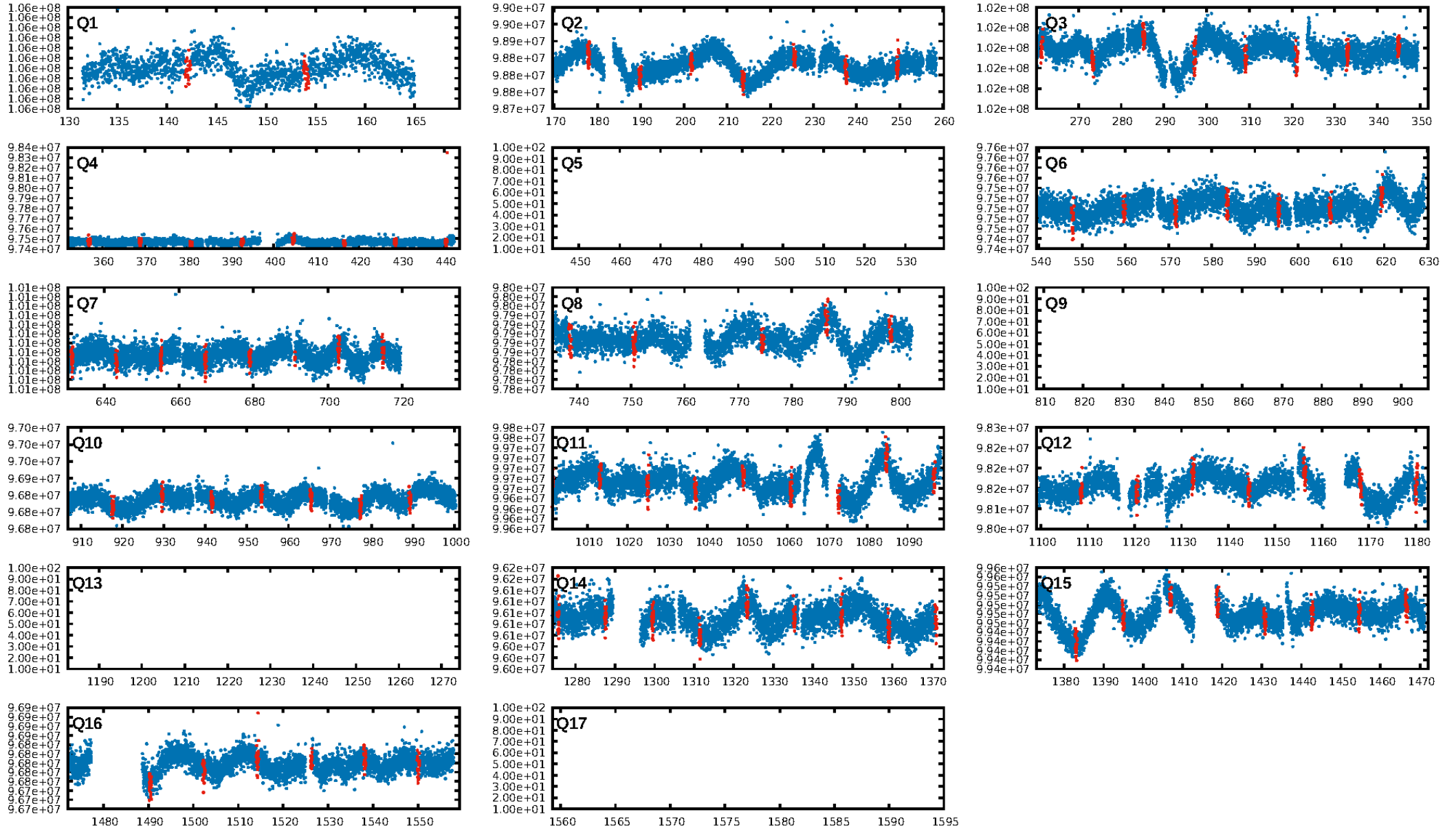
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [13.25σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 79.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 6.22e-112
RollingBand-fgt: 0.99 [87/88]
GhostDiagnostic-chr: 2.158
Centroid-sig: N/A
Centroid-so: 0.860 arcsec [1.62σ]
OotOffset-rm: 0.144 arcsec [0.41σ]
KicOffset-rm: 0.185 arcsec [0.48σ]
OotOffset-st: 4/4/4/1 [13]
KicOffset-st: 4/4/4/1 [13]
DiffImageQuality-fgm: 1.00 [13/13]
DiffImageOverlap-fno: 1.00 [13/13]

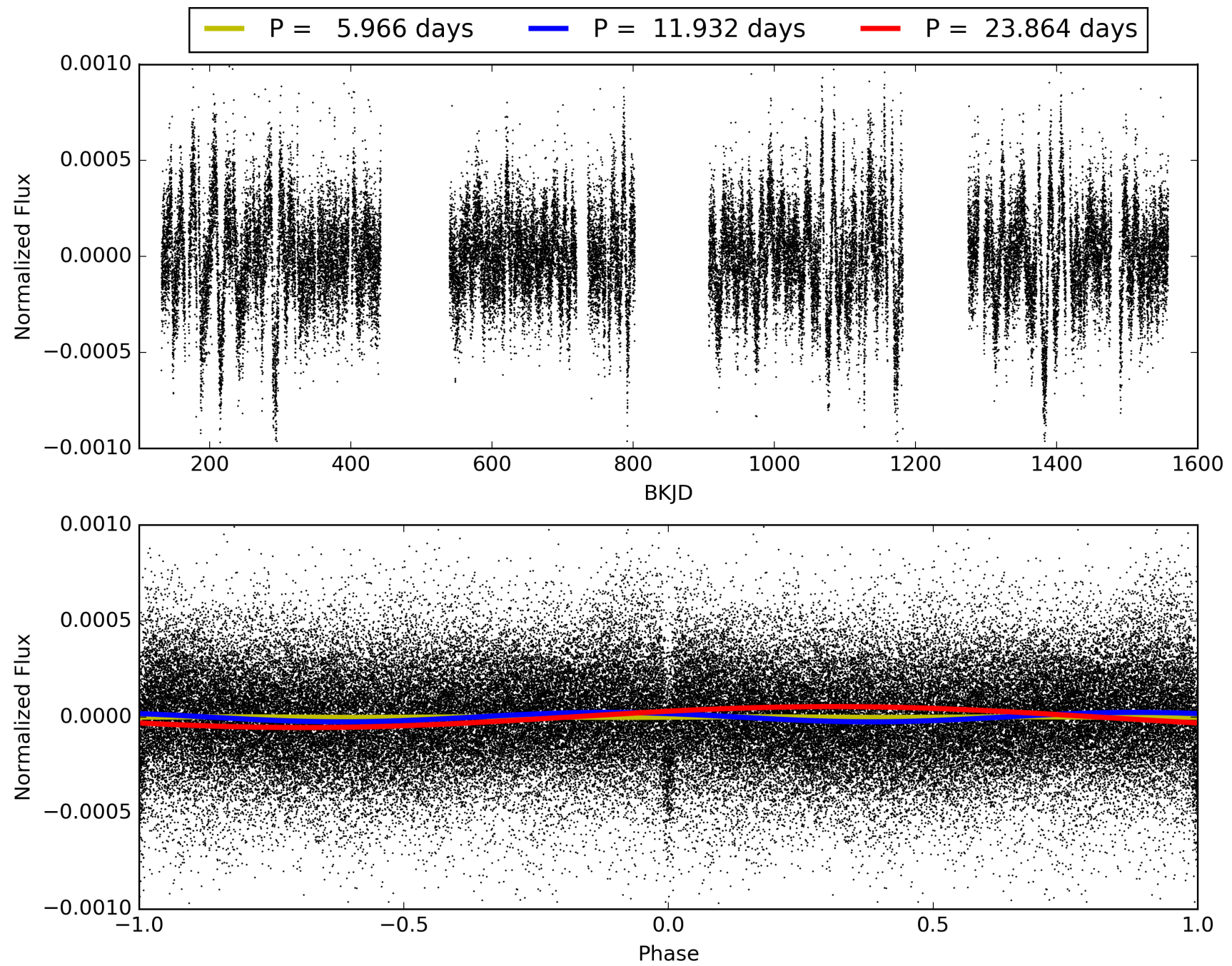
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 09:17:20 Z

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

TCE 006021193-01, PDC Light Curves

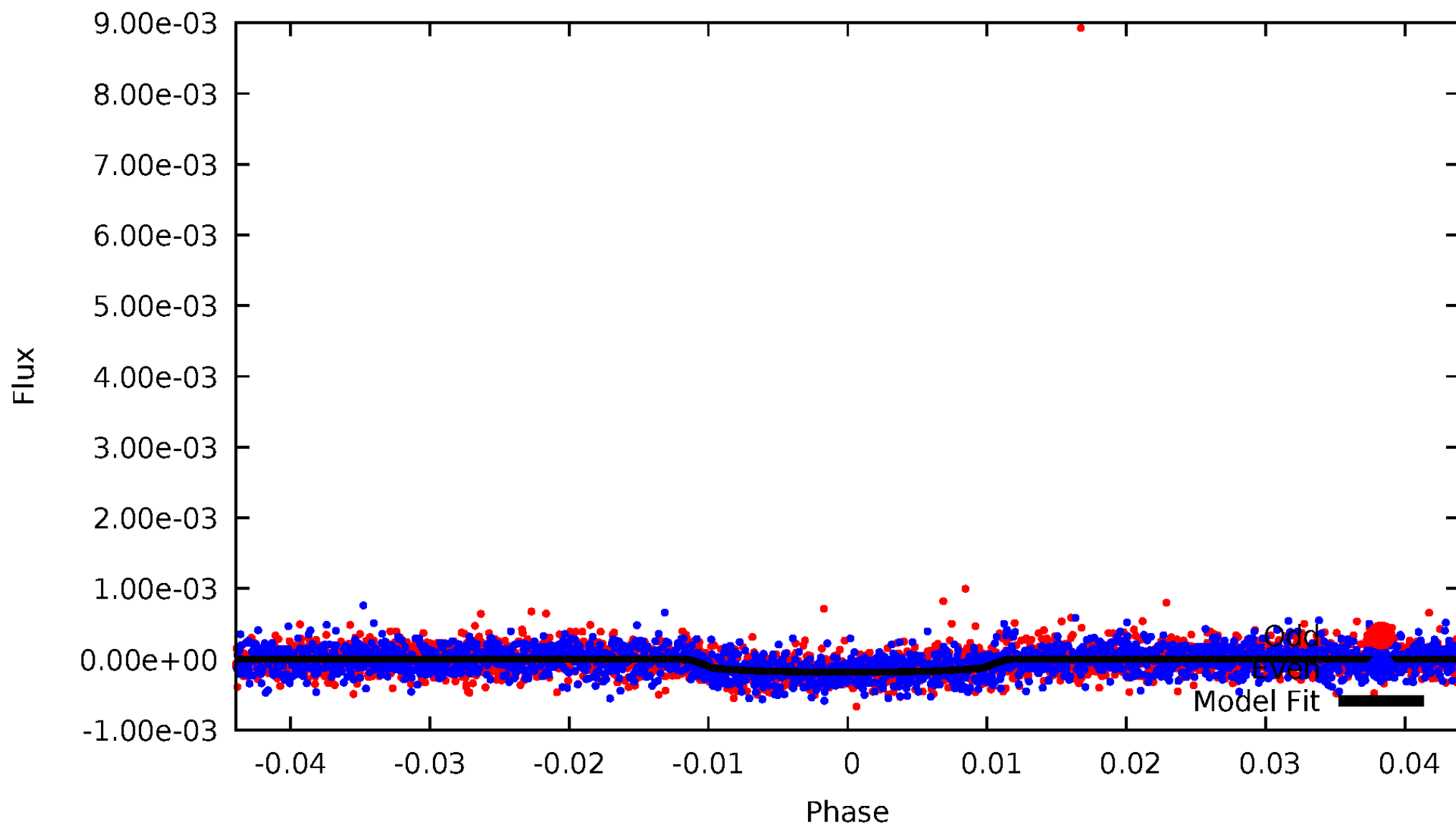


TCE 006021193-01



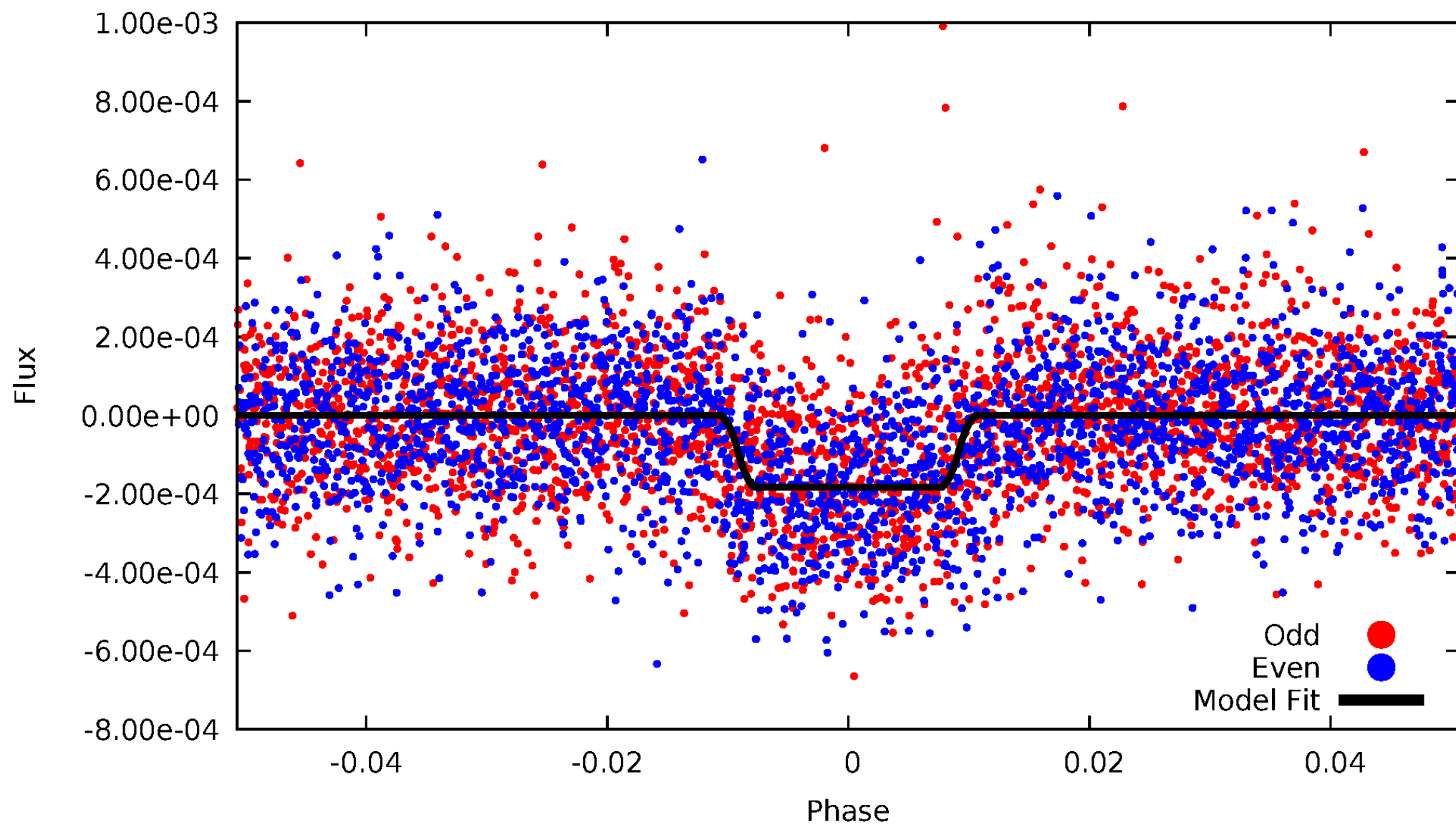
DV Odd/Even

TCE 006021193-01



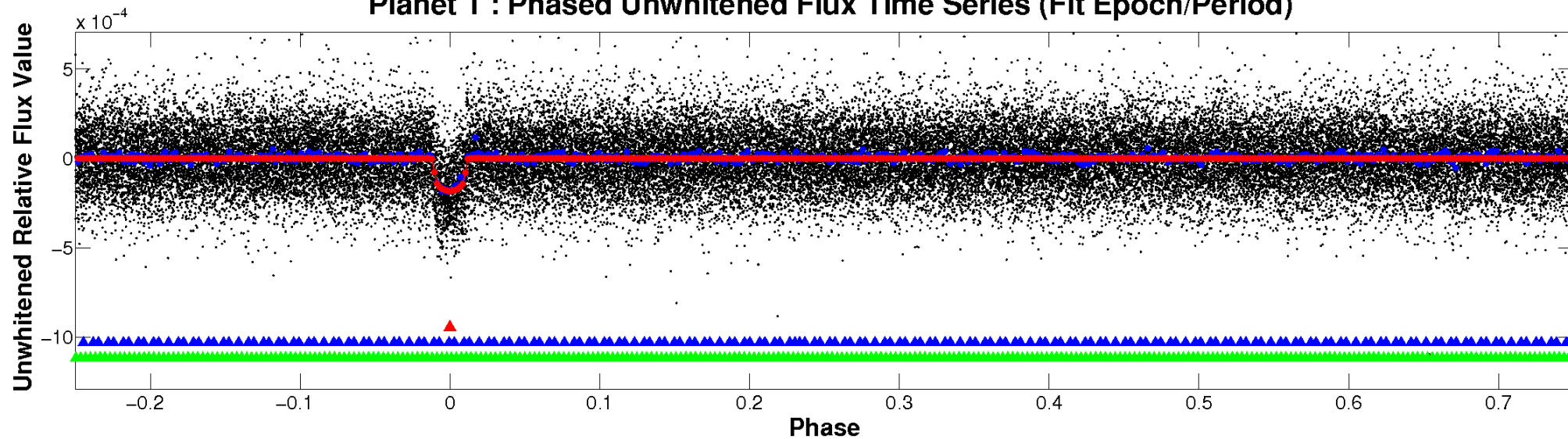
ALT Odd/Even

TCE 006021193-01

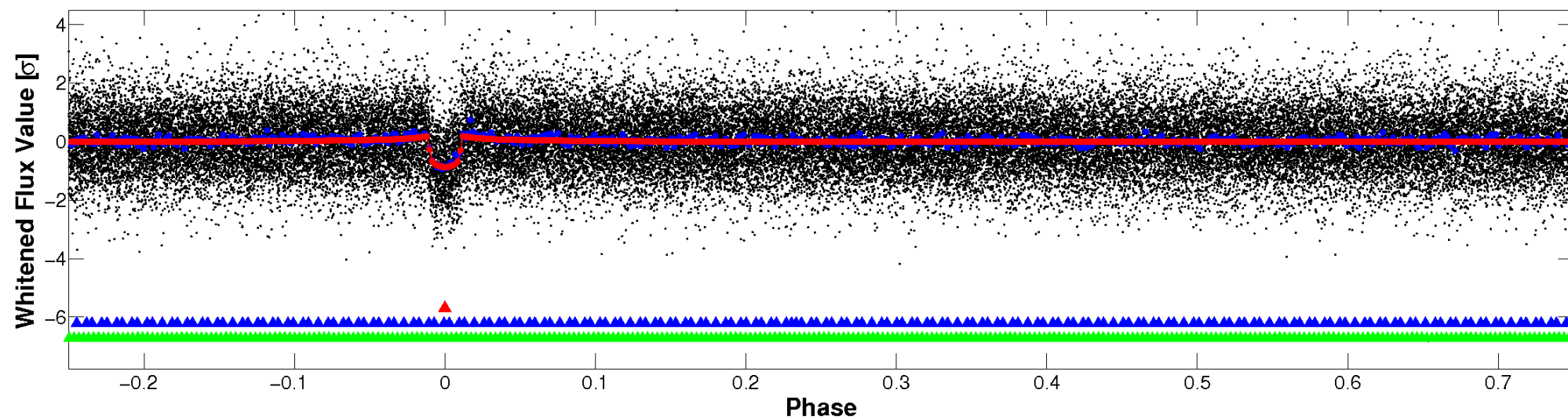


Non-Whitened Vs. Whitened Light Curve

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

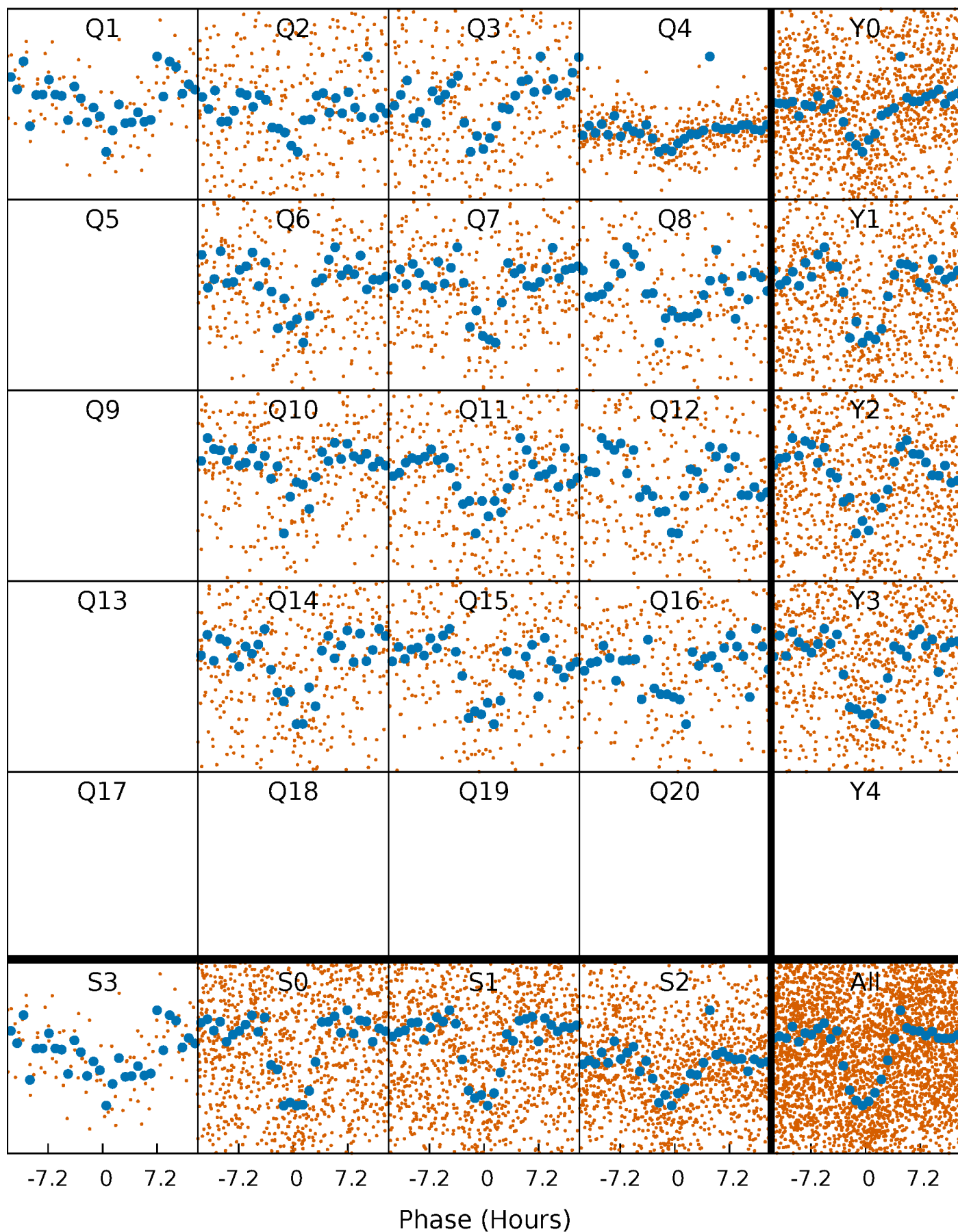


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



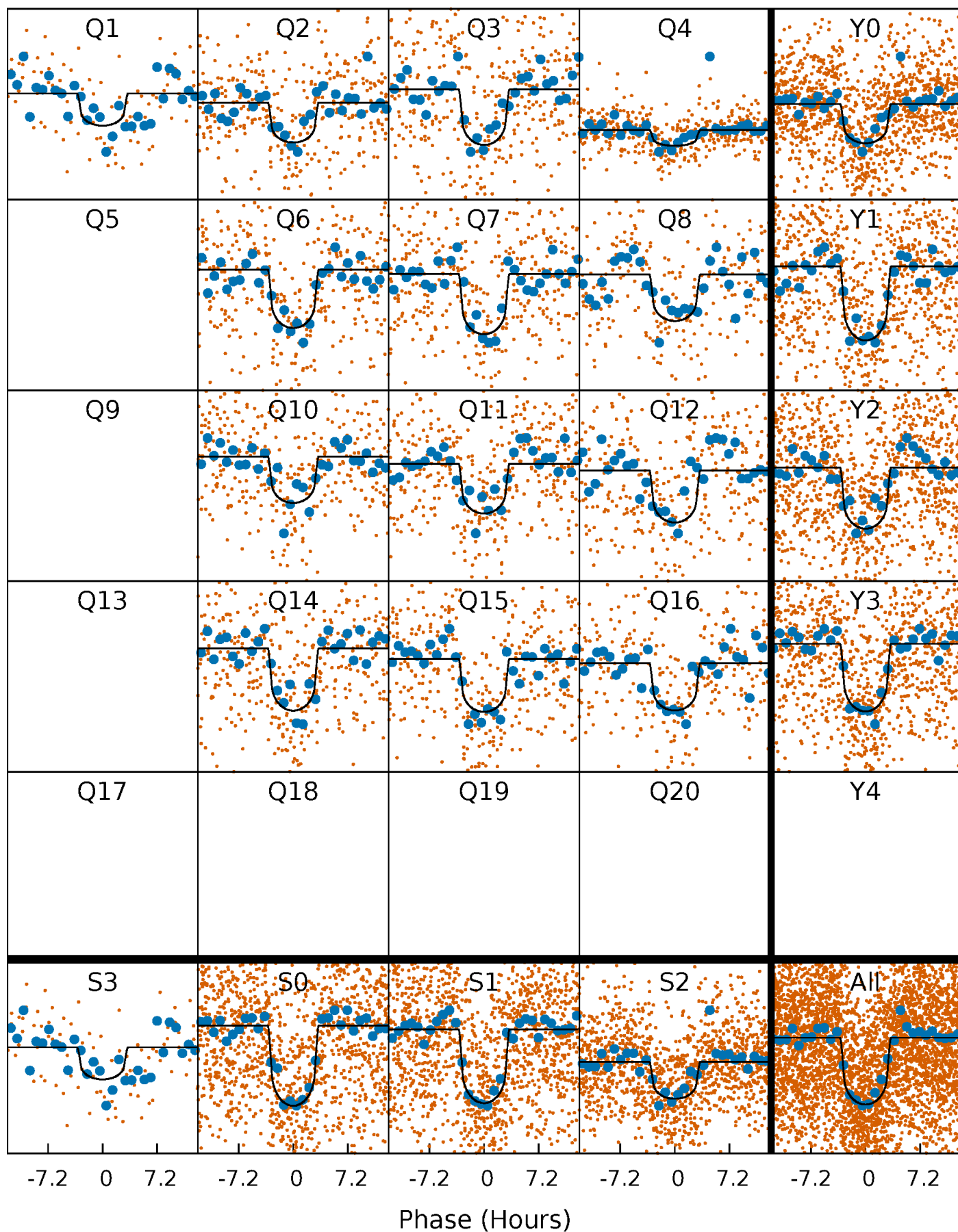
PDC Quarter-Phased Transit Curves

TCE 006021193-01 P= 11.932038 Days $T_0=142.108729$ (BKJD)



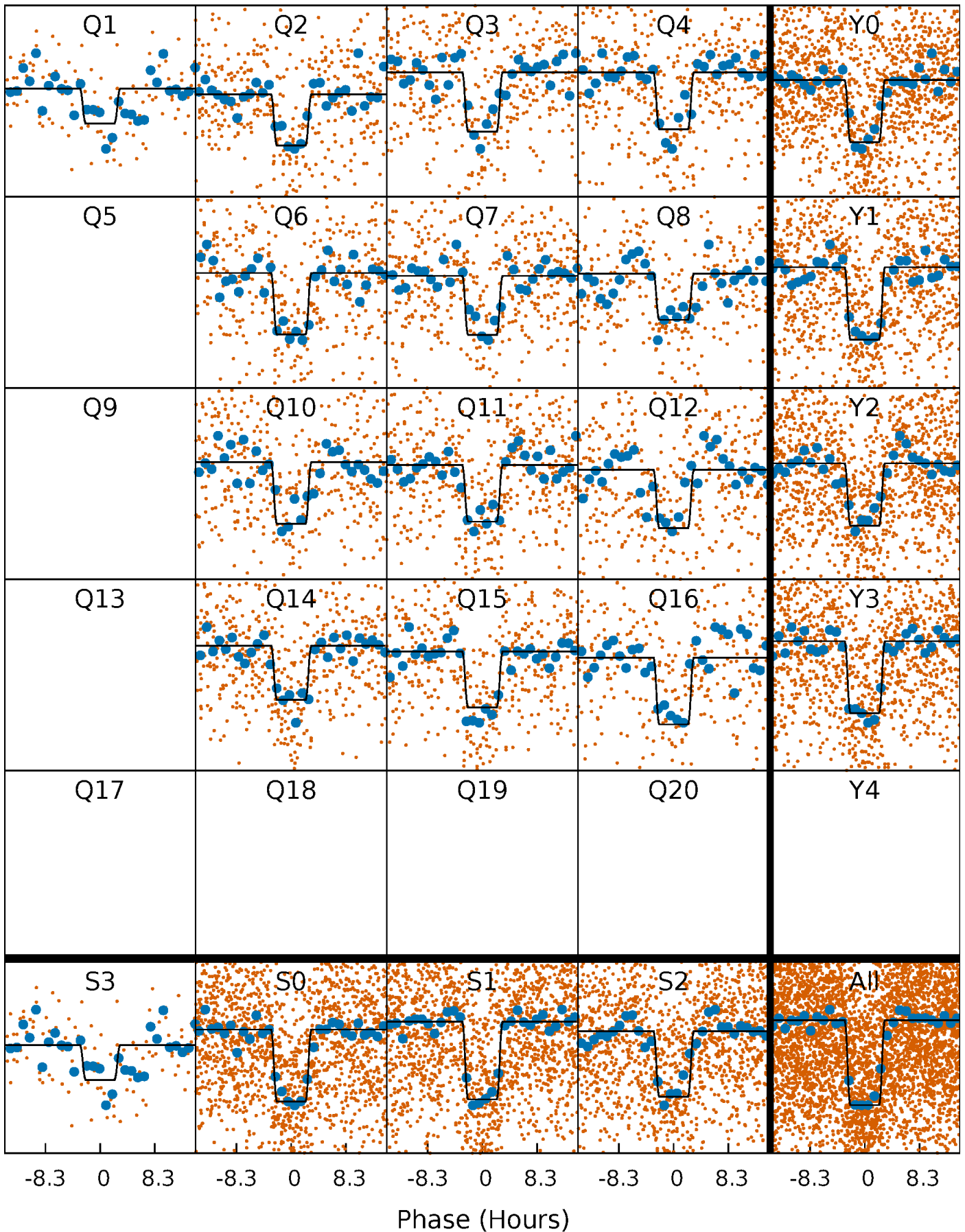
DV Quarter-Phased Transit Curves

TCE 006021193-01 P= 11.932038 Days $T_0=142.108729$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

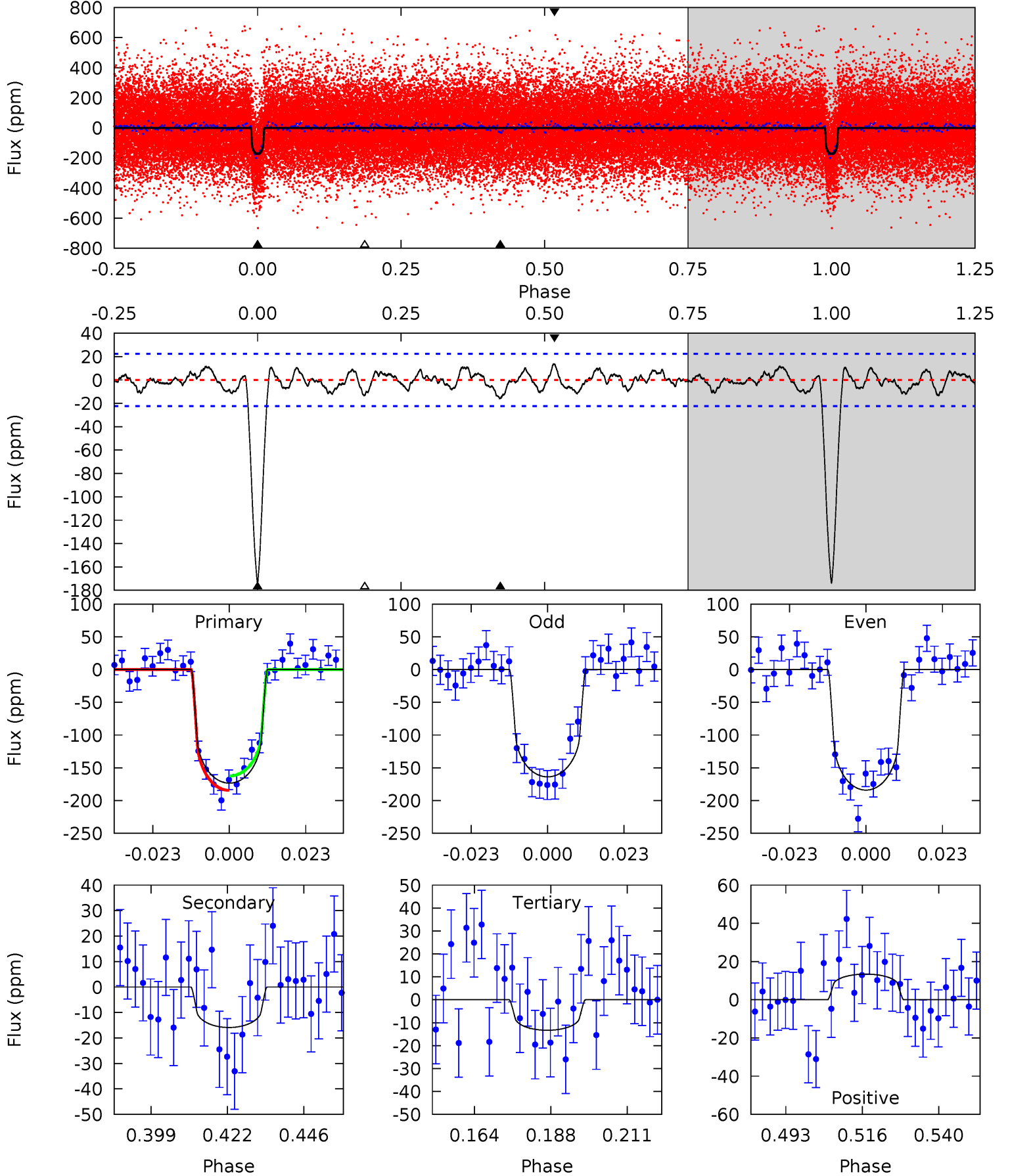
TCE 006021193-01 P= 11.932241 Days $T_0=142.092613$ (BKJD)



DV Model-Shift Uniqueness Test

006021193-01, P = 11.932038 Days, E = 130.176691 Days

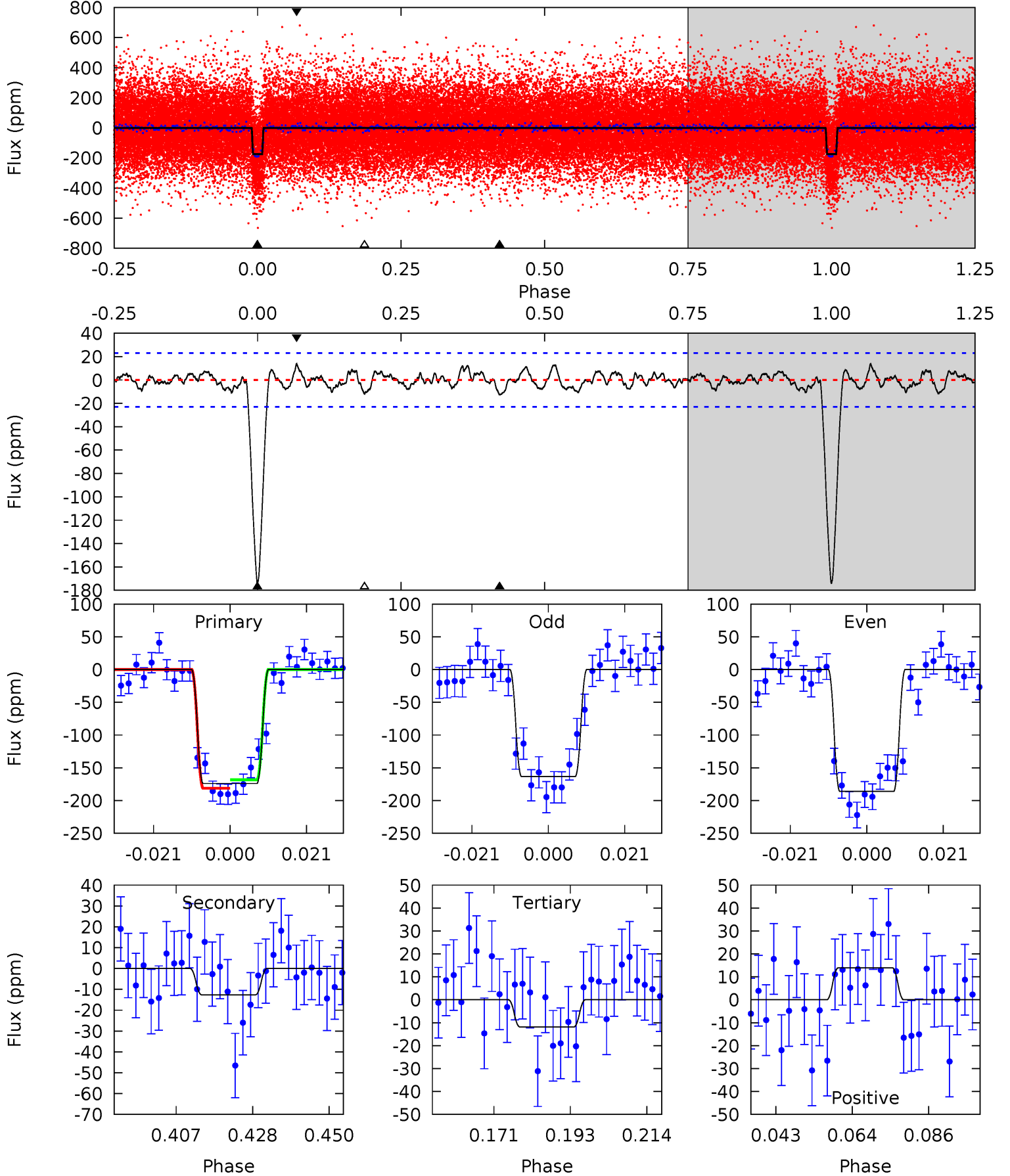
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
37.7	3.45	2.89	2.92	4.86	2.27	1.23	34.8	34.8	0.56	0.54	2.20	0.98	0.07	2.39



Alt Model-Shift Uniqueness Test

006021193-01, P = 11.932241 Days, E = 130.160372 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
36.8	2.67	2.52	2.96	4.88	2.30	1.07	34.3	33.9	0.16	-0.28	2.43	0.99	0.07	1.38



Stellar Parameters For KIC 006021193

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5711^{+101}_{-113}	$4.221^{+0.149}_{-0.122}$	$0.480^{+0.050}_{-0.150}$	$1.391^{+0.232}_{-0.258}$	$1.173^{+0.083}_{-0.114}$	$0.614^{+0.435}_{-0.197}$
	+2%/-2%	+4%/-3%	+10%/-31%	+17%/-19%	+7%/-10%	+71%/-32%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 006021193-01 / KOI 2148.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-16 ± 5	$2.03^{+0.57}_{-0.54}$	1261^{+68}_{-62}	3539^{+390}_{-303}	24^{+22}_{-11}
Alt.	-13 ± 5	$2.03^{+0.64}_{-0.54}$	1263^{+63}_{-67}	3388^{+438}_{-322}	18^{+20}_{-9}

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 $A_{obs} \gg 1.0$

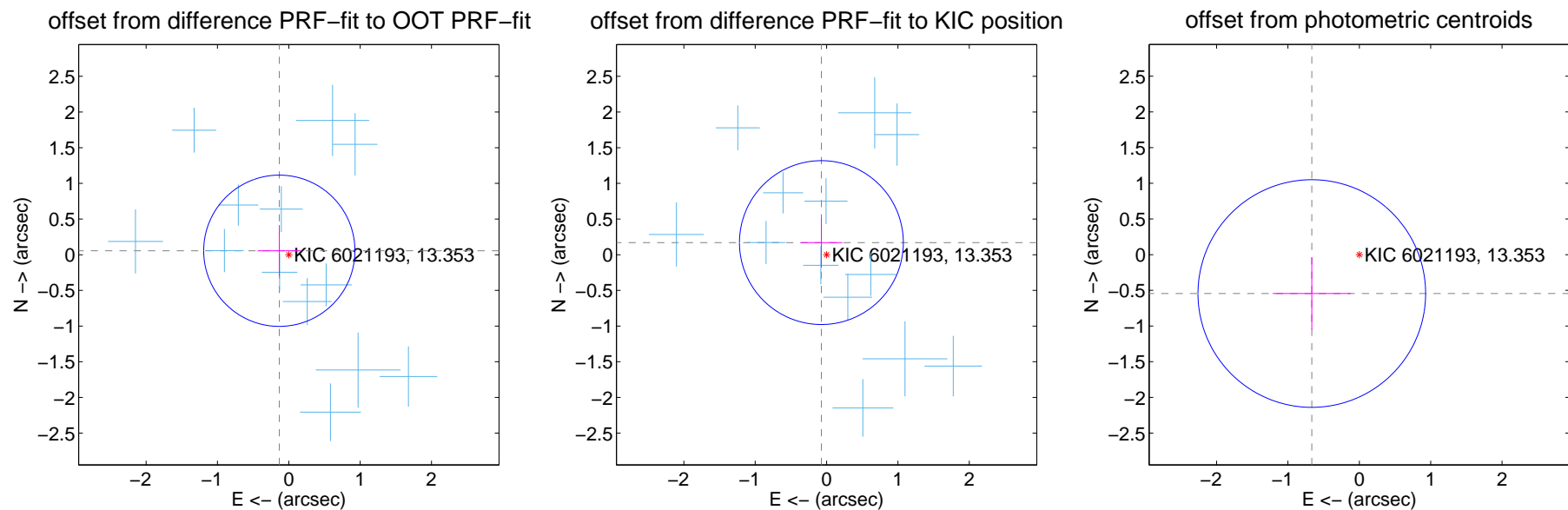
DV Centroid Data

Supplemental centroid analysis for 006021193-01. Kepler magnitude: 13.35. Transit SNR 25.29

There are 13 quarters with good PRF difference image offsets

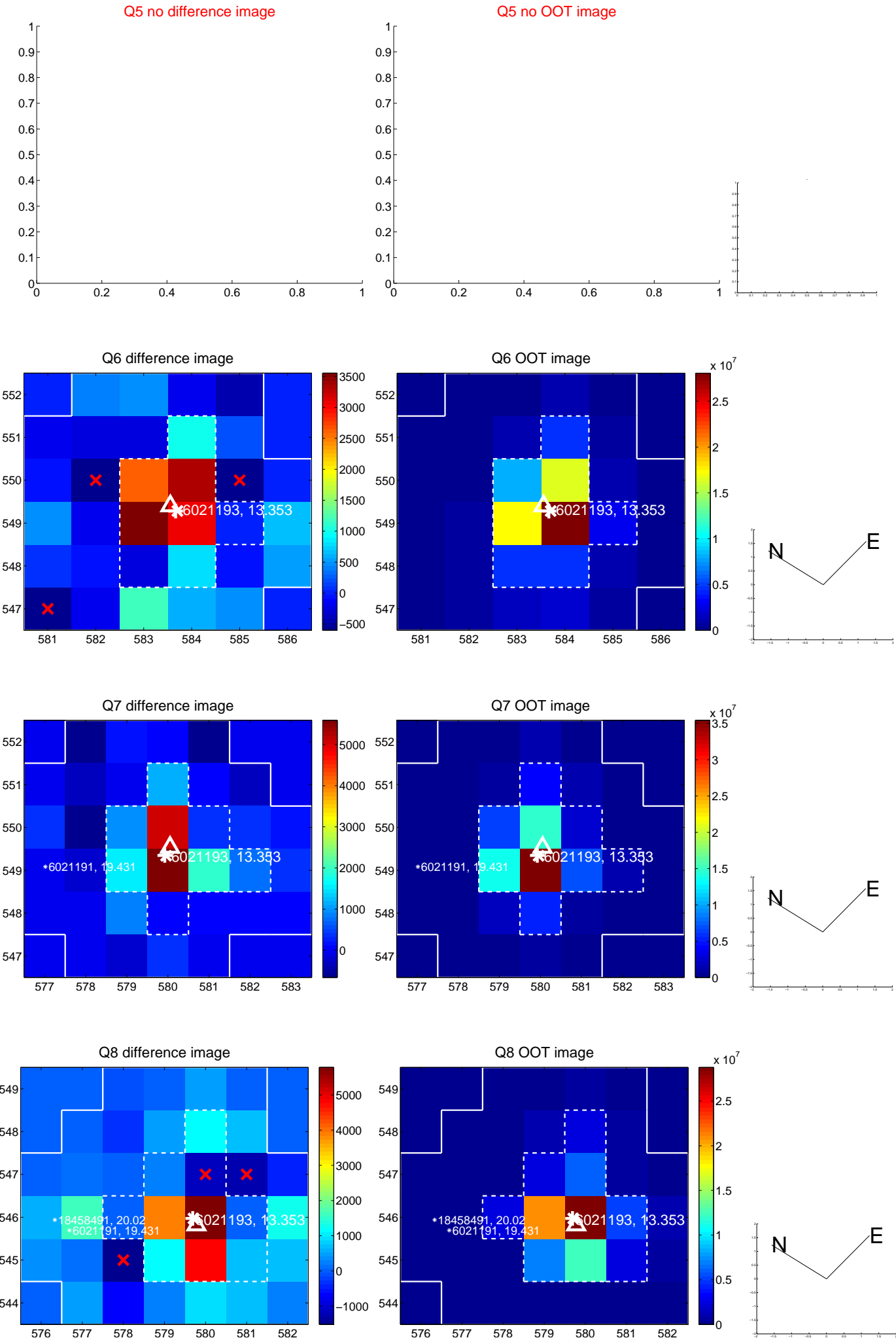
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.144 ± 0.353	0.41	0.133 ± 0.304	0.055 ± 0.359
PRF-fit source offset from KIC position	0.185 ± 0.383	0.48	0.073 ± 0.294	0.170 ± 0.350
photometric centroid source offset	0.86 ± 0.53	1.62	0.67 ± 0.55	-0.54 ± 0.51

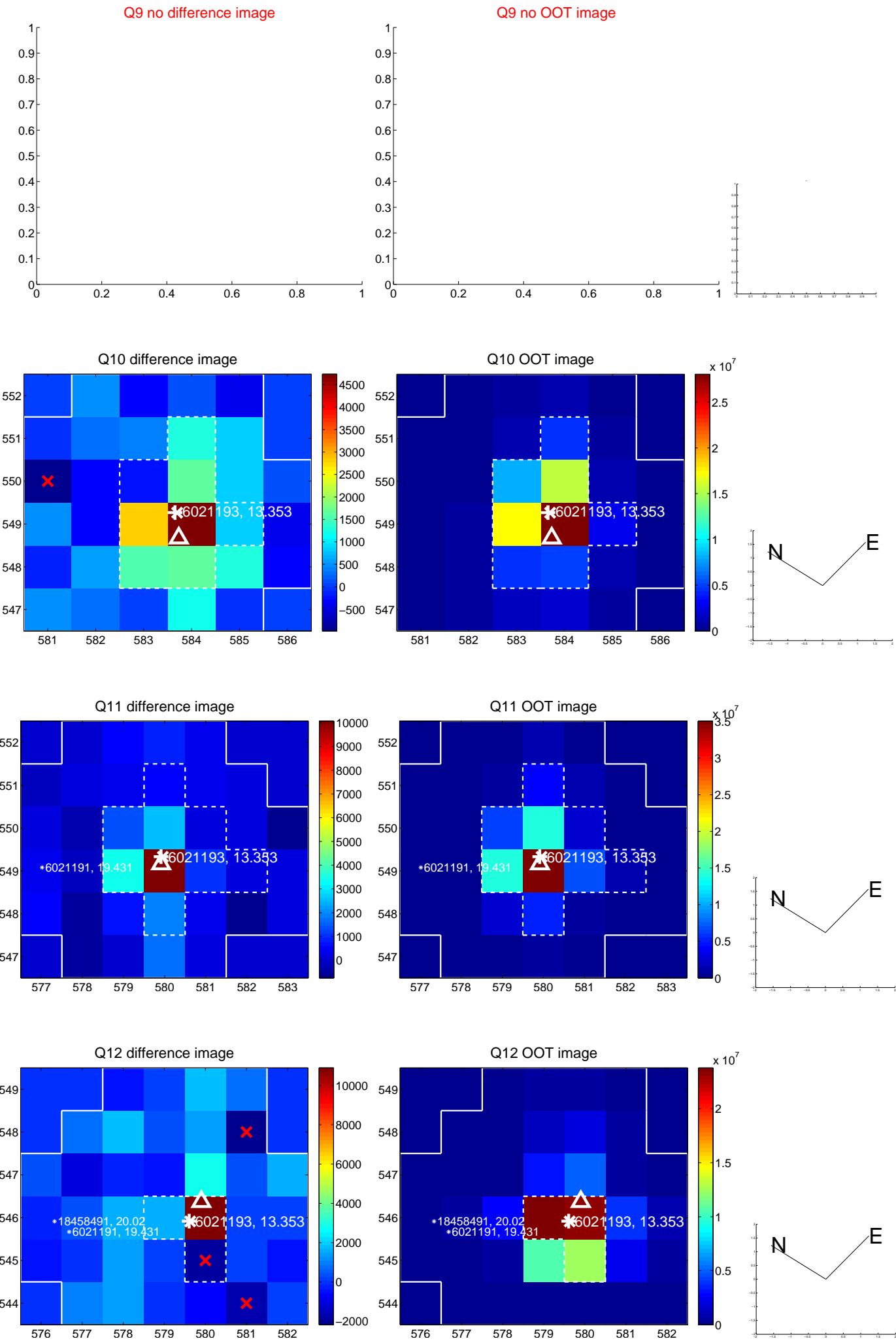


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

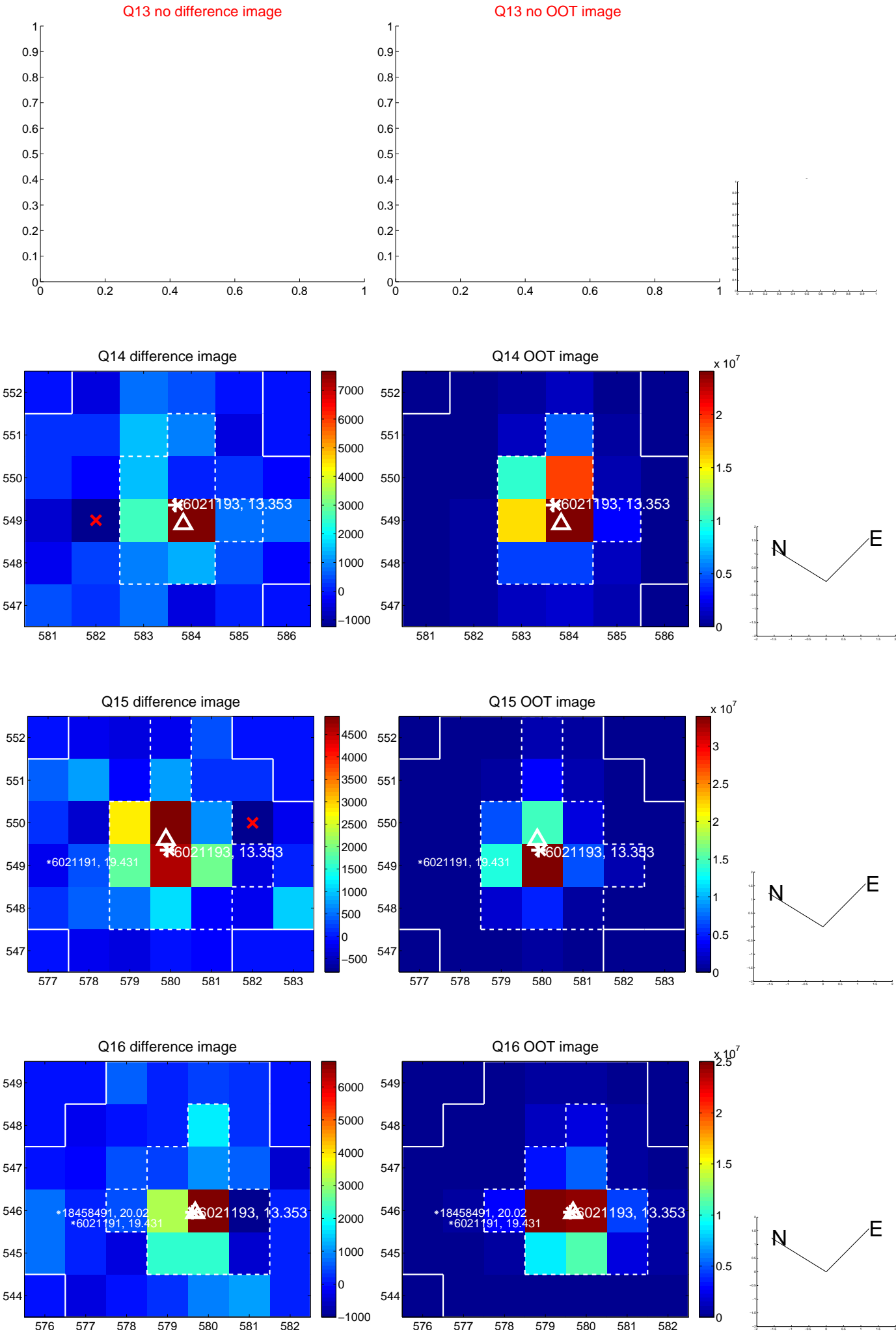
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



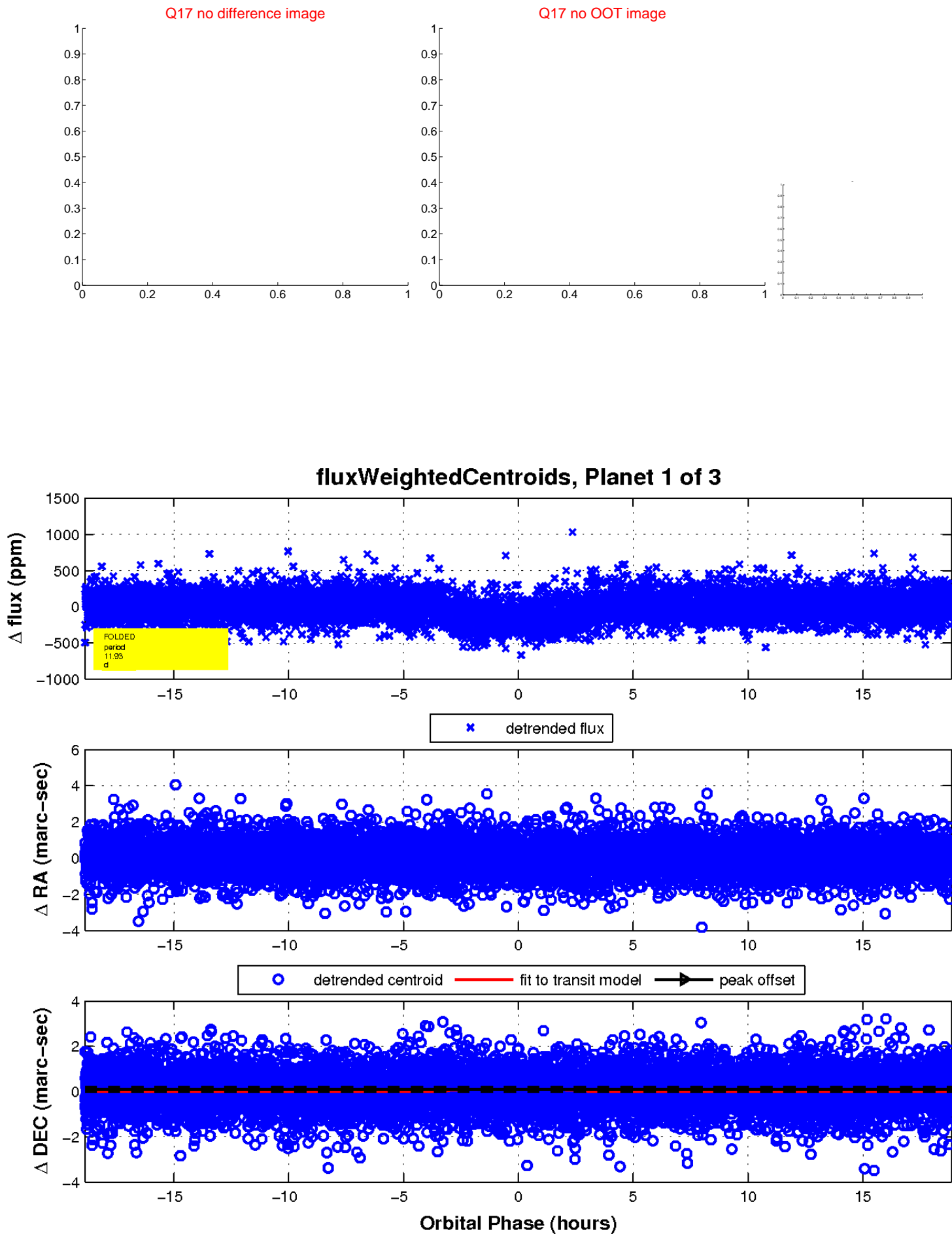
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

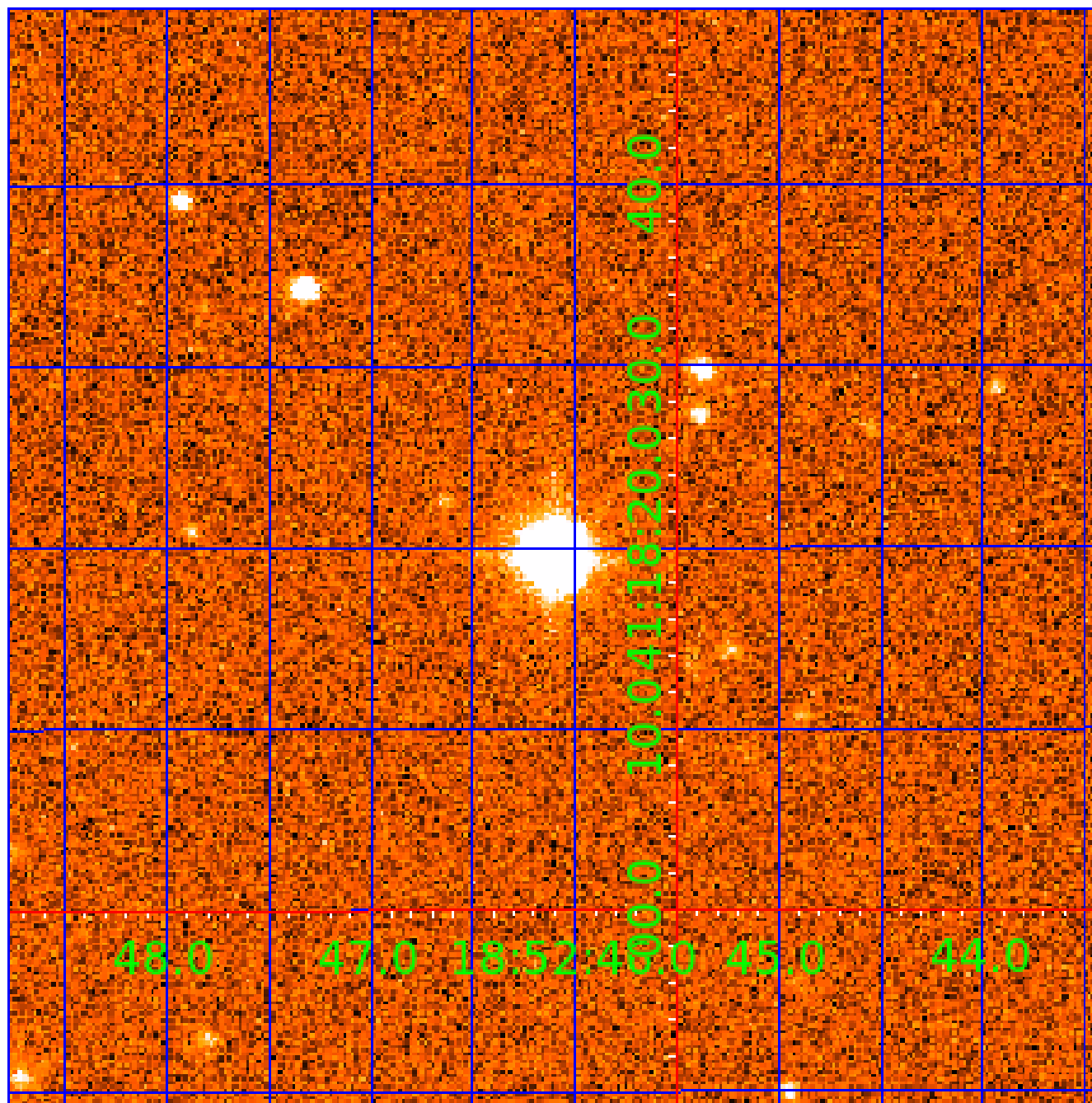


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006021193

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})
006021193-01	OBS	2148.01	11.932038	142.108729	182.2	6.288	23.4	25.3	1.39	5711	2.05	158.61
006021193-02	OBS	2148.02	7.542342	132.962419	124.0	4.863	19.1	19.4	1.39	5711	1.81	292.38
006021193-03	OBS	2148.03	3.614602	134.695901	61.9	3.236	11.1	11.8	1.39	5711	1.30	779.62

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006021193-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006021193-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006021193-03	OBS	PC	0.75	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.

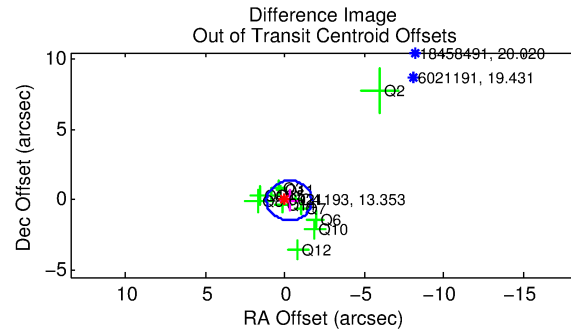
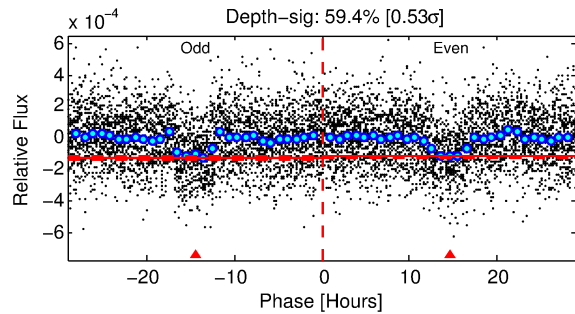
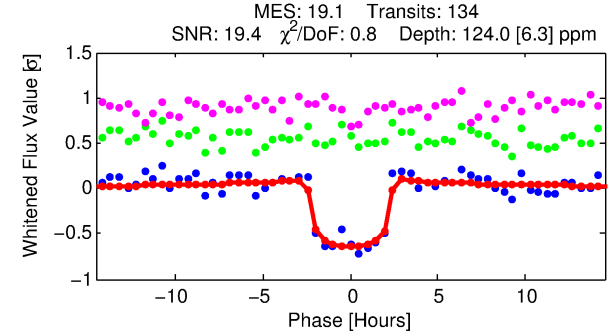
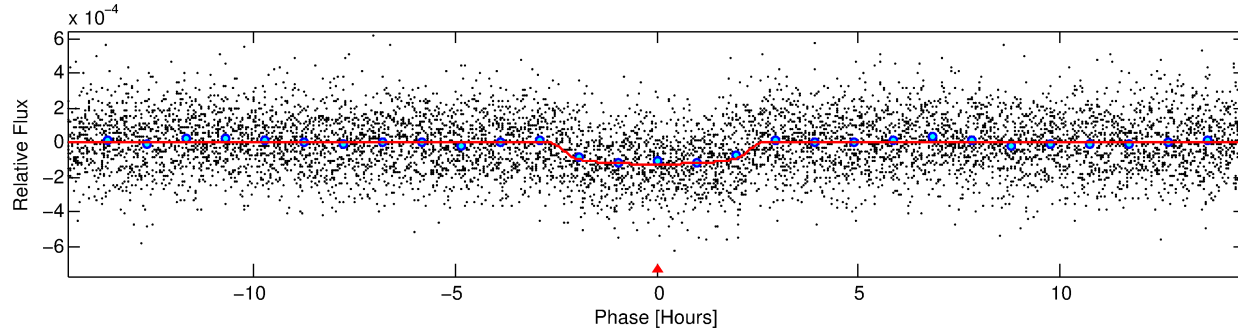
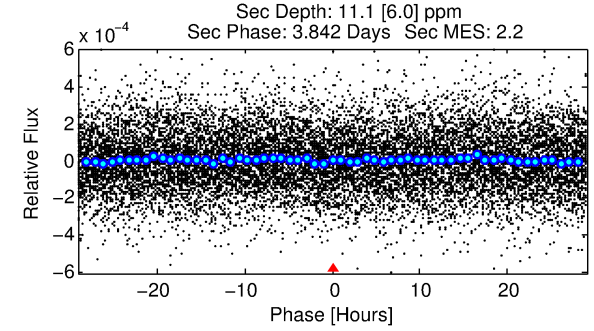
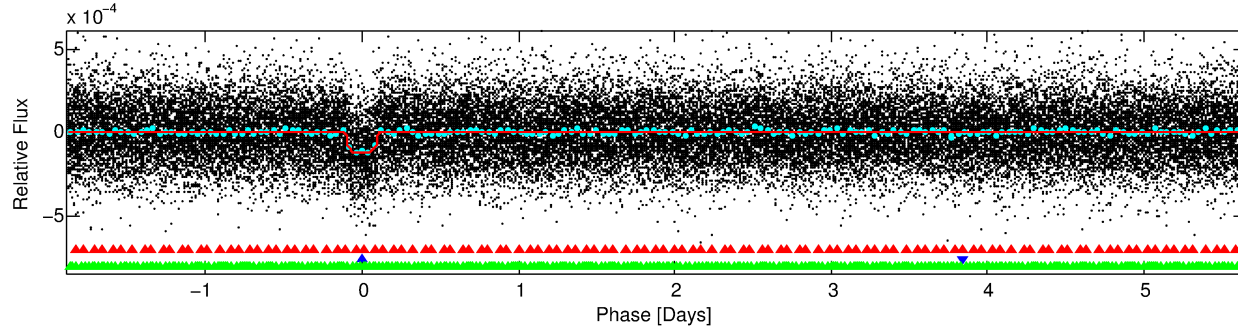
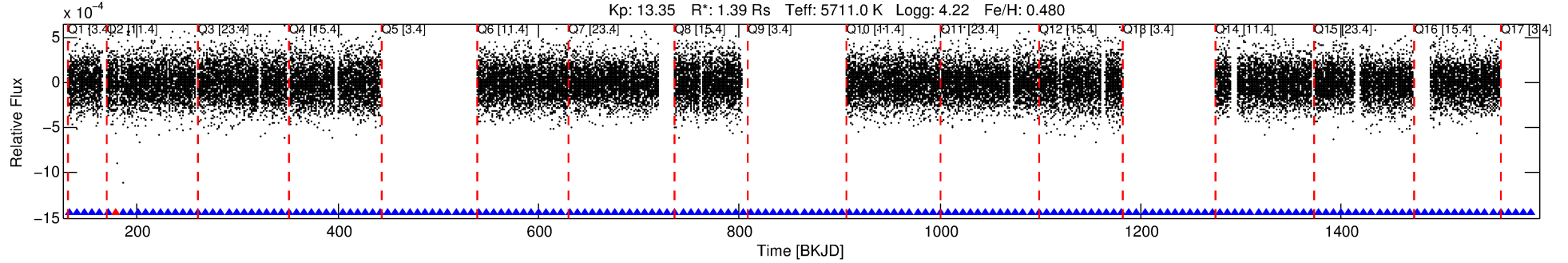
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006021193-02

No Significant Match Found

DV One-Page Summary

KIC: 6021193 Candidate: 2 of 3 Period: 7.542 d
KOI: K02148.02 Name: Kepler-363c Corr: 0.990



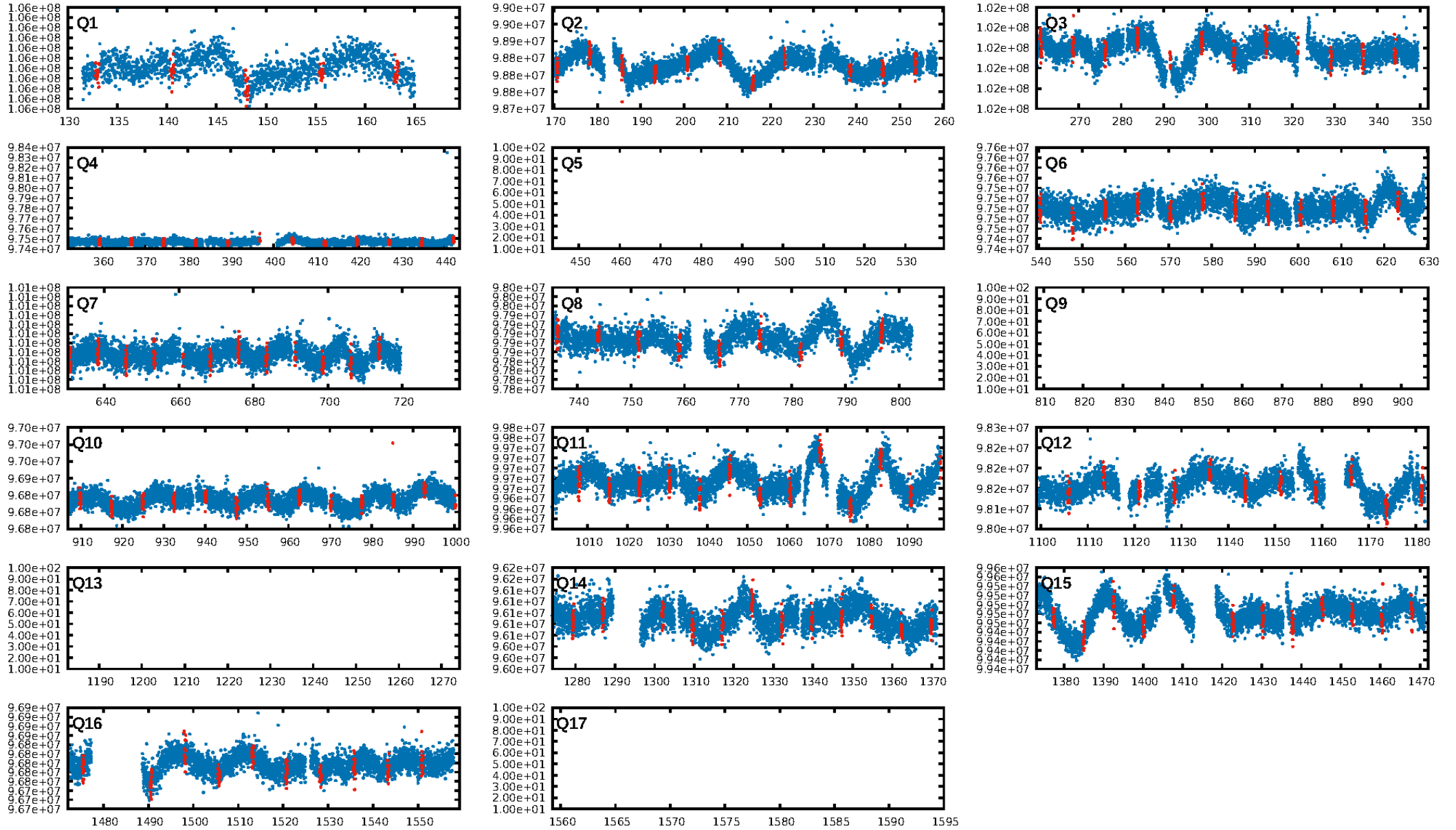
DV Fit Results:

Period = 7.54234 [0.00004] d
Epoch = 132.9624 [0.0040] BKJD
Rp/R* = 0.0120 [0.0034]
a/R* = 6.07 [7.36]
b = 0.88 [0.34]
Seff = 292.38 [79.47]
Teq = 1054 [72] K
Rp = 1.81 [0.61] Re
a = 0.0794 [0.0134] AU
Ag = 11.66 [9.61] [1.11σ]
Teffp = 3013 [592] K [3.28σ]

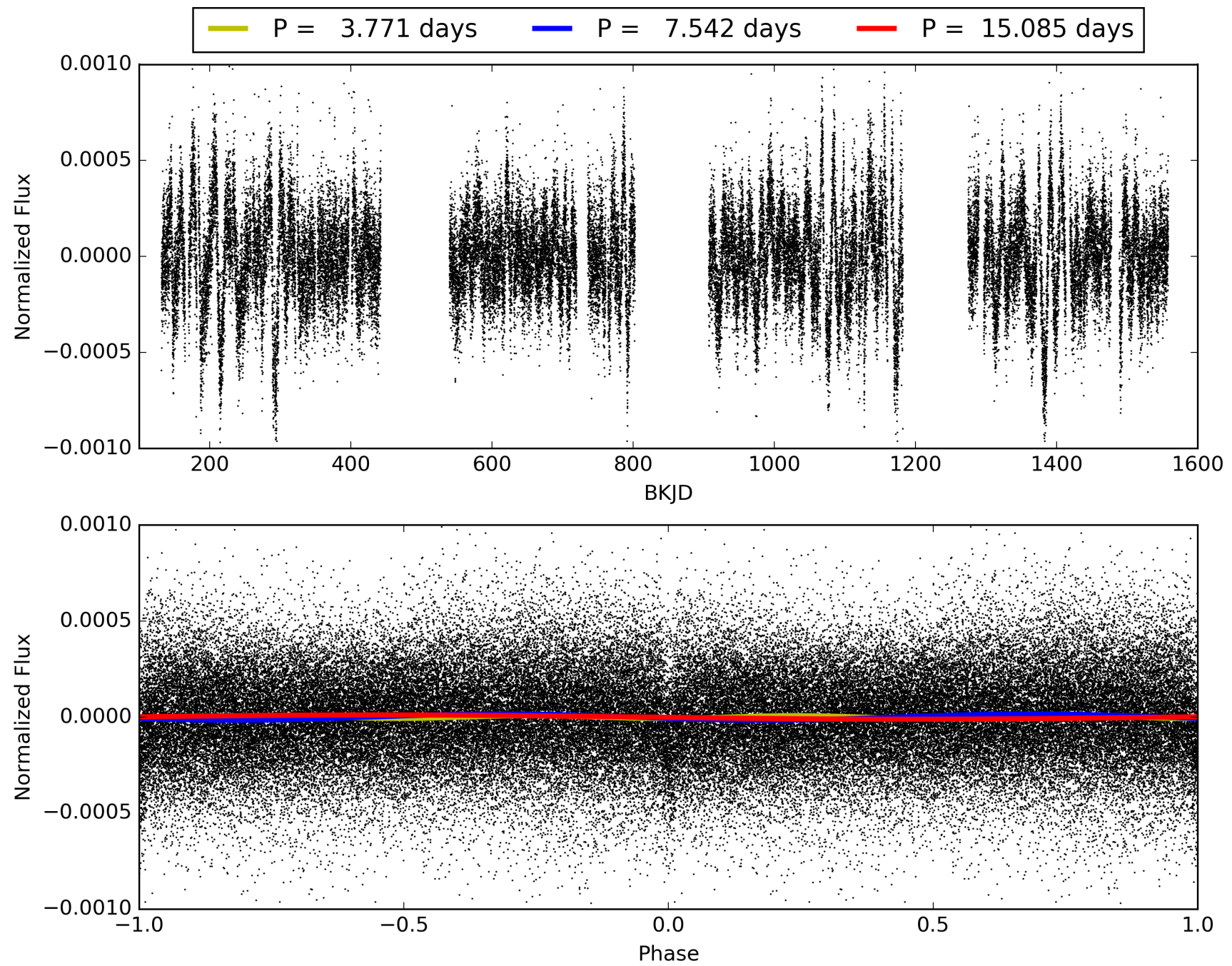
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [16.14σ]
LongPeriod-sig: 100.0% [13.25σ]
ModelChiSquare2-sig: 99.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 7.28e-76
RollingBand-fgt: 0.99 [128/129]
GhostDiagnostic-chr: 4.72
Centroid-sig: N/A
Centroid-so: 0.499 arcsec [0.71σ]
OotOffset-rm: 0.275 arcsec [0.58σ]
KicOffset-rm: 0.344 arcsec [0.55σ]
OotOffset-st: 4/4/4/0 [12]
KicOffset-st: 4/4/4/0 [12]
DiffImageQuality-fgm: 0.83 [10/12]
DiffImageOverlap-fno: 1.00 [13/13]

TCE 006021193-02, PDC Light Curves

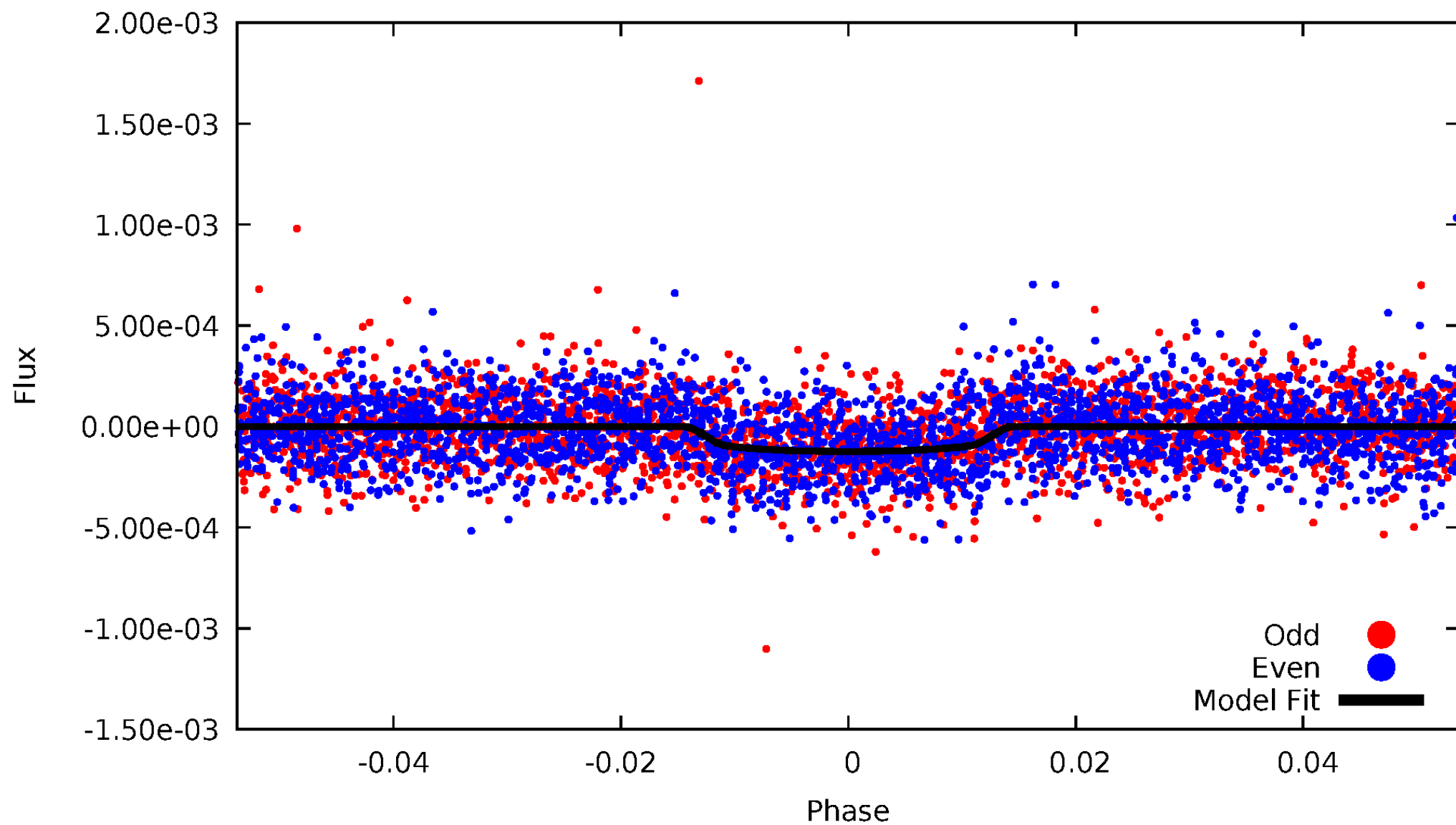


TCE 006021193-02



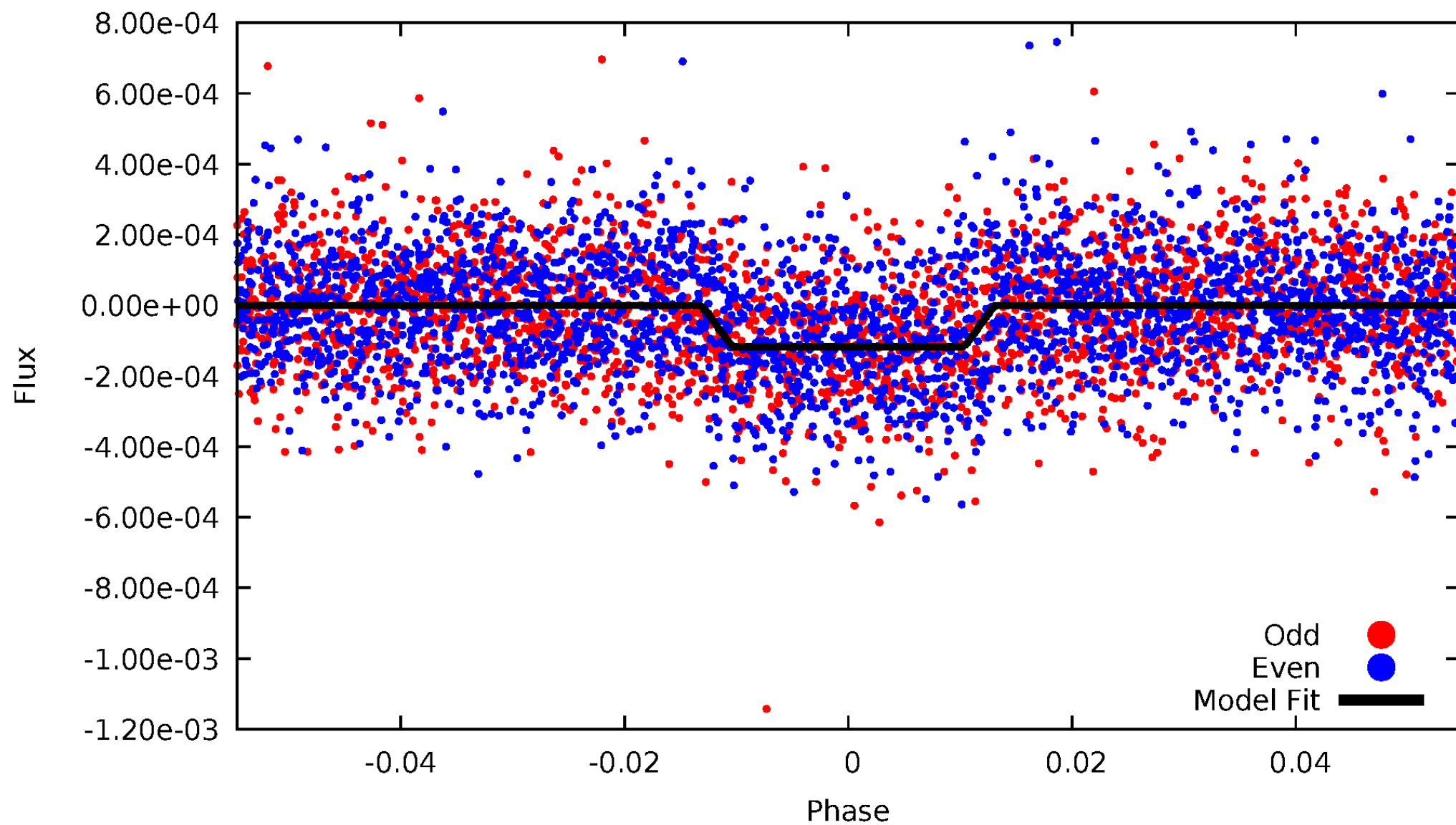
DV Odd/Even

TCE 006021193-02



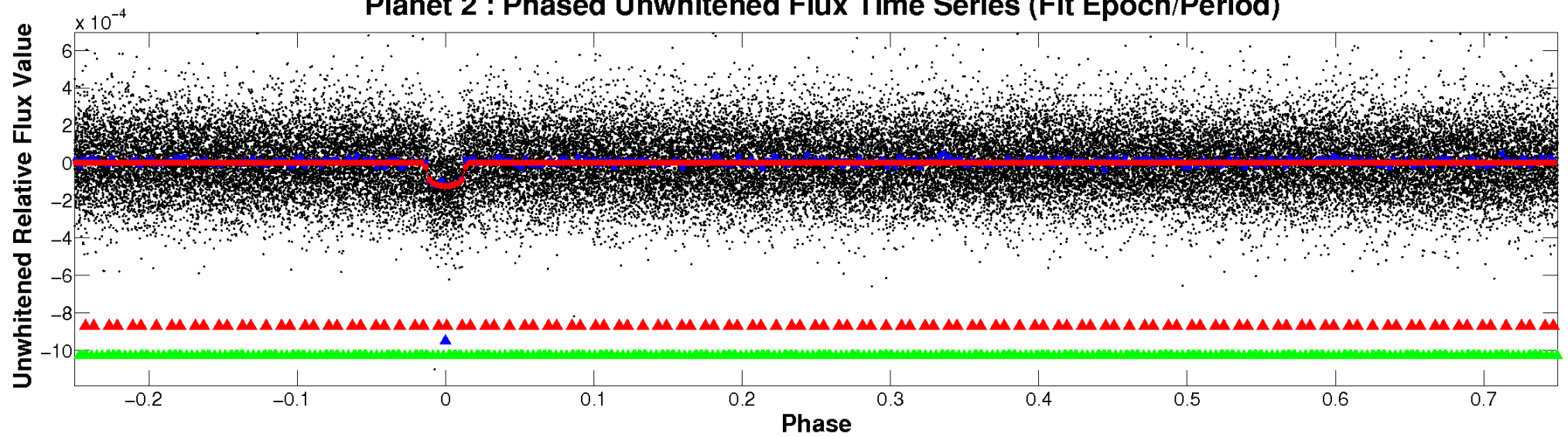
ALT Odd/Even

TCE 006021193-02

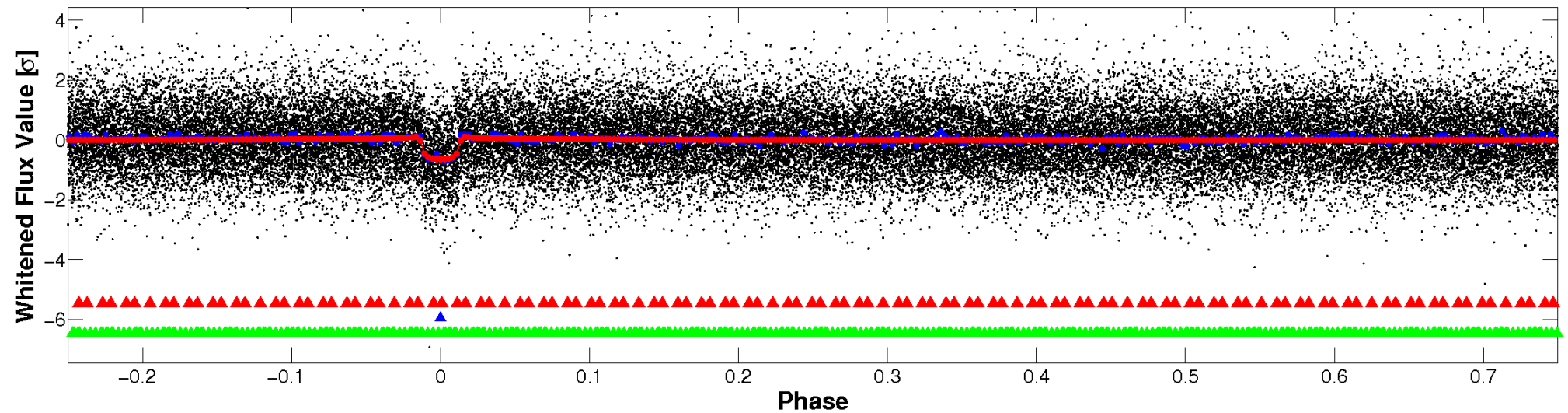


Non-Whitened Vs. Whitened Light Curve

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

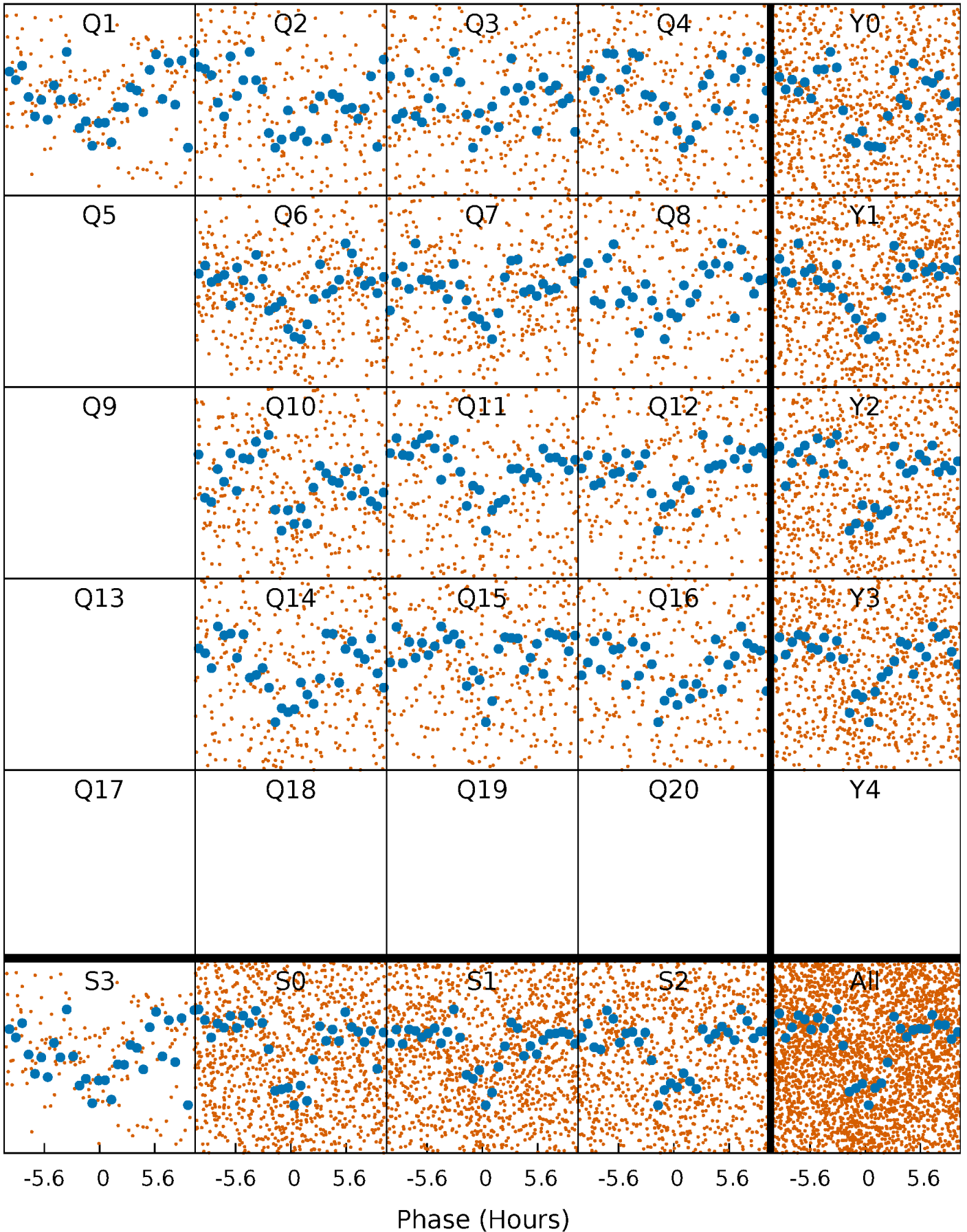


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



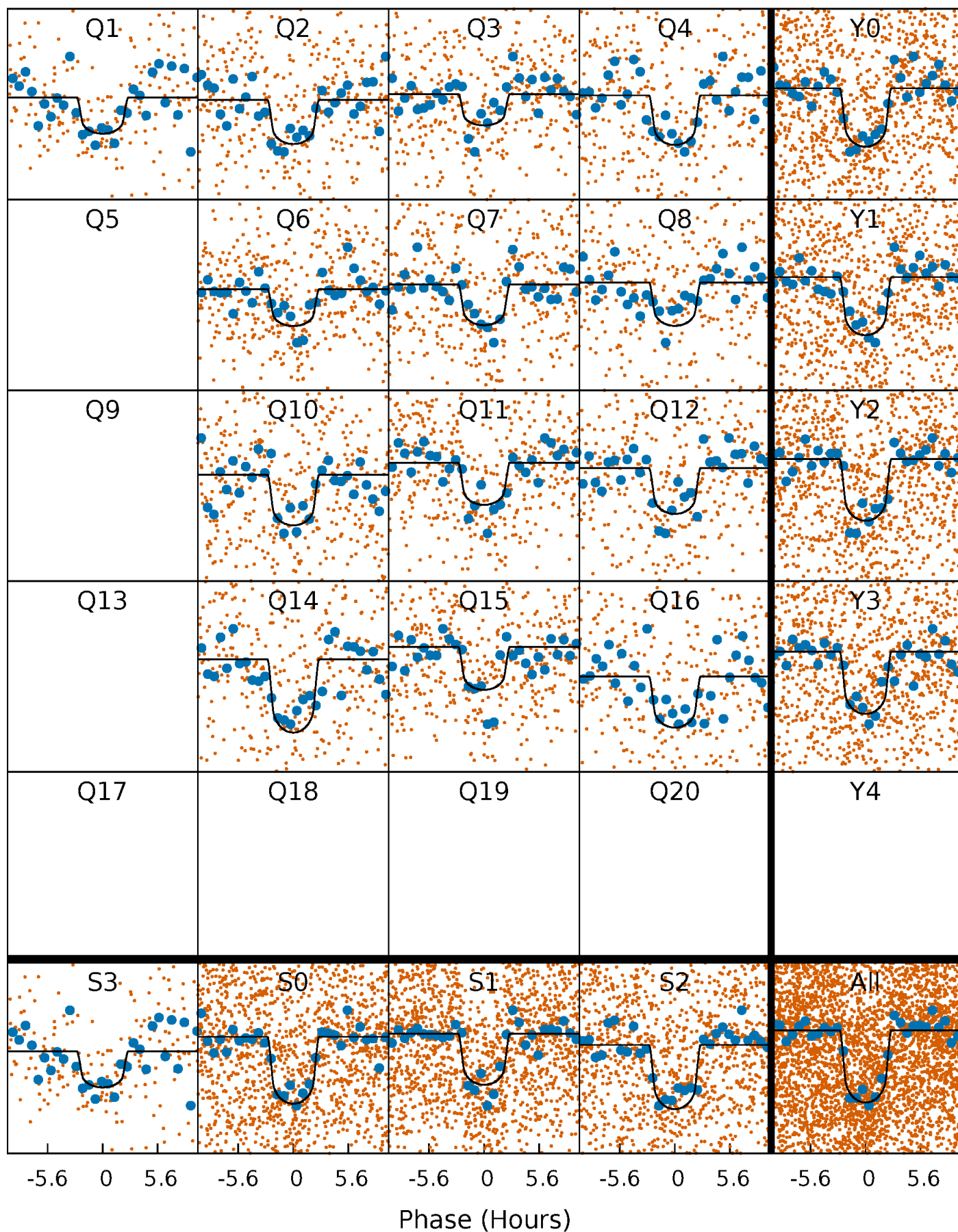
PDC Quarter-Phased Transit Curves

TCE 006021193-02 P= 7.542342 Days $T_0=132.962419$ (BKJD)



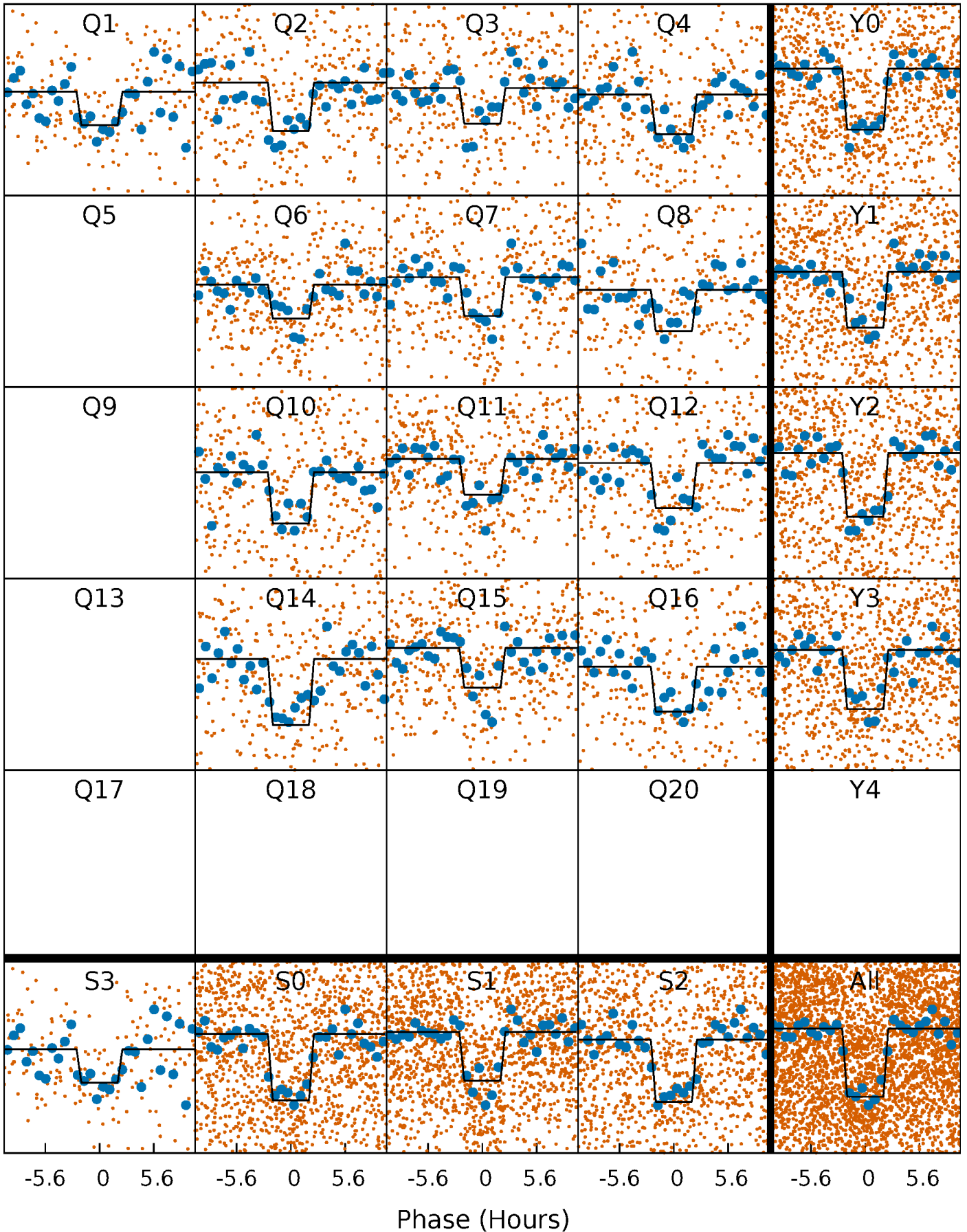
DV Quarter-Phased Transit Curves

TCE 006021193-02 P= 7.542342 Days $T_0=132.962419$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

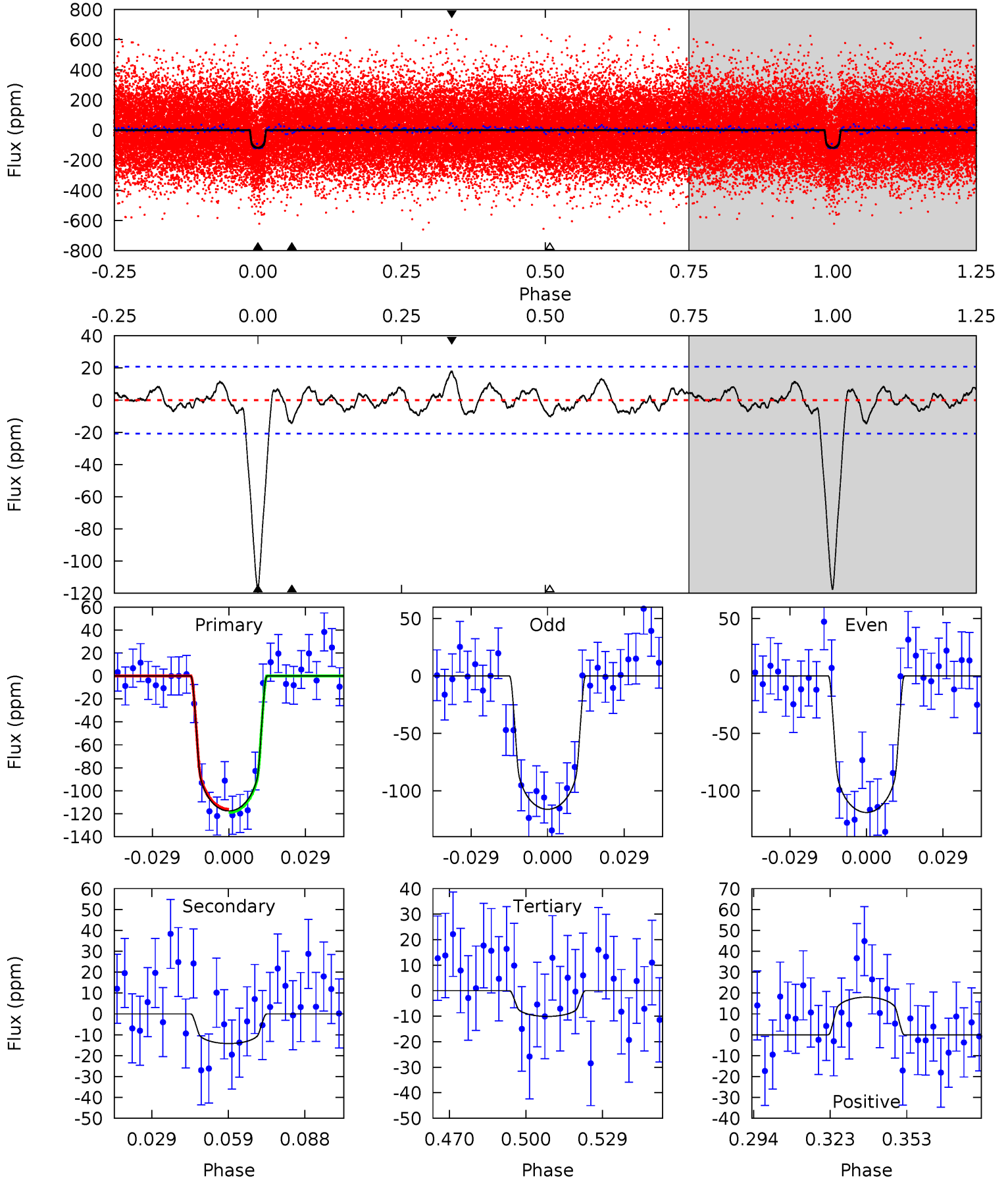
TCE 006021193-02 P= 7.542319 Days $T_0=132.963226$ (BKJD)



DV Model-Shift Uniqueness Test

006021193-02, P = 7.542342 Days, E = 125.420077 Days

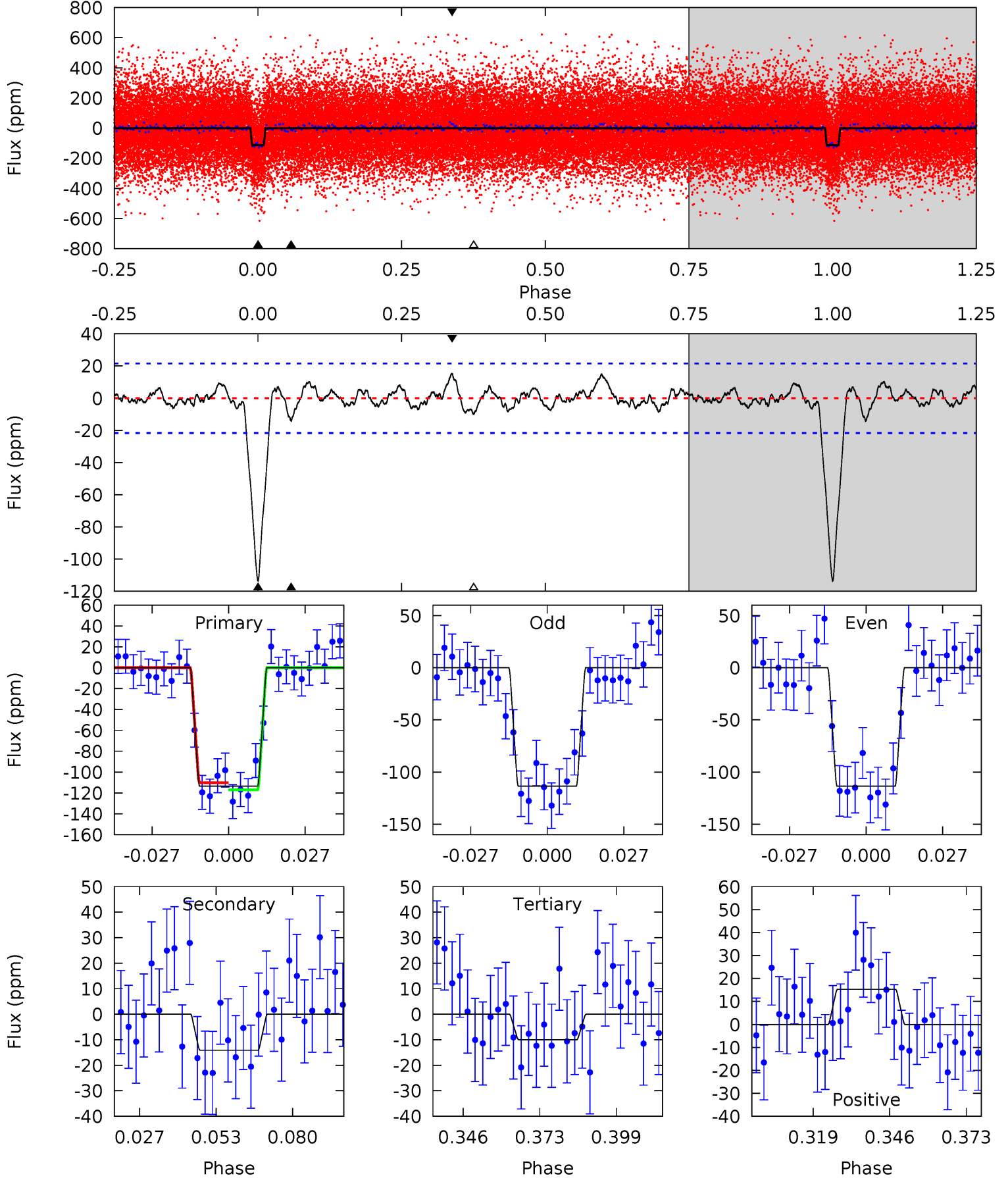
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.2	3.29	2.33	4.17	4.82	2.18	1.26	24.9	23.0	0.96	-0.88	0.32	1.02	0.13	0.32



Alt Model-Shift Uniqueness Test

006021193-02, P = 7.542319 Days, E = 125.420907 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.4	3.16	2.24	3.42	4.84	2.22	1.04	23.2	22.0	0.92	-0.26	0.00	0.95	0.12	0.75



Stellar Parameters For KIC 006021193

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5711^{+101}_{-113}	$4.221^{+0.149}_{-0.122}$	$0.480^{+0.050}_{-0.150}$	$1.391^{+0.232}_{-0.258}$	$1.173^{+0.083}_{-0.114}$	$0.614^{+0.435}_{-0.197}$
	+2%/-2%	+4%/-3%	+10%/-31%	+17%/-19%	+7%/-10%	+71%/-32%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 006021193-02 / KOI 2148.02

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-14±4	$1.81^{+0.55}_{-0.53}$	1472^{+75}_{-79}	3627^{+467}_{-350}	15^{+16}_{-7}
Alt.	-14±4	$1.64^{+0.58}_{-0.51}$	1471^{+76}_{-74}	3717^{+525}_{-391}	17^{+22}_{-9}

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

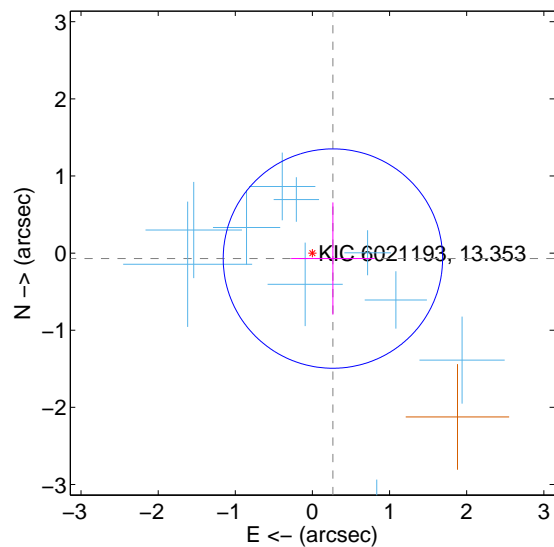
Supplemental centroid analysis for 006021193-02. Kepler magnitude: 13.35. Transit SNR 19.43

There are 10 quarters with good PRF difference image offsets

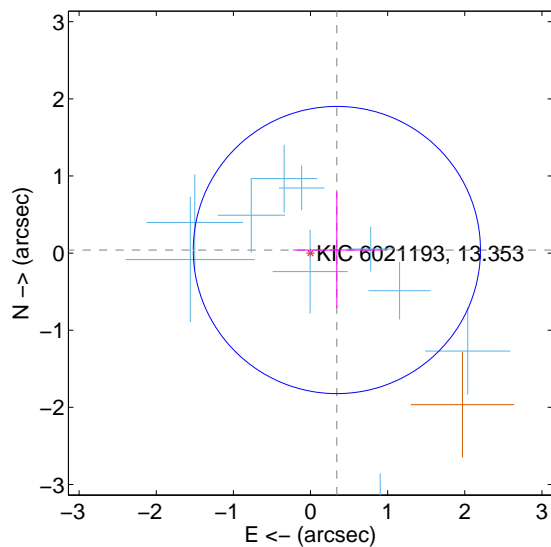
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.275 ± 0.474	0.58	-0.265 ± 0.542	-0.071 ± 0.728
PRF-fit source offset from KIC position	0.344 ± 0.621	0.55	-0.341 ± 0.568	0.040 ± 0.749
photometric centroid source offset	0.50 ± 0.71	0.71	-0.44 ± 0.72	0.23 ± 0.67

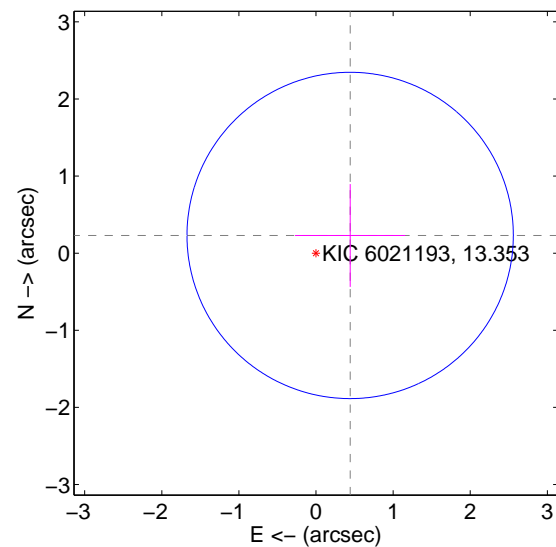
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

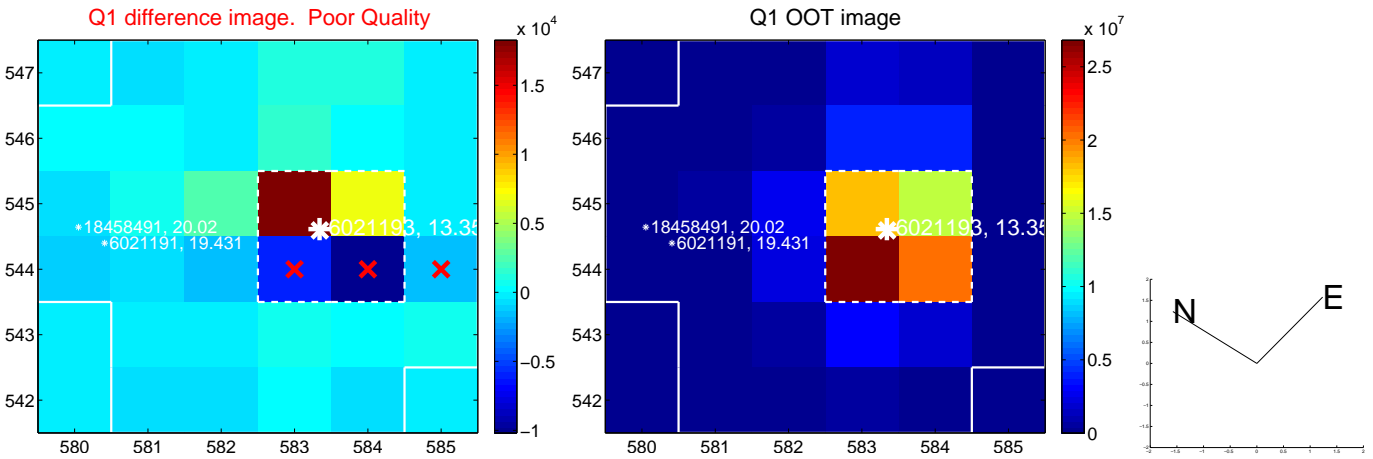


offset from photometric centroids

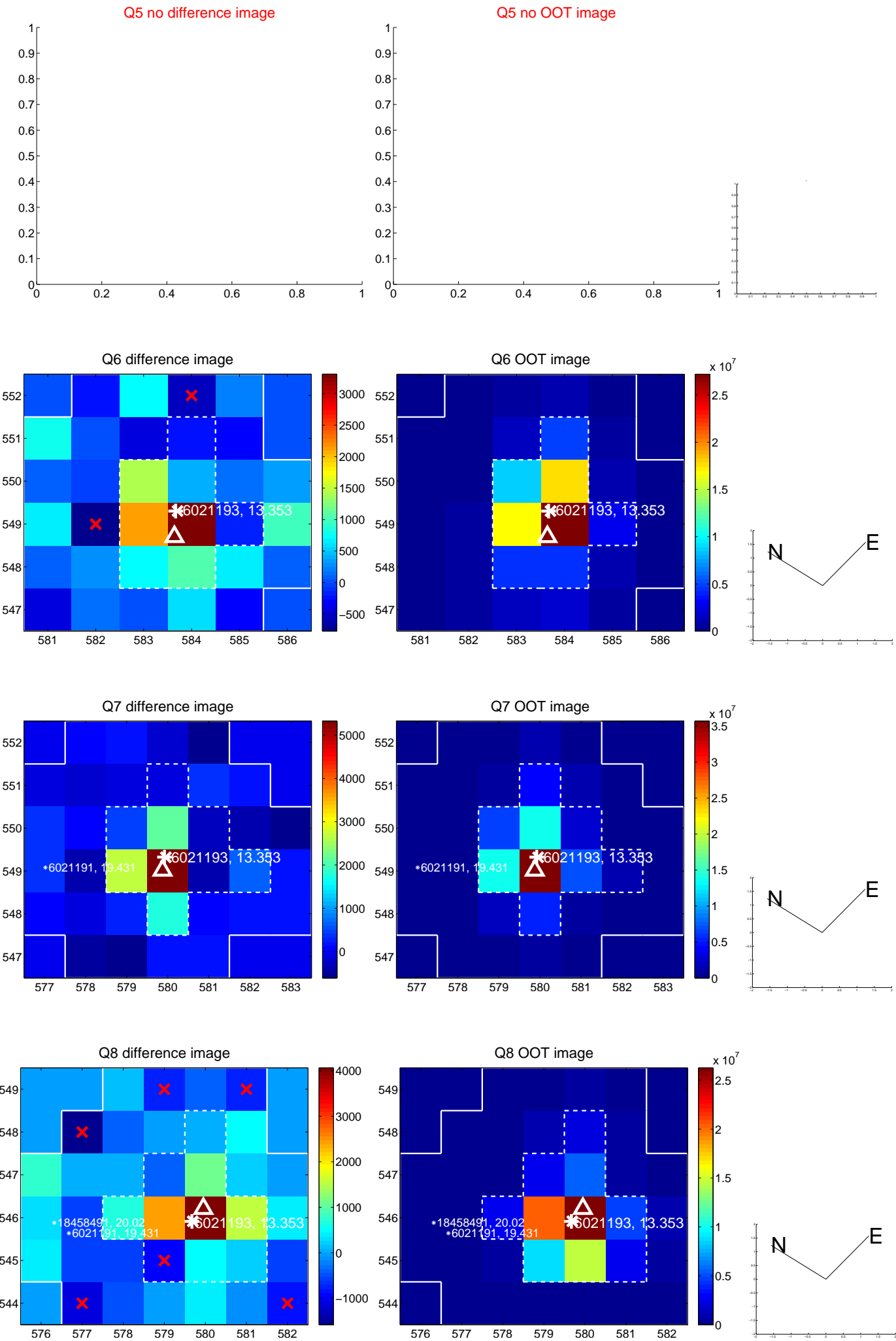


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

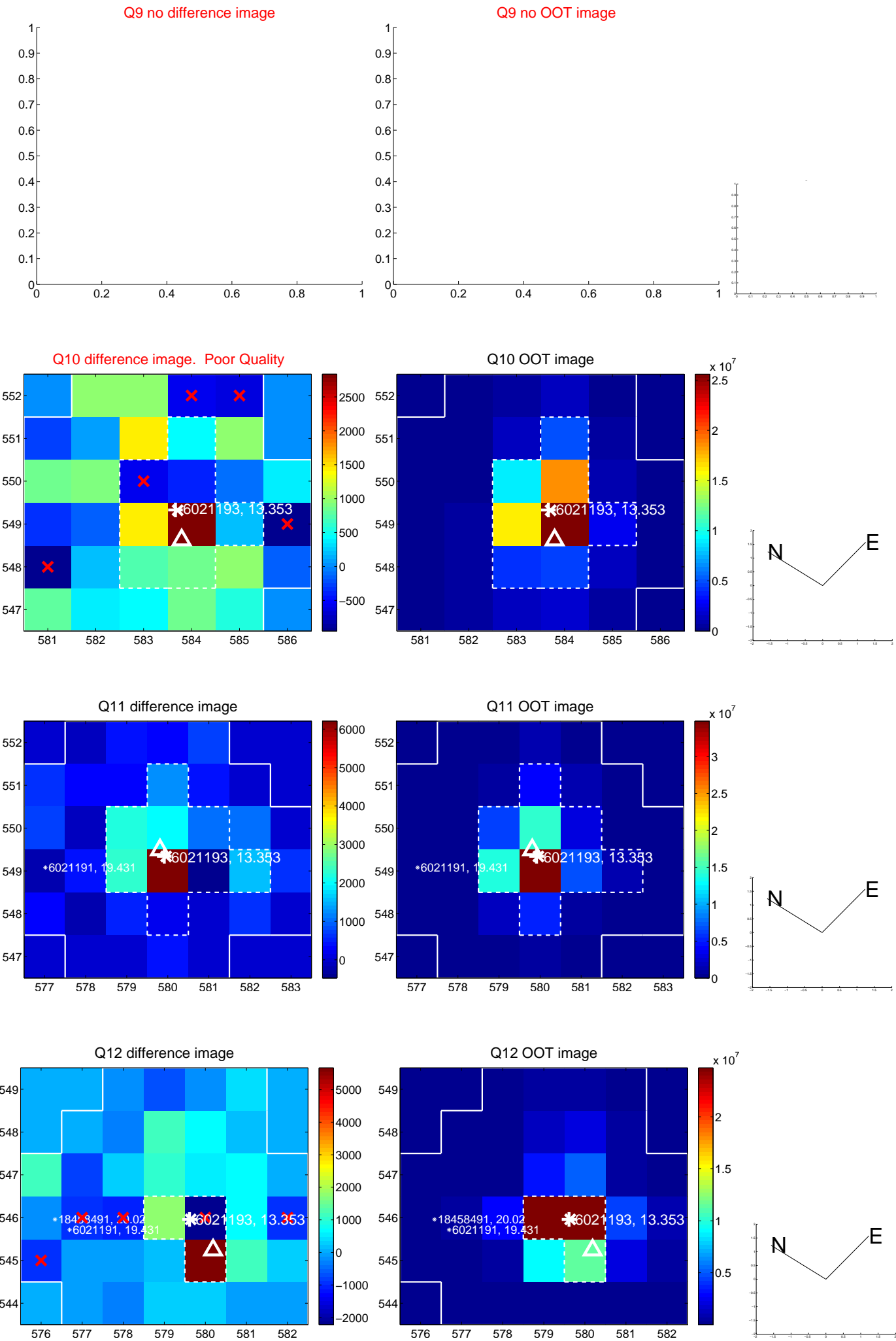
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



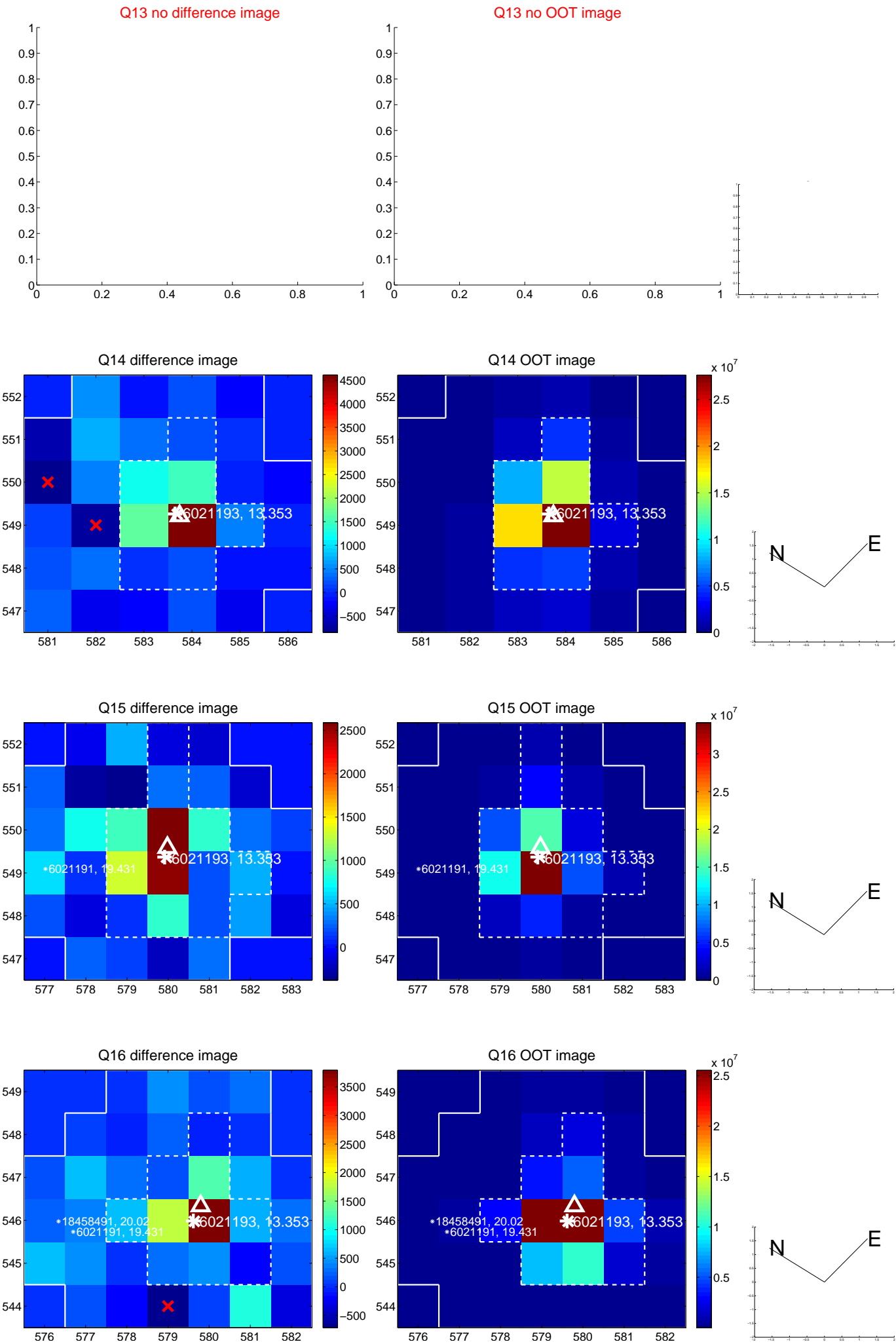
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



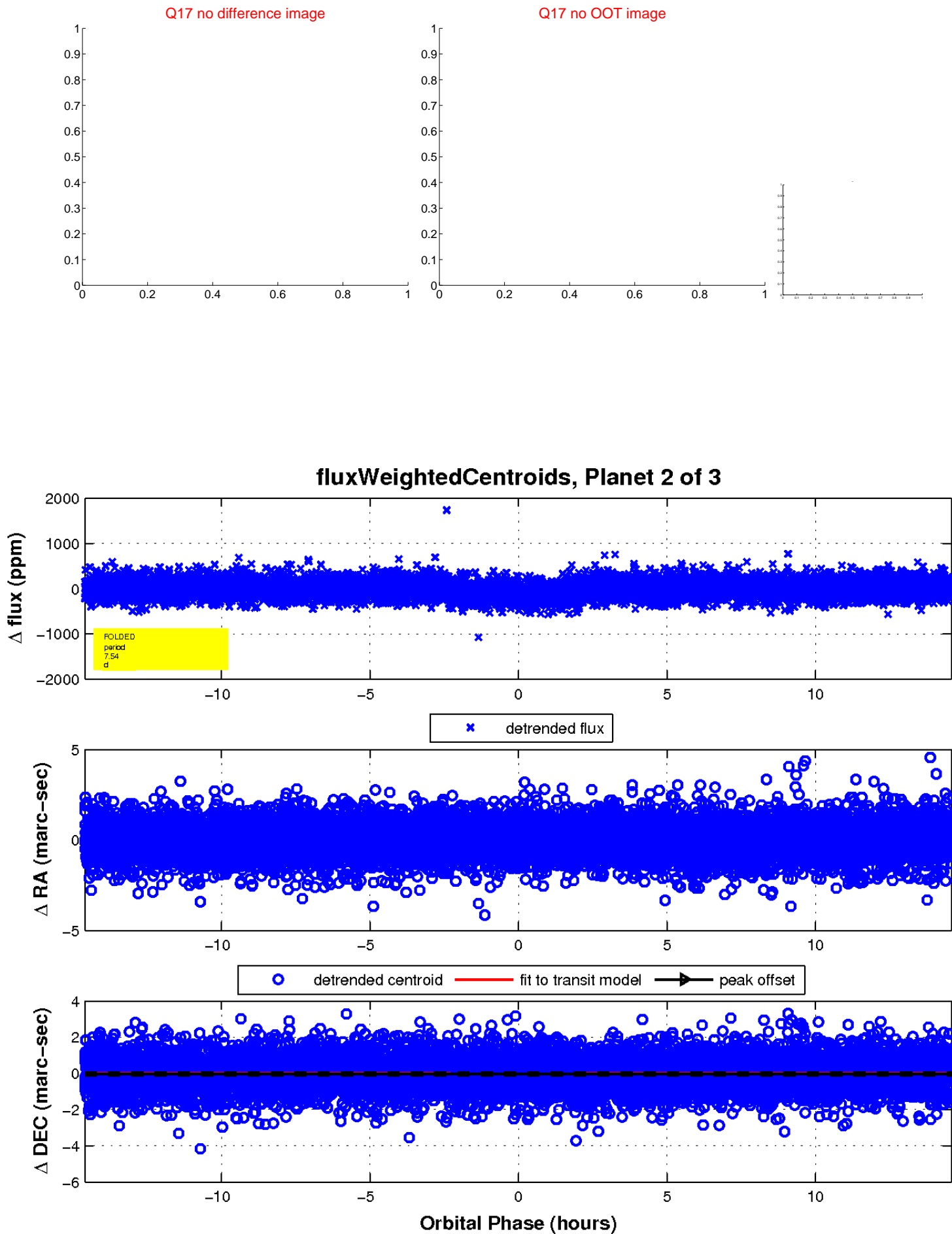
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

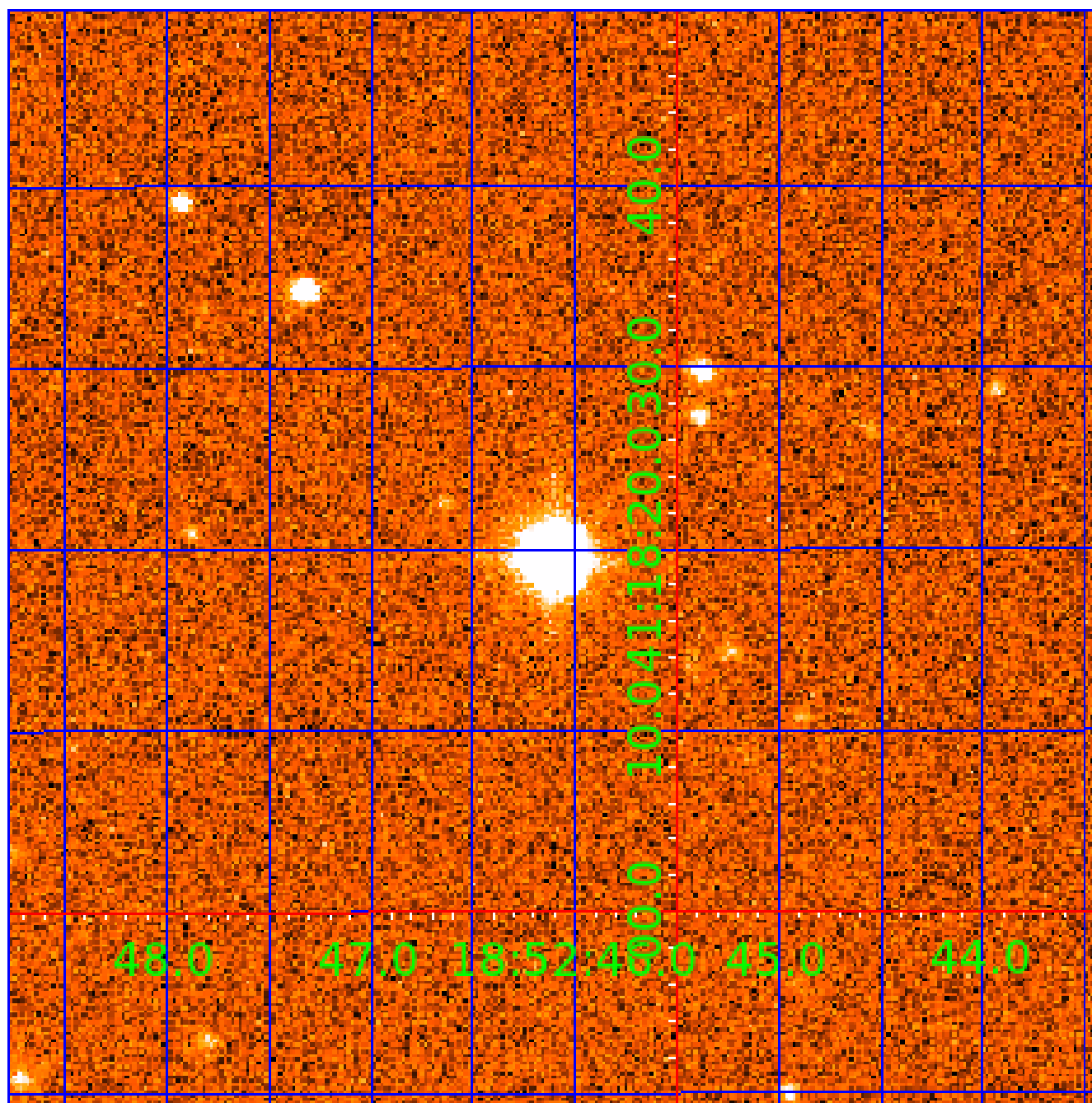


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006021193

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})
006021193-01	OBS	2148.01	11.932038	142.108729	182.2	6.288	23.4	25.3	1.39	5711	2.05	158.61
006021193-02	OBS	2148.02	7.542342	132.962419	124.0	4.863	19.1	19.4	1.39	5711	1.81	292.38
006021193-03	OBS	2148.03	3.614602	134.695901	61.9	3.236	11.1	11.8	1.39	5711	1.30	779.62

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006021193-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006021193-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006021193-03	OBS	PC	0.75	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.

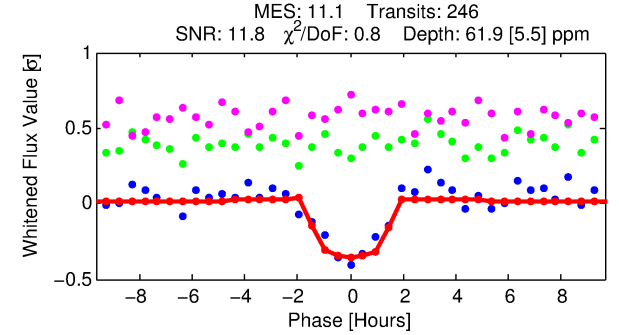
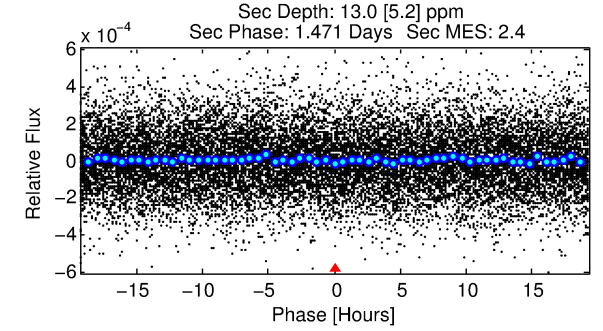
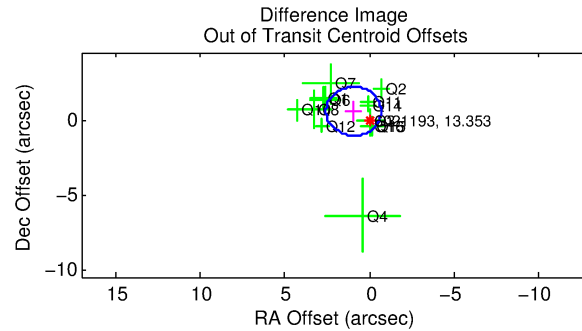
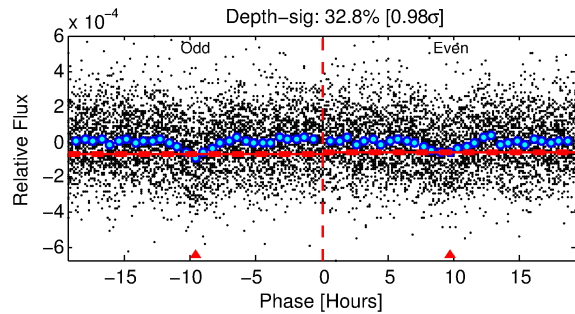
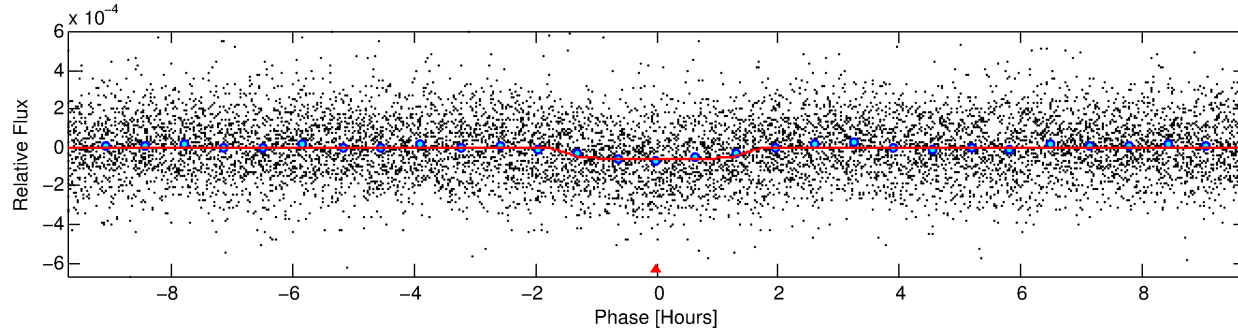
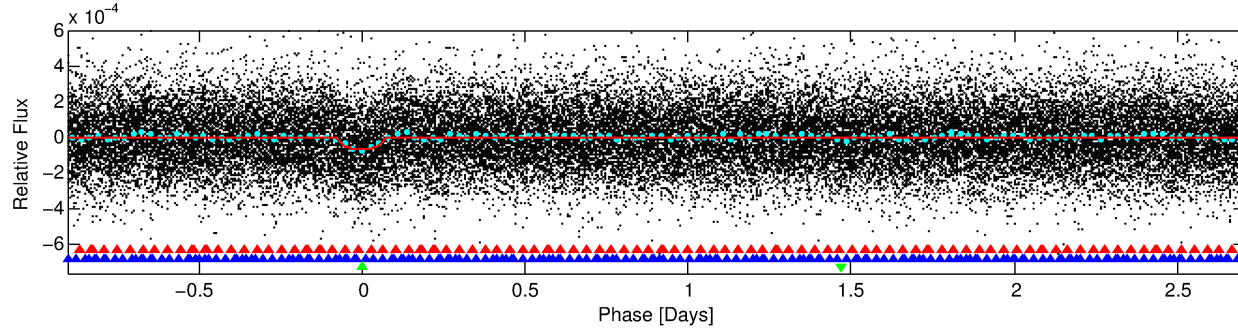
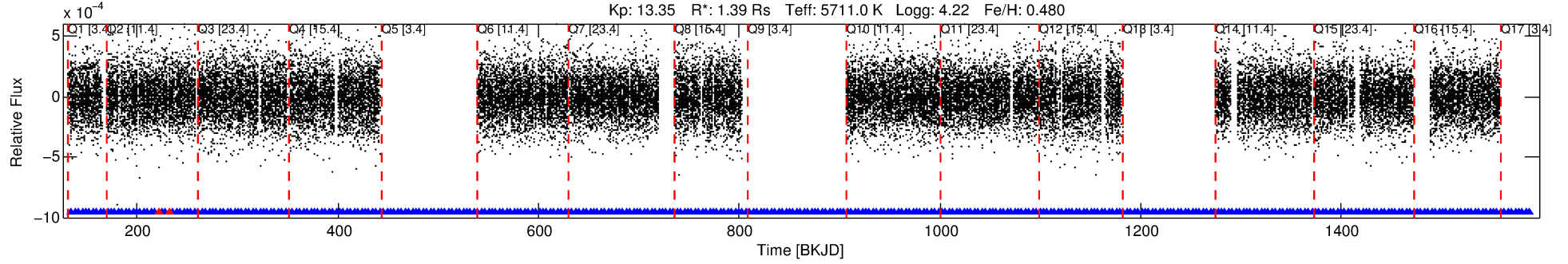
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006021193-03

No Significant Match Found

DV One-Page Summary

KIC: 6021193 Candidate: 3 of 3 Period: 3.615 d
KOI: K02148.03 Name: Kepler-363b Corr: 0.986



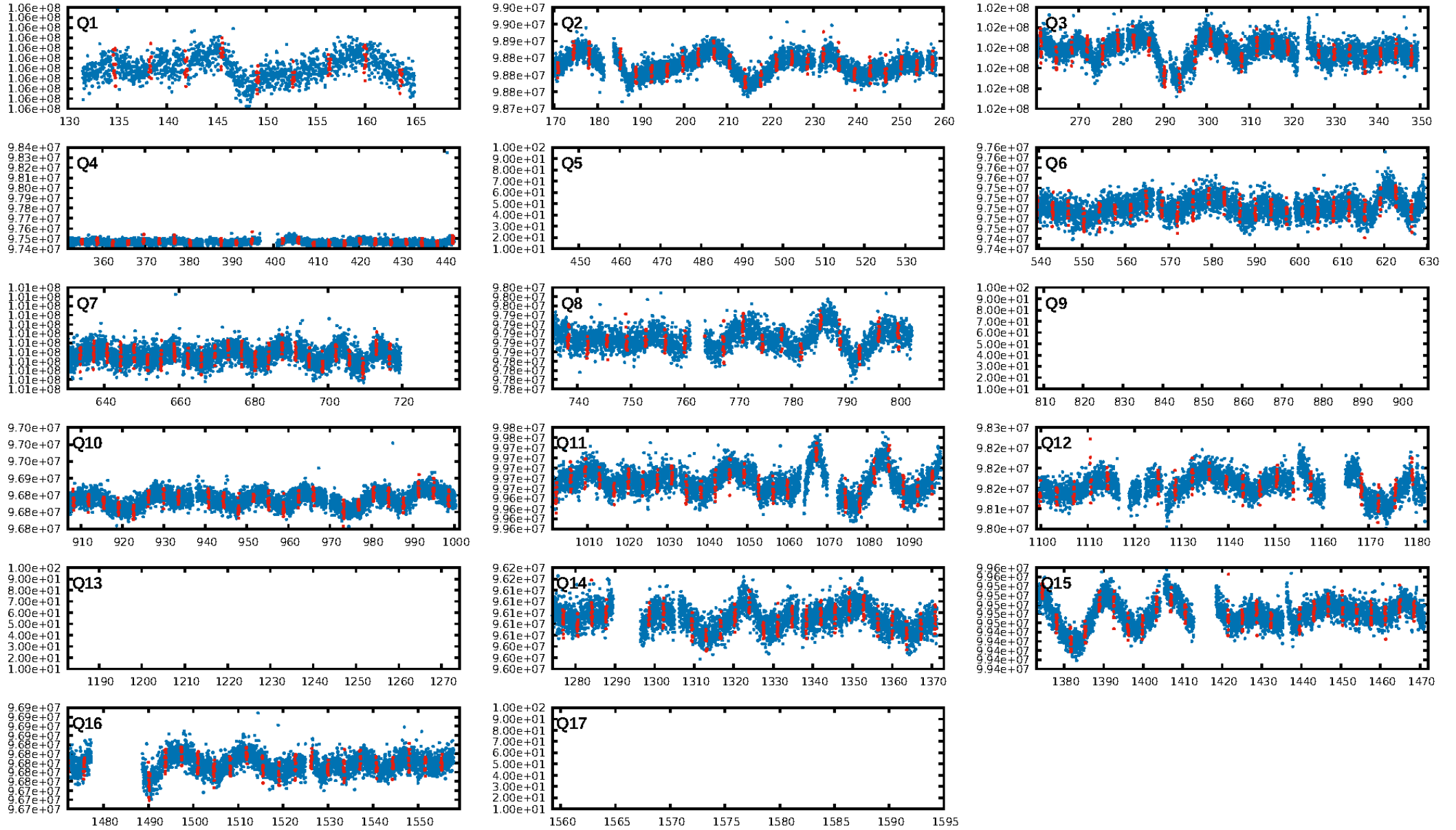
DV Fit Results:

Period = 3.61460 [0.00002] d
Epoch = 134.6959 [0.0040] BKJD
Rp/R* = 0.0086 [0.0045]
a/R* = 4.11 [9.06]
b = 0.89 [0.54]
Seff = 779.62 [211.89]
Teq = 1347 [92] K
Rp = 1.30 [0.72] Re
a = 0.0486 [0.0082] AU
Ag = 10.01 [11.53] [0.78 σ]
Teffp = 3706 [1041] K [2.26 σ]

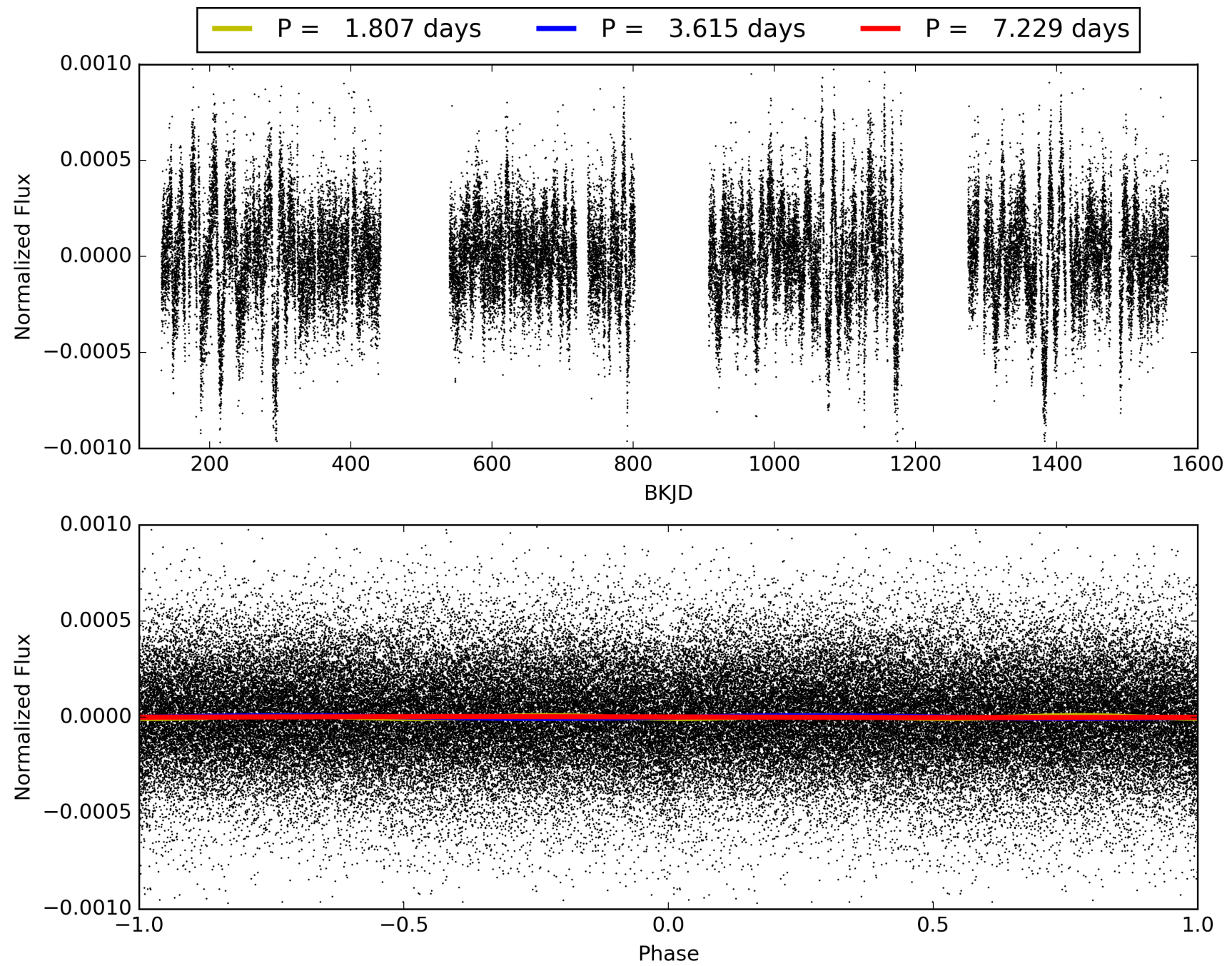
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [16.14 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.13e-27
RollingBand-fgt: 0.99 [236/238]
GhostDiagnostic-chr: 4.383
Centroid-sig: N/A
Centroid-so: 1.004 arcsec [0.85 σ]
OotOffset-rm: 1.102 arcsec [2.05 σ]
KicOffset-rm: 1.123 arcsec [2.03 σ]
OotOffset-st: 4/4/4/1 [13]
KicOffset-st: 4/4/4/1 [13]
DiffImageQuality-fgm: 0.69 [9/13]
DiffImageOverlap-fno: 1.00 [13/13]

TCE 006021193-03, PDC Light Curves

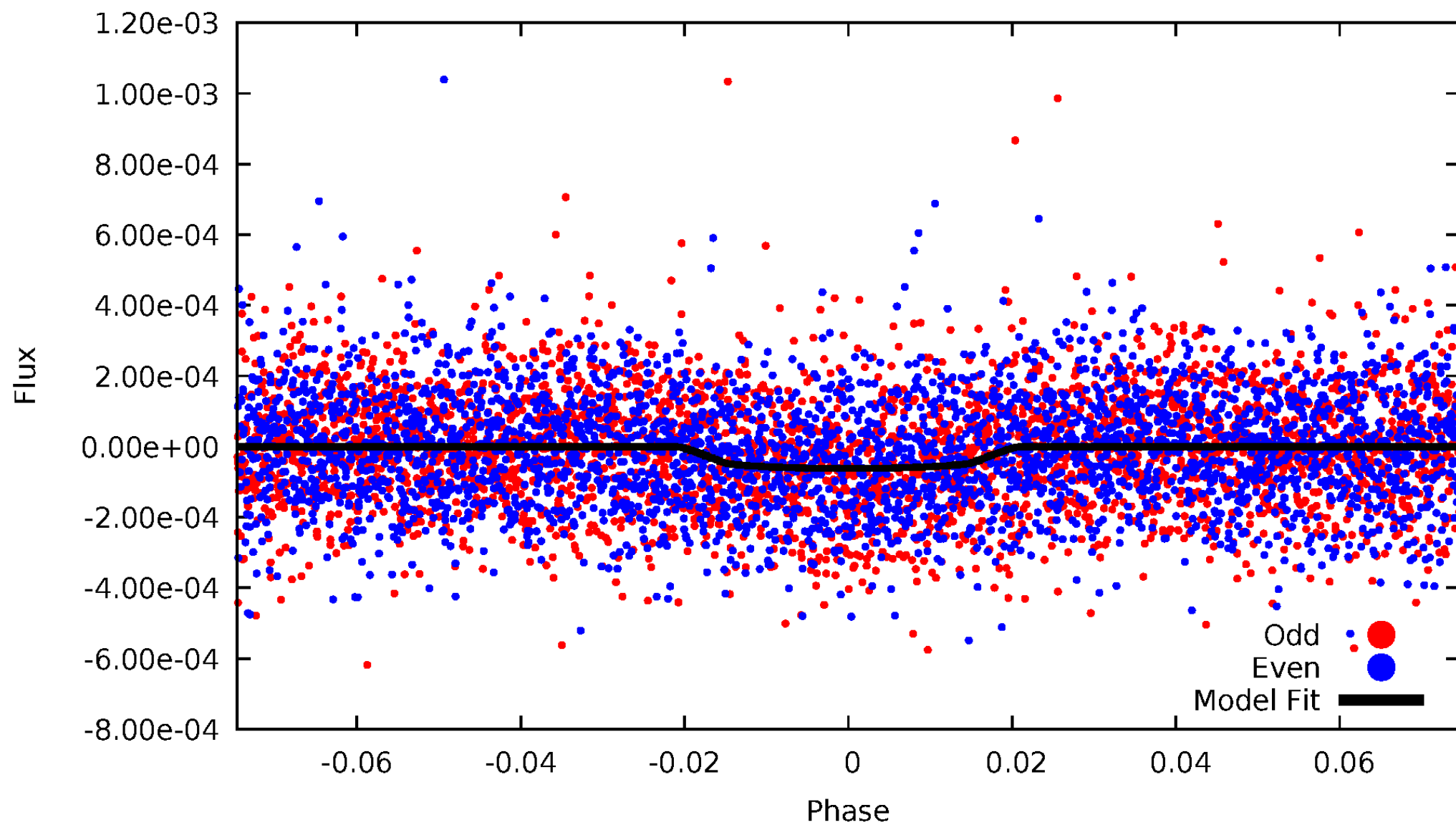


TCE 006021193-03



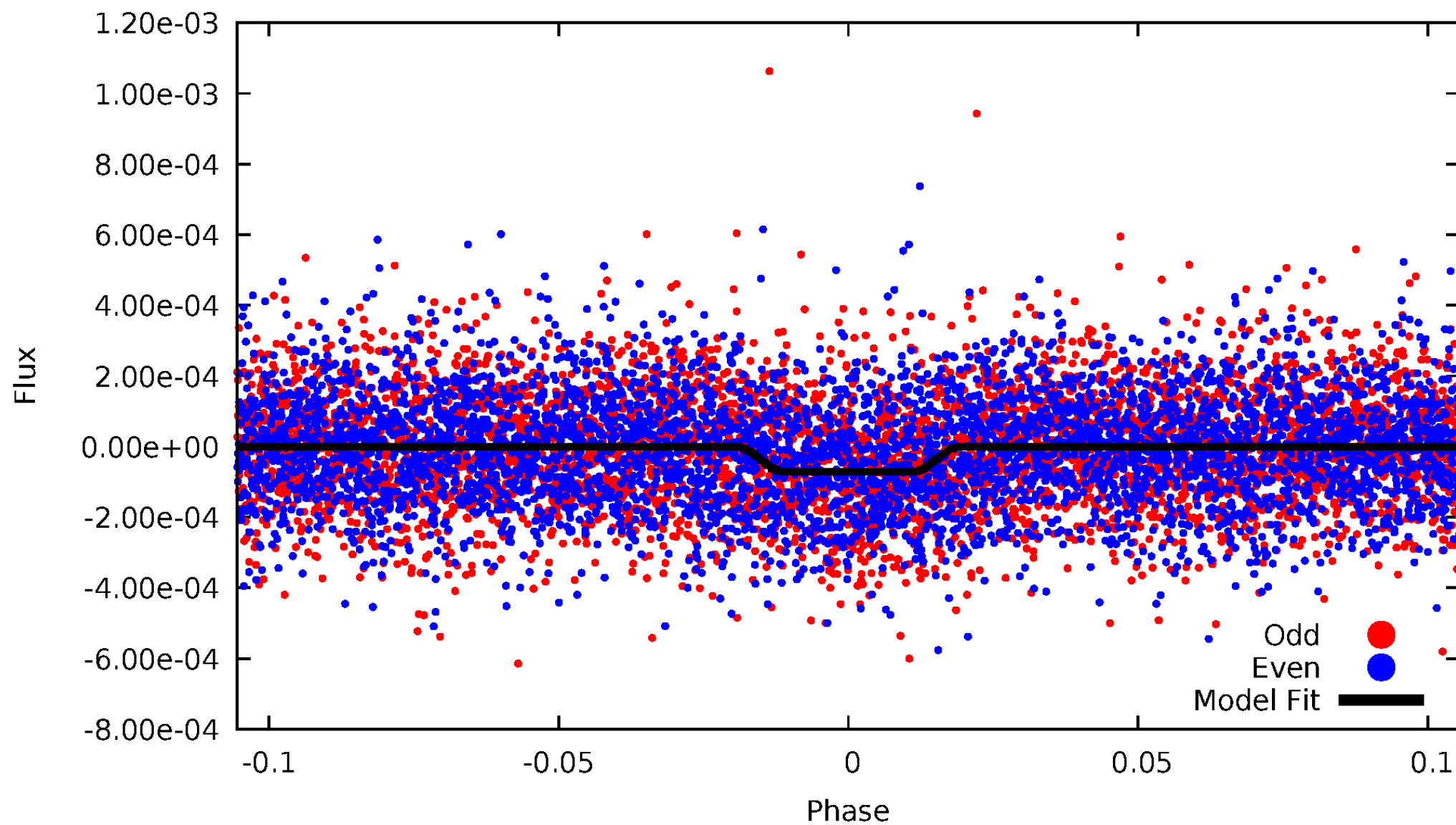
DV Odd/Even

TCE 006021193-03

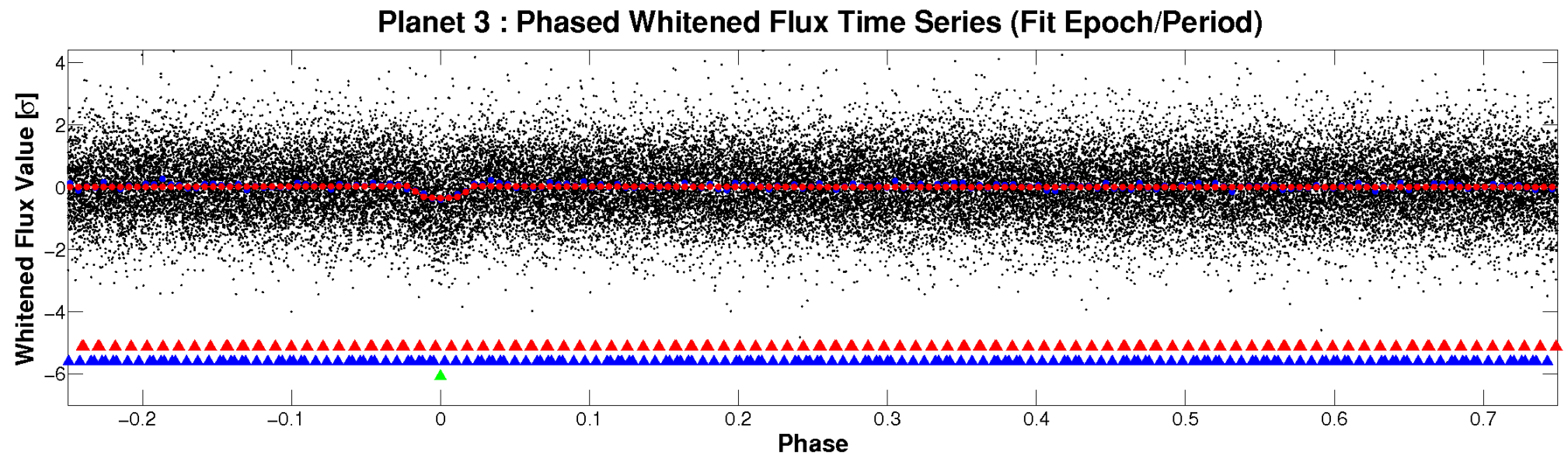
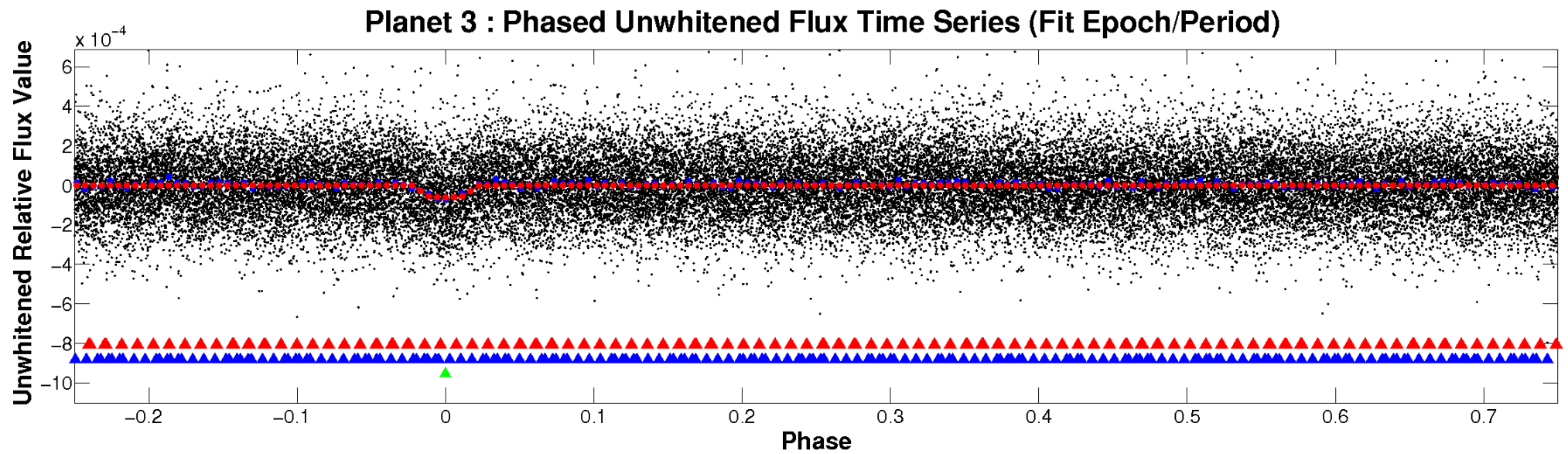


ALT Odd/Even

TCE 006021193-03

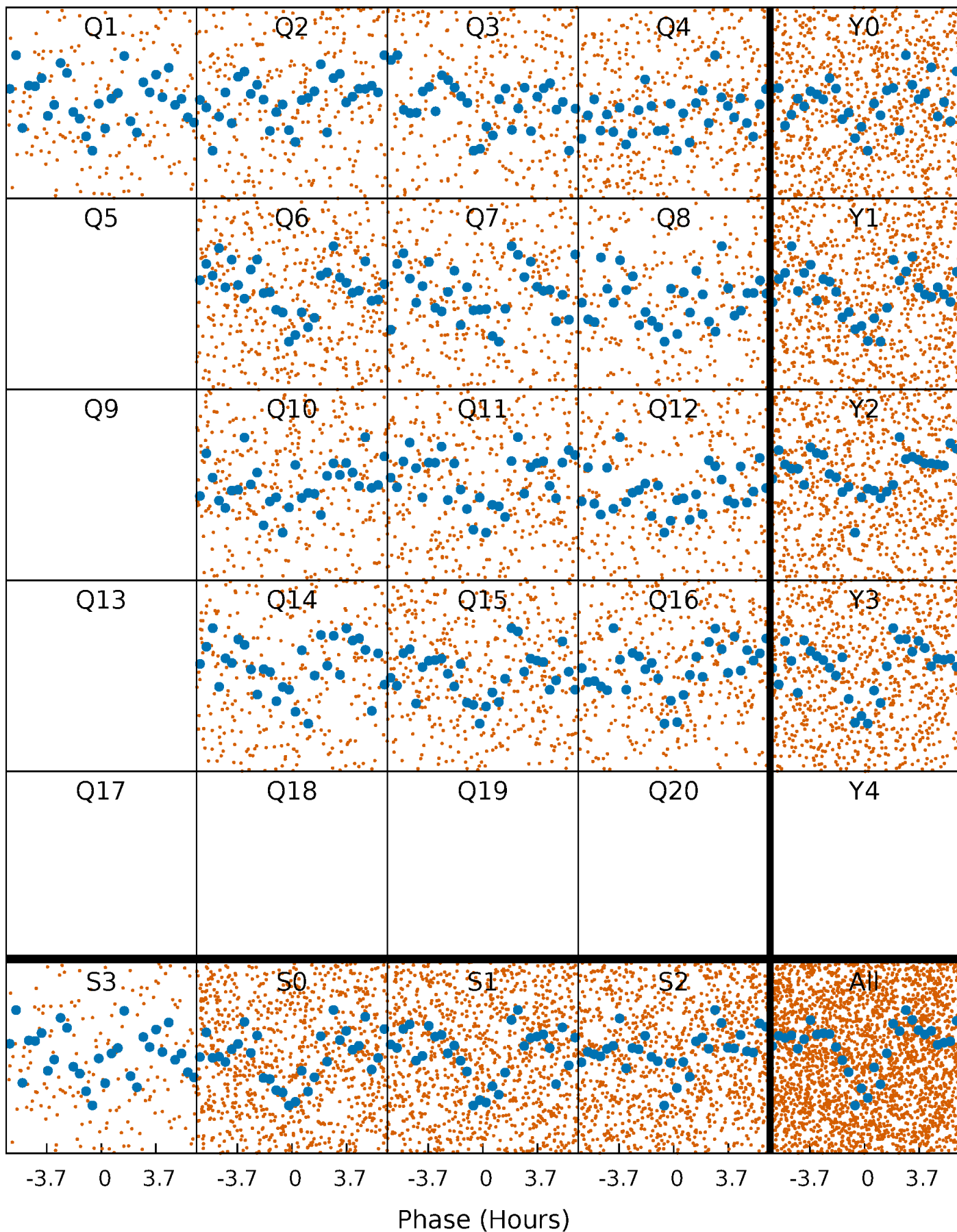


Non-Whitened Vs. Whitened Light Curve



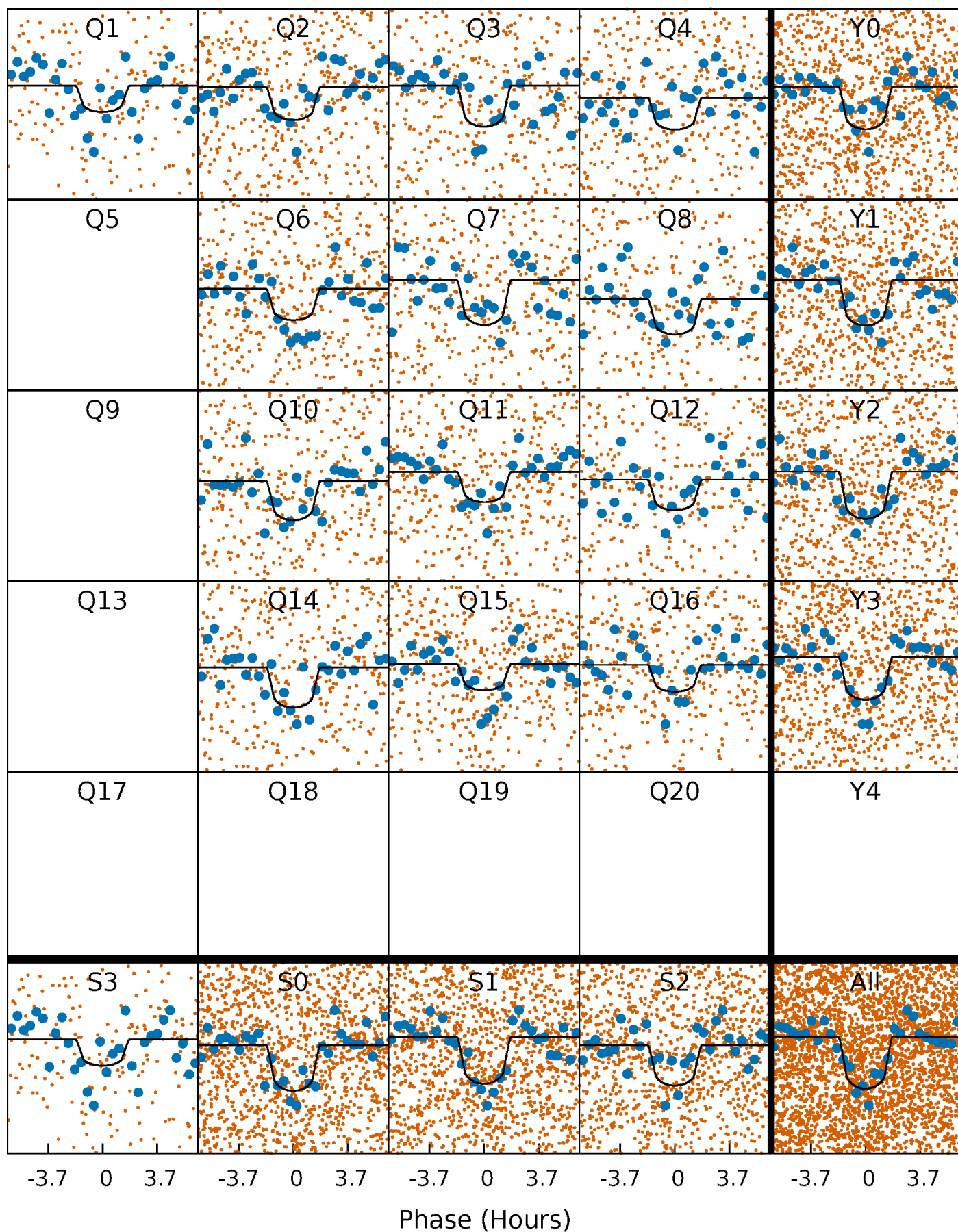
PDC Quarter-Phased Transit Curves

TCE 006021193-03 P= 3.614602 Days $T_0=134.695901$ (BKJD)



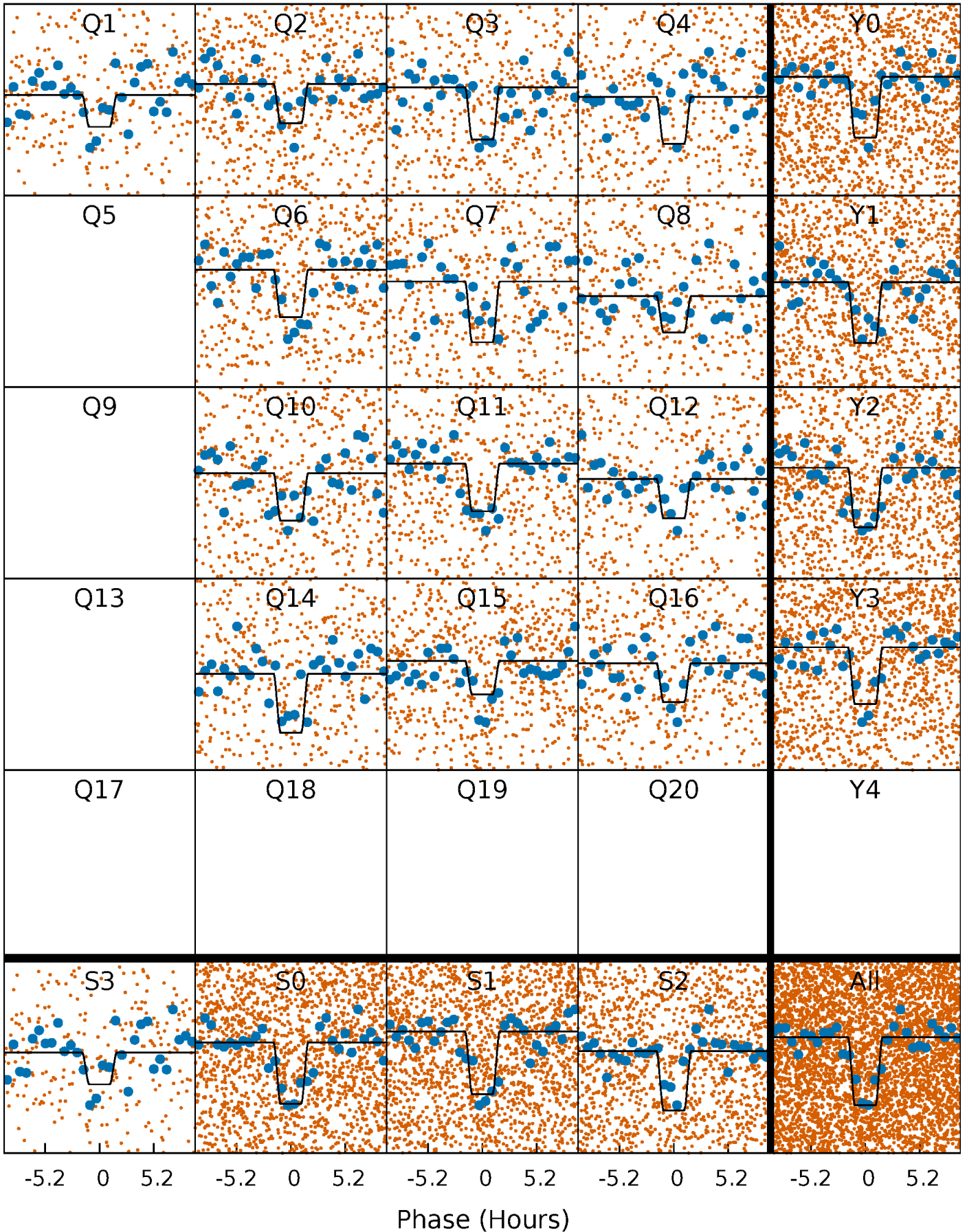
DV Quarter-Phased Transit Curves

TCE 006021193-03 P= 3.614602 Days $T_0=134.695901$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

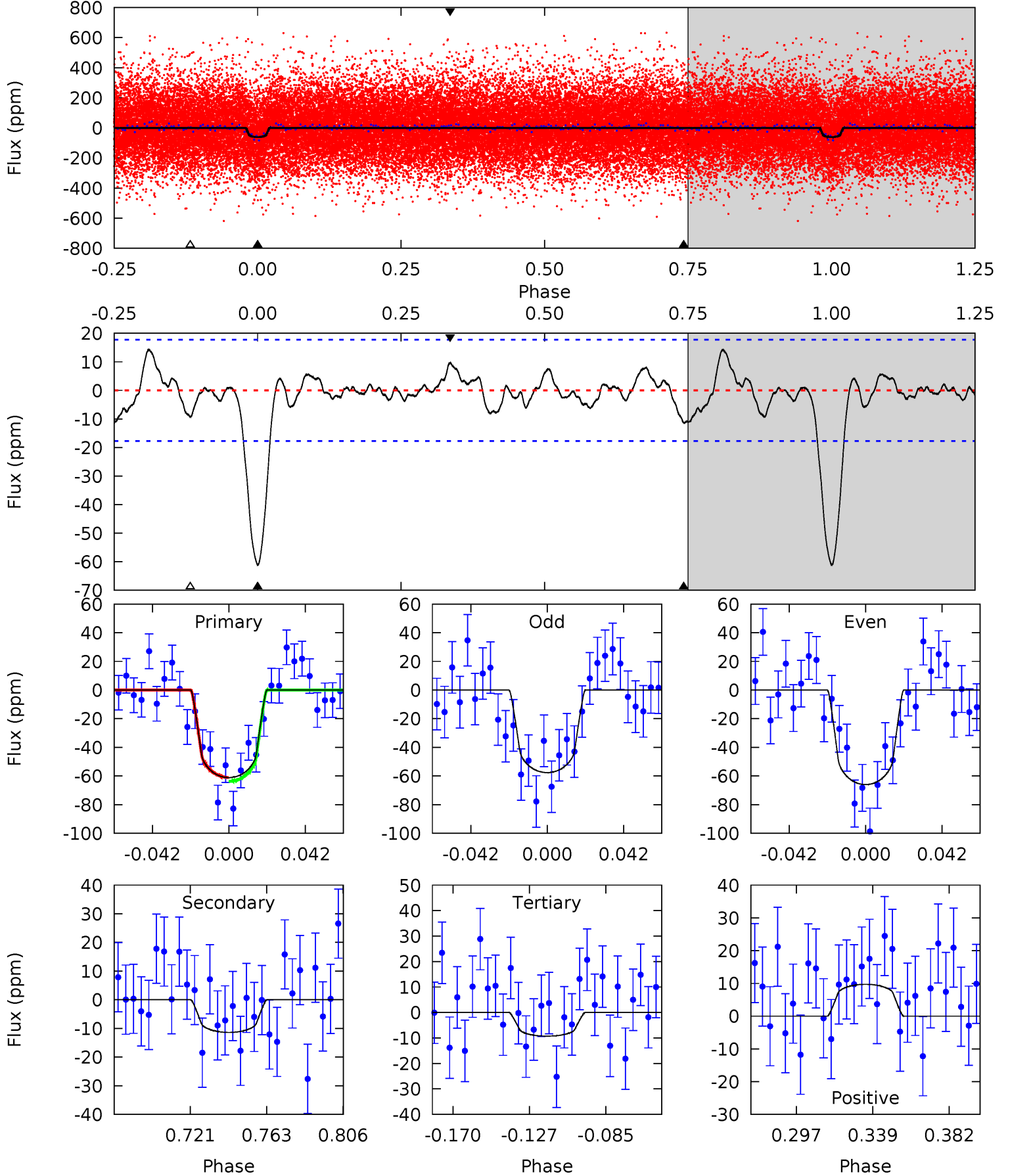
TCE 006021193-03 P= 3.614613 Days $T_0=134.688713$ (BKJD)



DV Model-Shift Uniqueness Test

006021193-03, P = 3.614602 Days, E = 131.081299 Days

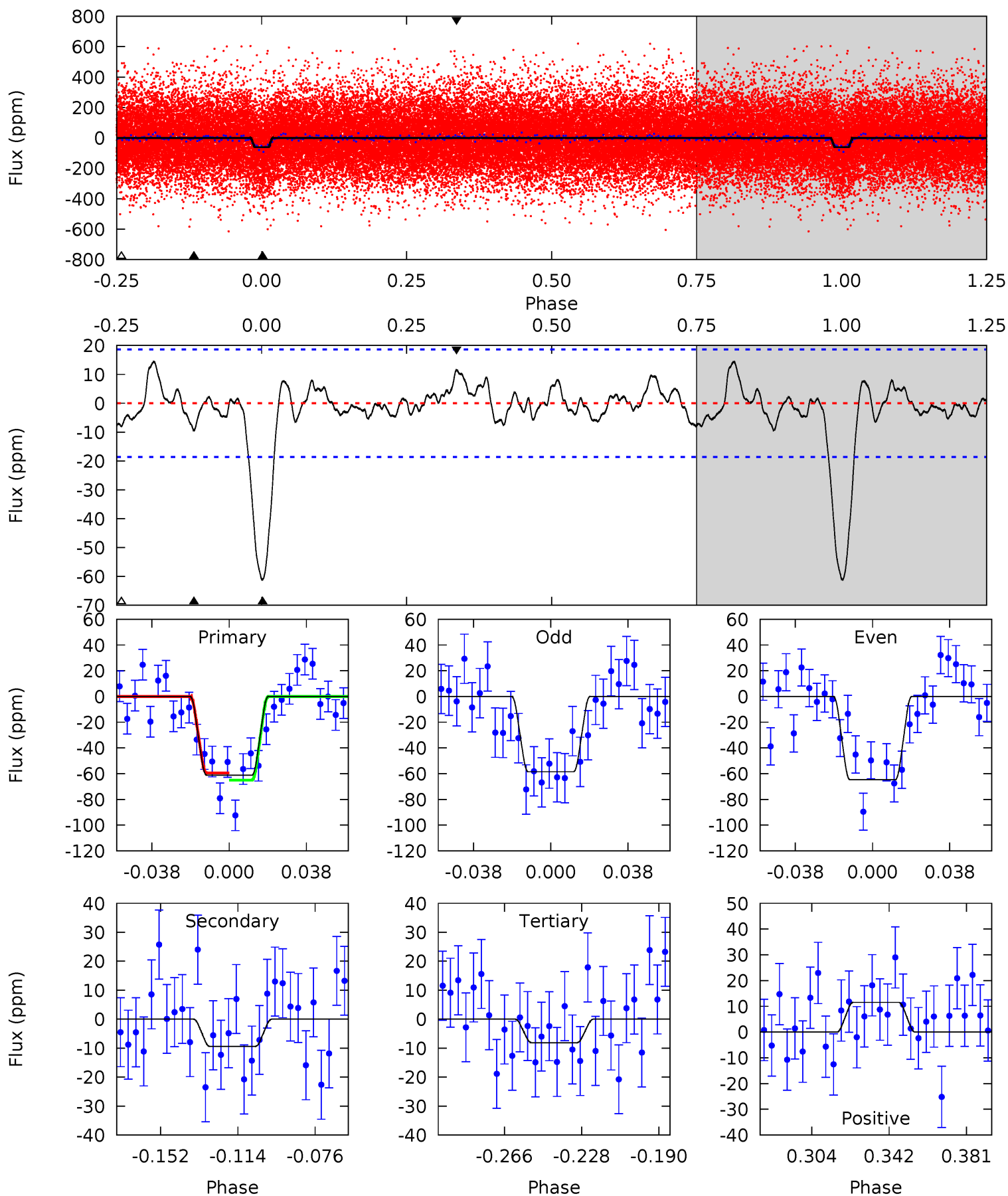
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.3	3.04	2.48	2.59	4.74	2.03	1.11	13.8	13.7	0.56	0.45	1.12	1.04	0.19	0.36



Alt Model-Shift Uniqueness Test

006021193-03, P = 3.614613 Days, E = 131.074100 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.6	2.41	2.07	2.95	4.76	2.07	1.17	13.6	12.7	0.33	-0.54	0.80	1.08	0.19	0.73



Stellar Parameters For KIC 006021193

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5711^{+101}_{-113}	$4.221^{+0.149}_{-0.122}$	$0.480^{+0.050}_{-0.150}$	$1.391^{+0.232}_{-0.258}$	$1.173^{+0.083}_{-0.114}$	$0.614^{+0.435}_{-0.197}$
	+2%/-2%	+4%/-3%	+10%/-31%	+17%/-19%	+7%/-10%	+71%/-32%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 006021193-03 / KOI 2148.03

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-11 ± 4	$1.30^{+0.69}_{-0.64}$	1881^{+94}_{-96}	3866^{+1211}_{-576}	$8.487^{+25.455}_{-5.235}$
Alt.	-9 ± 4	$1.27^{+0.70}_{-0.58}$	1882^{+95}_{-95}	3766^{+1070}_{-594}	$7.351^{+20.280}_{-4.754}$

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

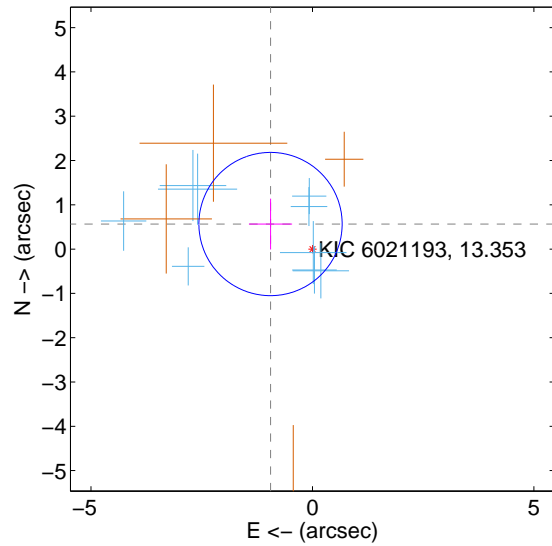
Supplemental centroid analysis for 006021193-03. Kepler magnitude: 13.35. Transit SNR 11.77

There are 9 quarters with good PRF difference image offsets

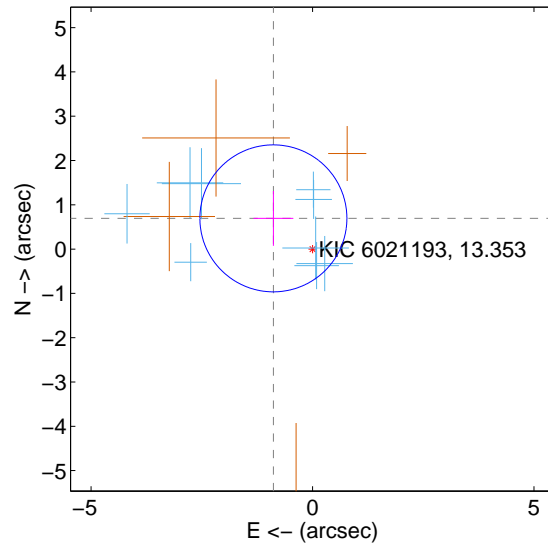
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.102 ± 0.539	2.05	0.946 ± 0.488	0.566 ± 0.574
PRF-fit source offset from KIC position	1.123 ± 0.553	2.03	0.883 ± 0.449	0.694 ± 0.619
photometric centroid source offset	1.00 ± 1.18	0.85	0.98 ± 1.19	-0.20 ± 1.10

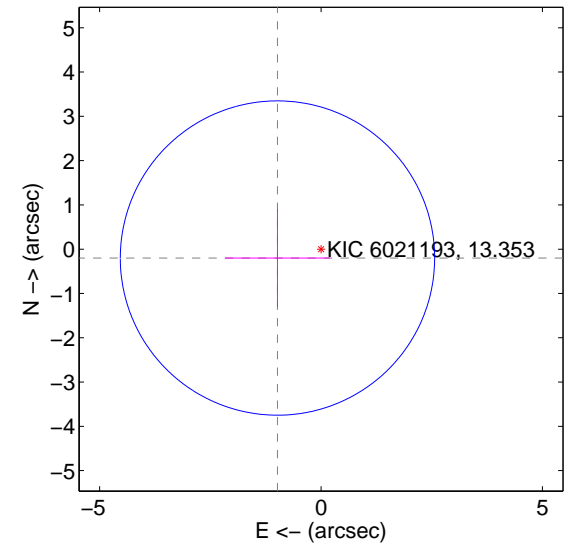
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

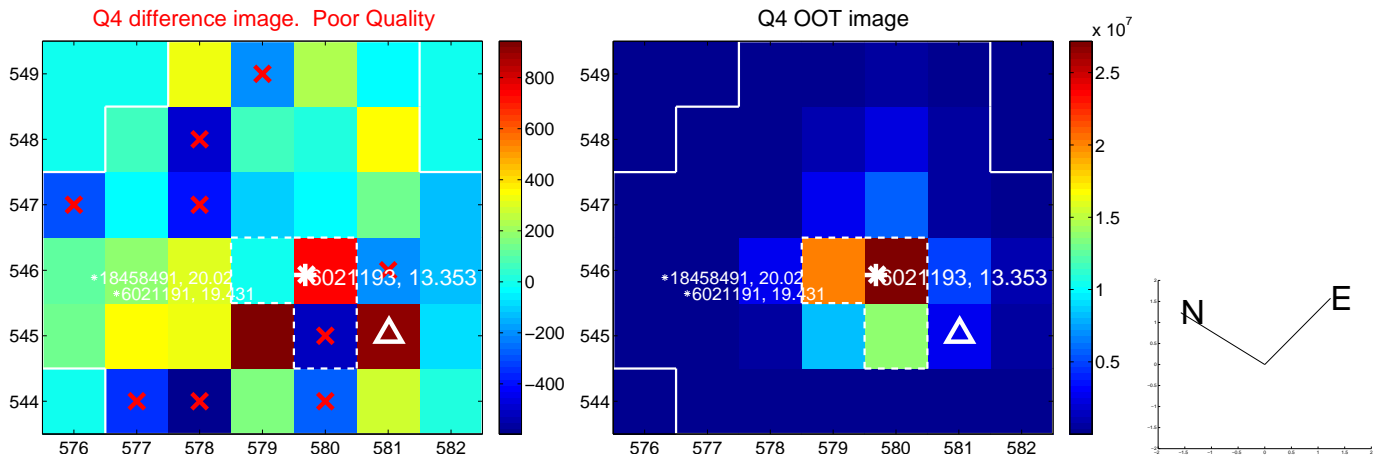
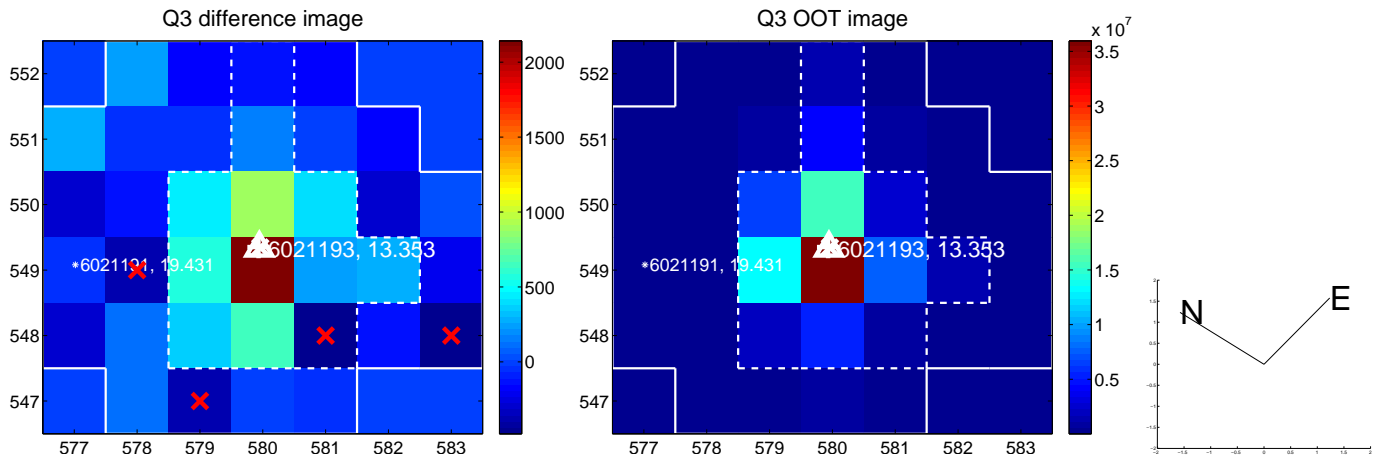
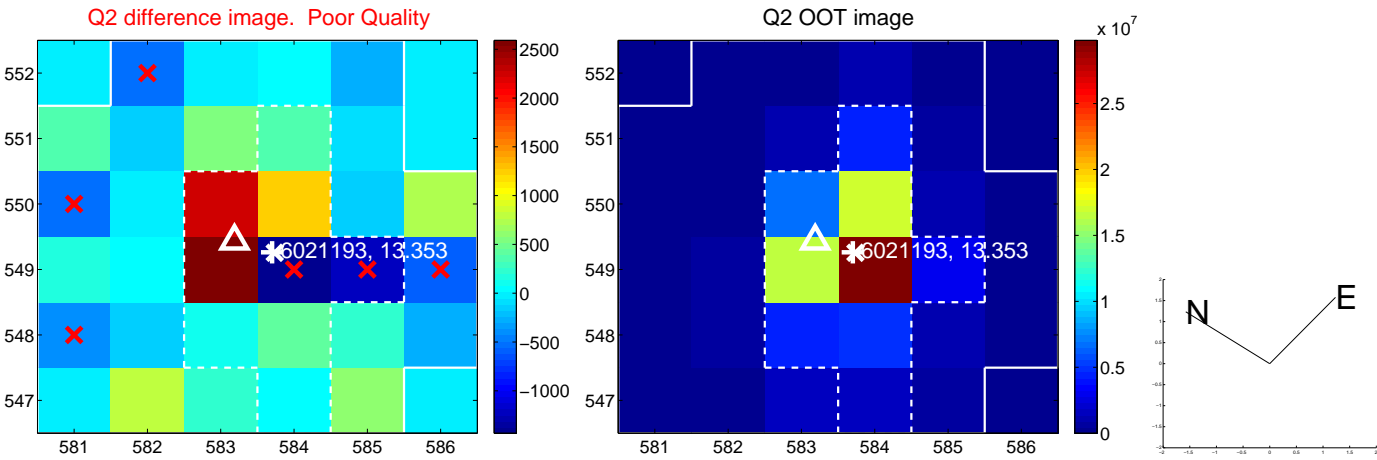
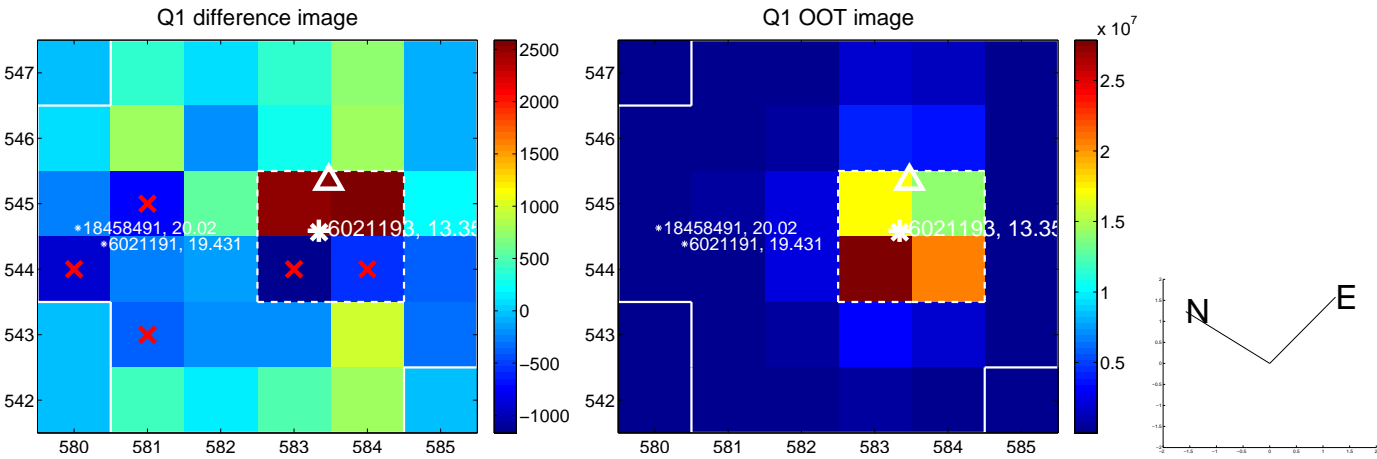


offset from photometric centroids

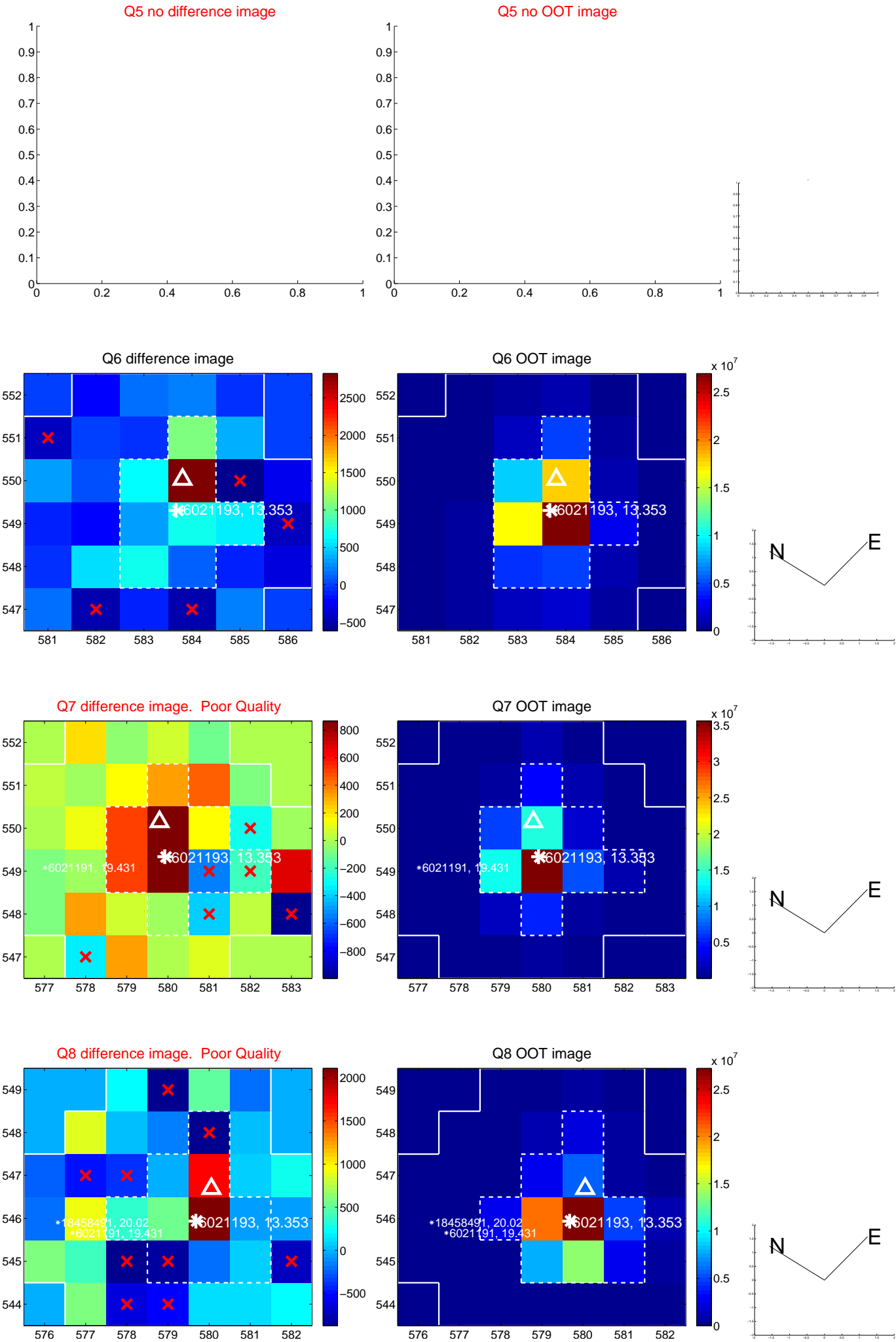


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

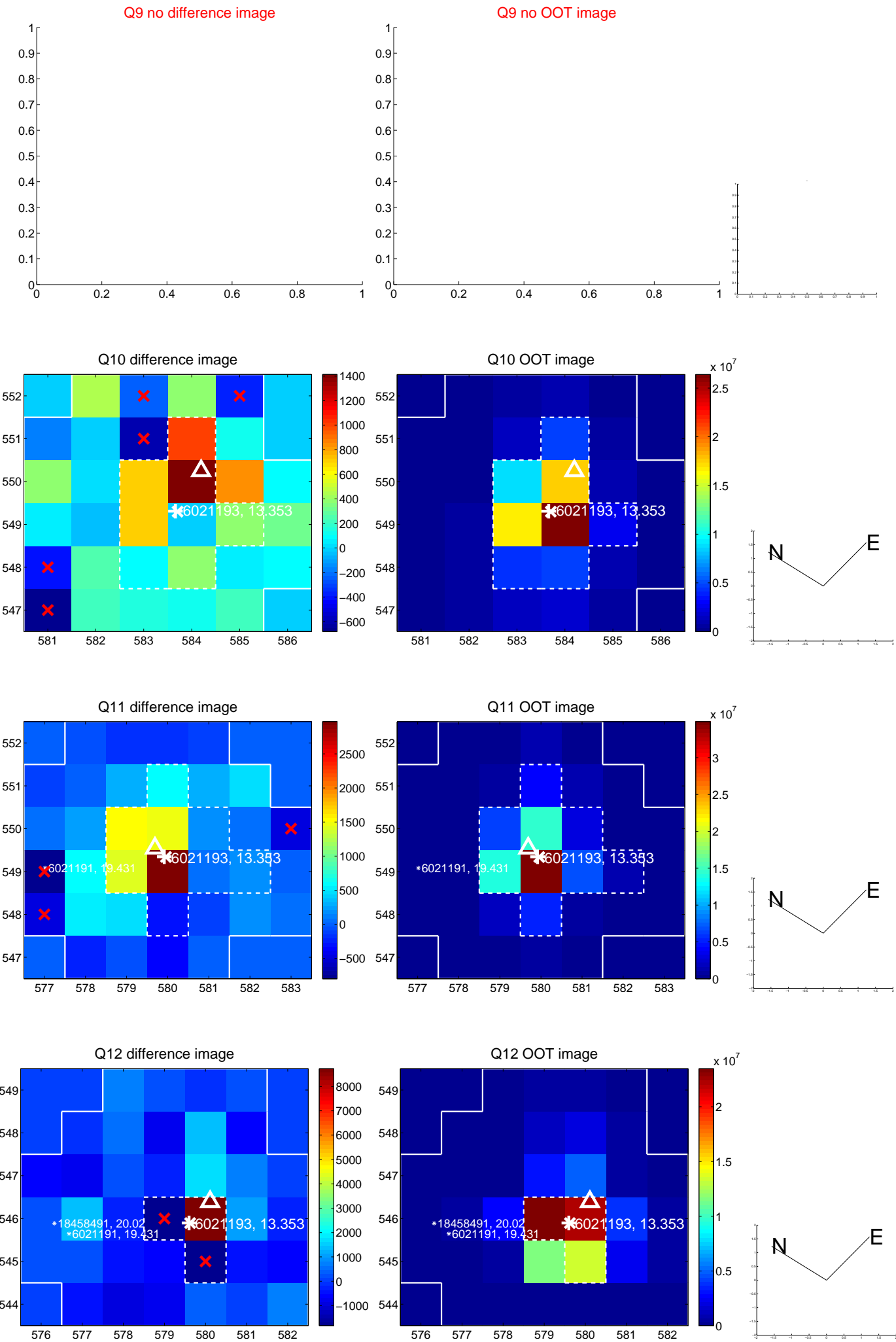
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



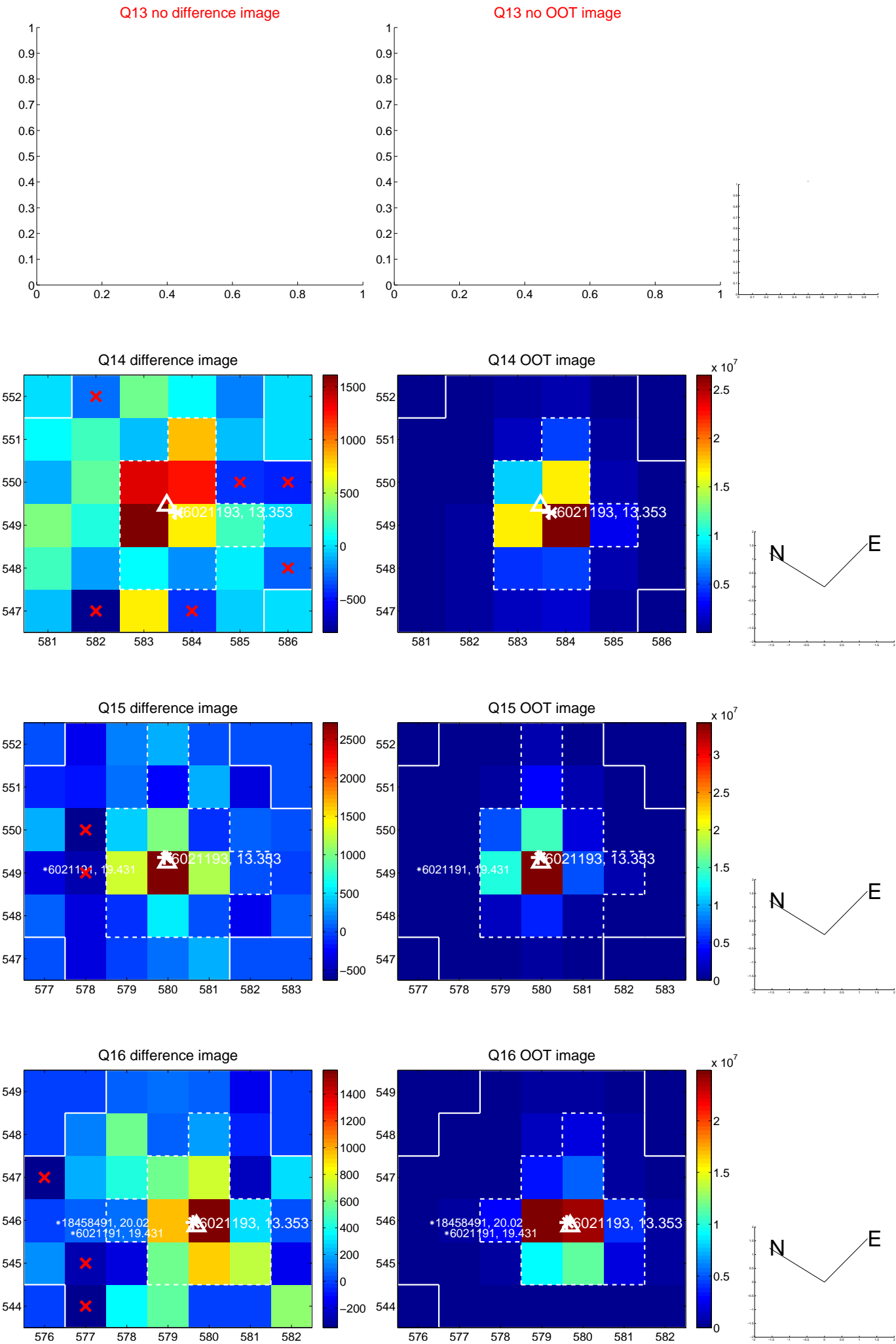
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



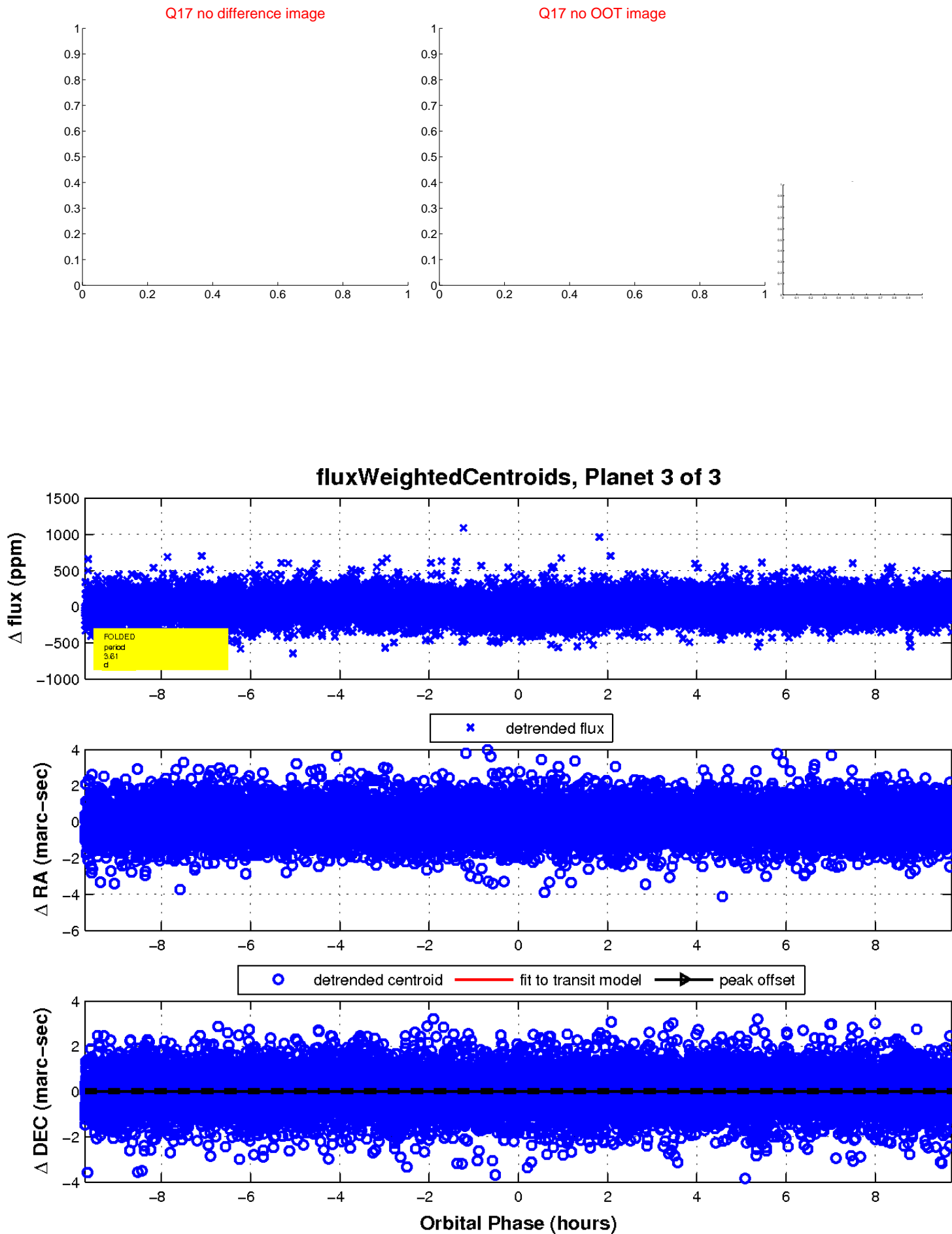
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

