

KIC 008906676

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})
008906676-01	OBS	7108.01	8.209514	134.063214	141186.3	4.152	17207.6	16074.4	2.11	6258	117.54	836.64
008906676-02	OBS	No	4.104758	134.065097	15057.8	4.023	1988.4	1926.8	2.11	6258	45.59	2108.20
008906676-03	OBS	No	310.208686	393.333009	444.1	15.000	30.5	-1.0	2.11	6258	4.46	6.60

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008906676-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—MOD_ODDEVEN_ALT—DEEP_V_SHAPED—HAS_SEC_TCE
008906676-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
008906676-03	OBS	FP	0.00	1	0	0	0	LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS

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 008906676-01

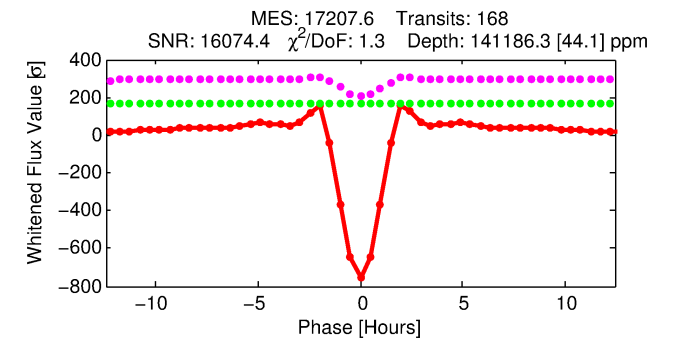
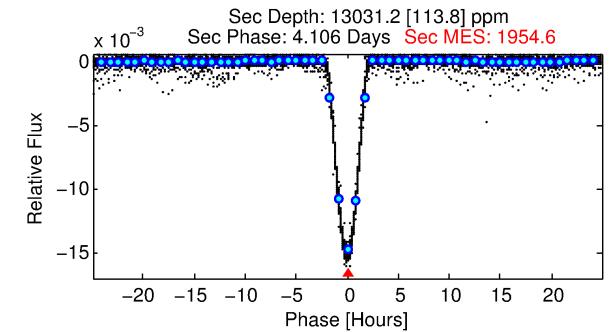
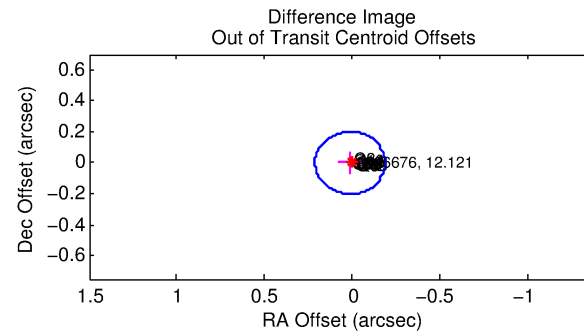
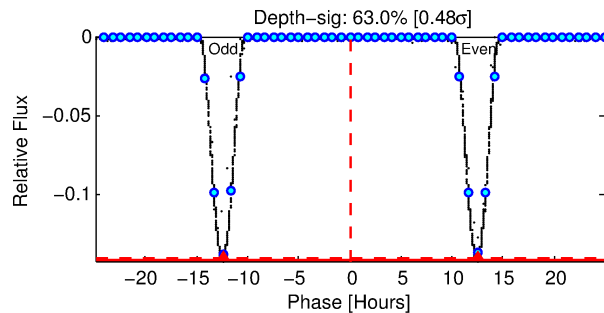
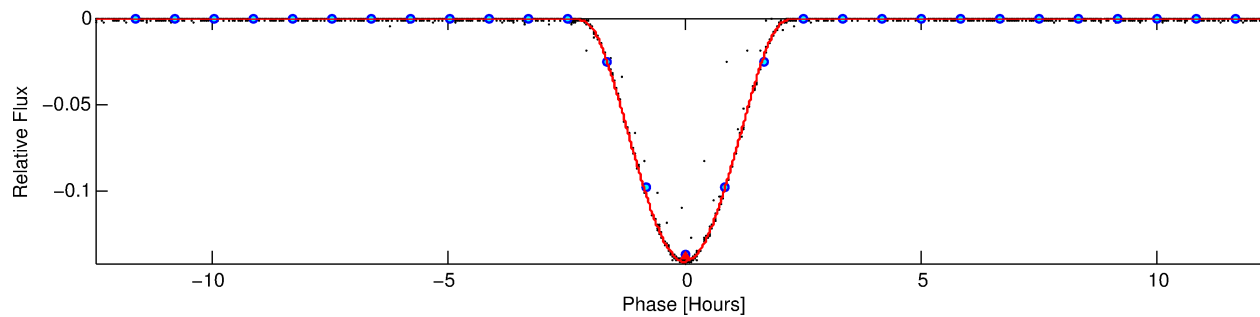
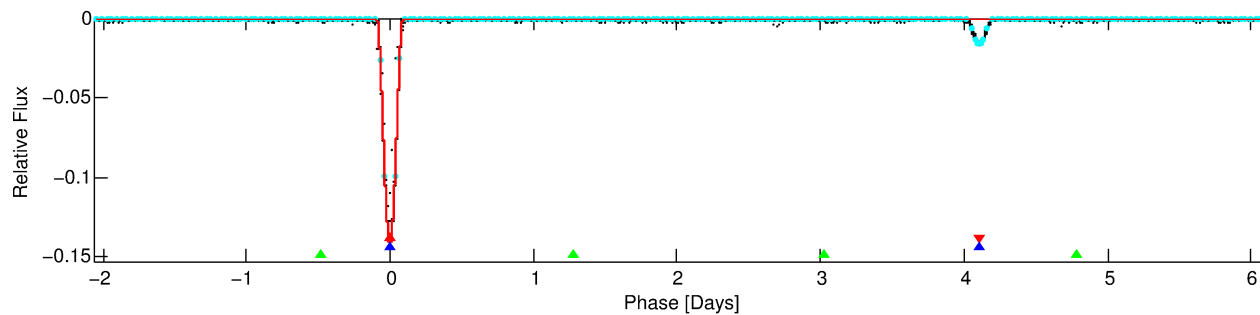
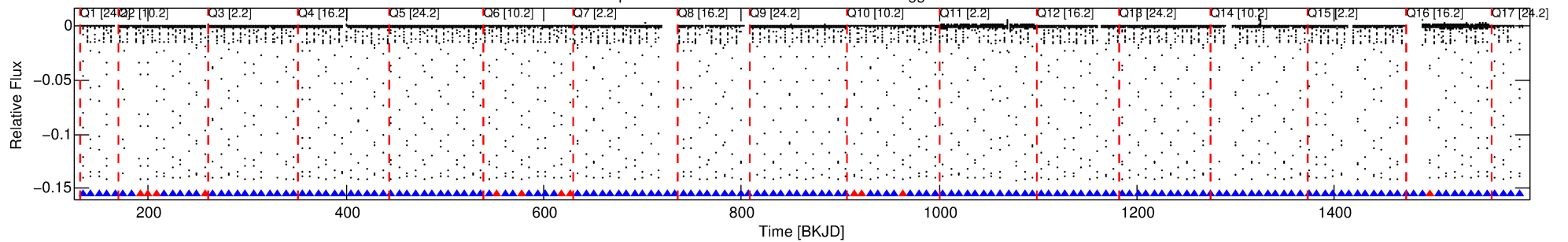
No Significant Match Found

DV One-Page Summary

KIC: 8906676 Candidate: 1 of 3 Period: 8.210 d

KOI: K07108.01 Corr: 0.998

Kp: 12.12 R*: 2.11 Rs Teff: 6258.0 K Logg: 3.88 Fe/H: -0.200



DV Fit Results:

Period = 8.20951 [0.00000] d
Epoch = 134.0632 [0.0000] BKJD
Rp/R* = 0.5102 [0.0139]
a/R* = 18.35 [0.04]
b = 0.90 [0.02]
Seff = 836.64 [658.88]
Teq = 1371 [270] K
Rp = 117.54 [52.33] Re
a = 0.0856 [0.0396] AU
Ag = 3.80 [2.94] [0.95σ]
Teffp = 2960 [124] K [5.35σ]

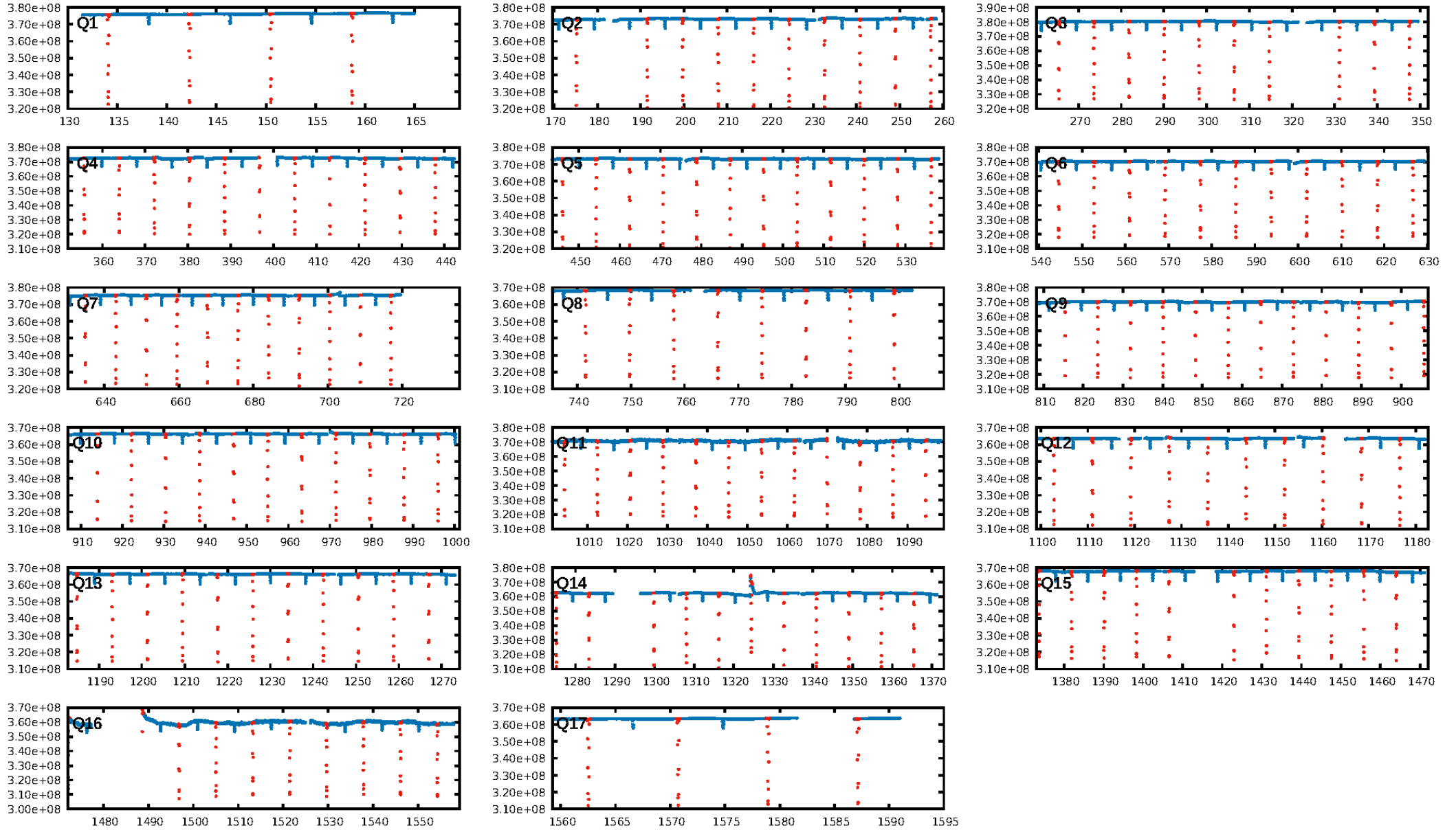
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [17.04σ]
LongPeriod-sig: 100.0% [465.68σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 0.93 [148/160]
GhostDiagnostic-chr: 8.493
Centroid-sig: 0.0%
Centroid-so: 0.050 arcsec [92.26σ]
OotOffset-rm: 0.013 arcsec [0.19σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.028 arcsec [0.39σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

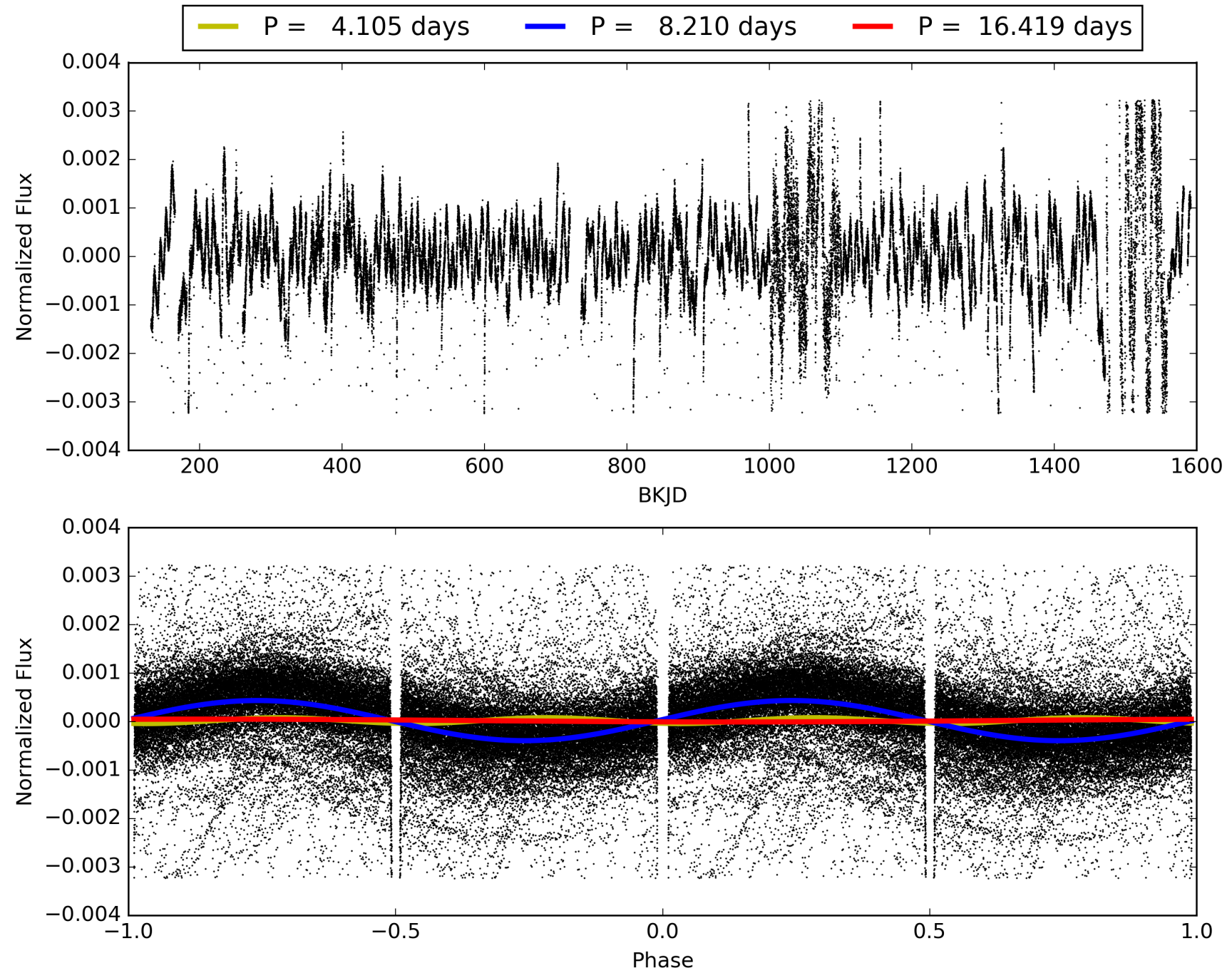
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 23:39:07 Z

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

TCE 008906676-01, PDC Light Curves

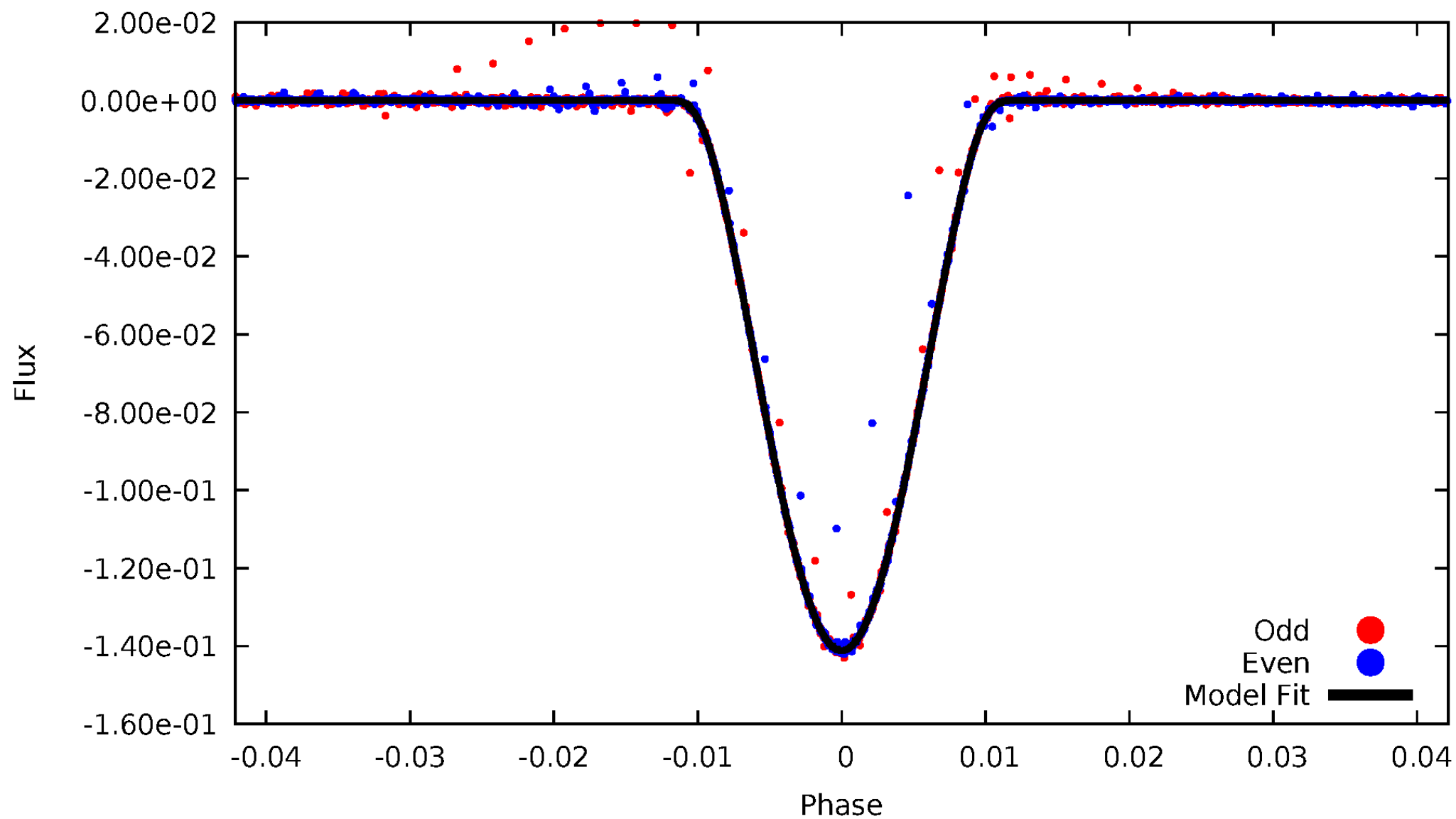


TCE 008906676-01



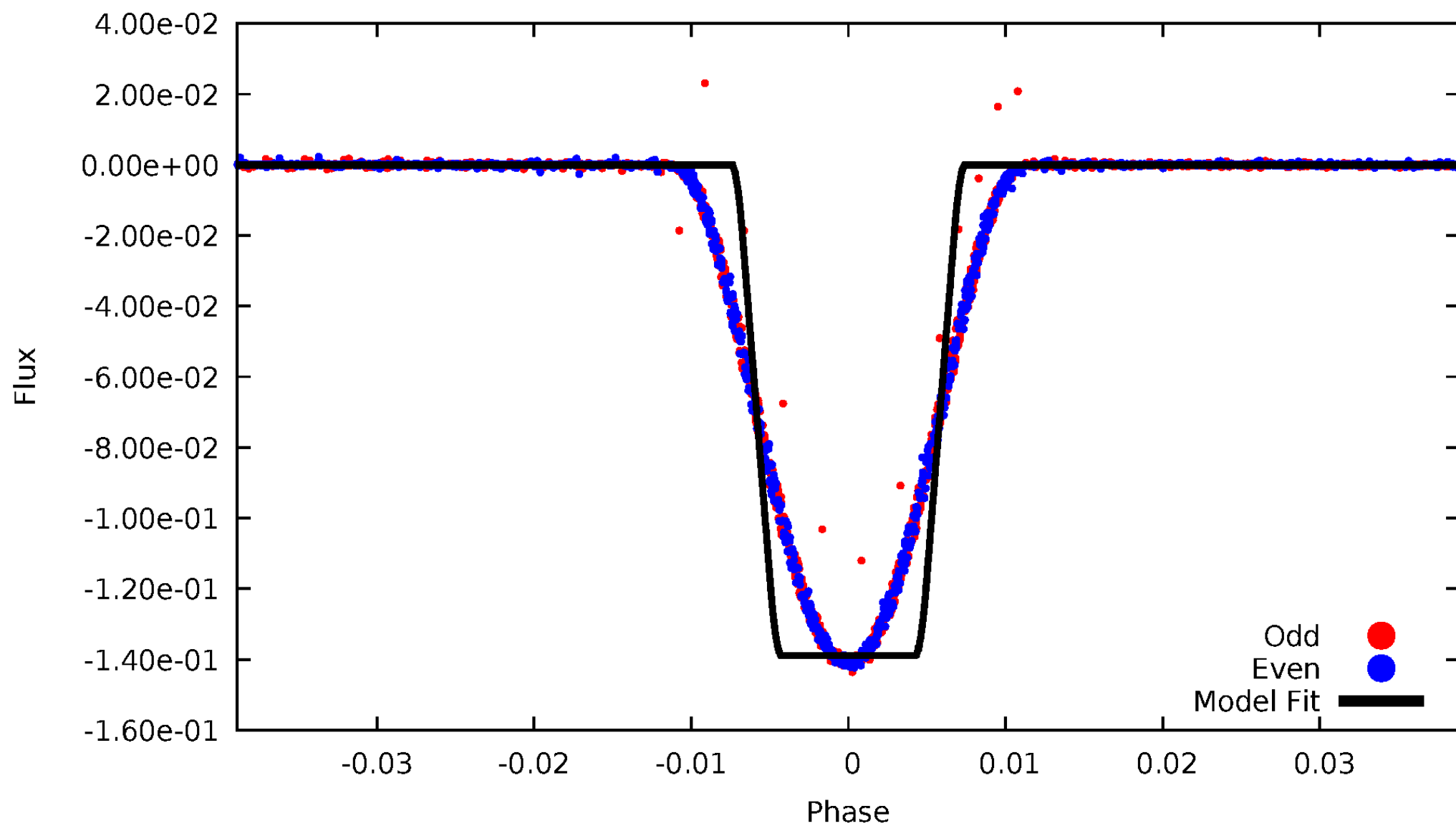
DV Odd/Even

TCE 008906676-01



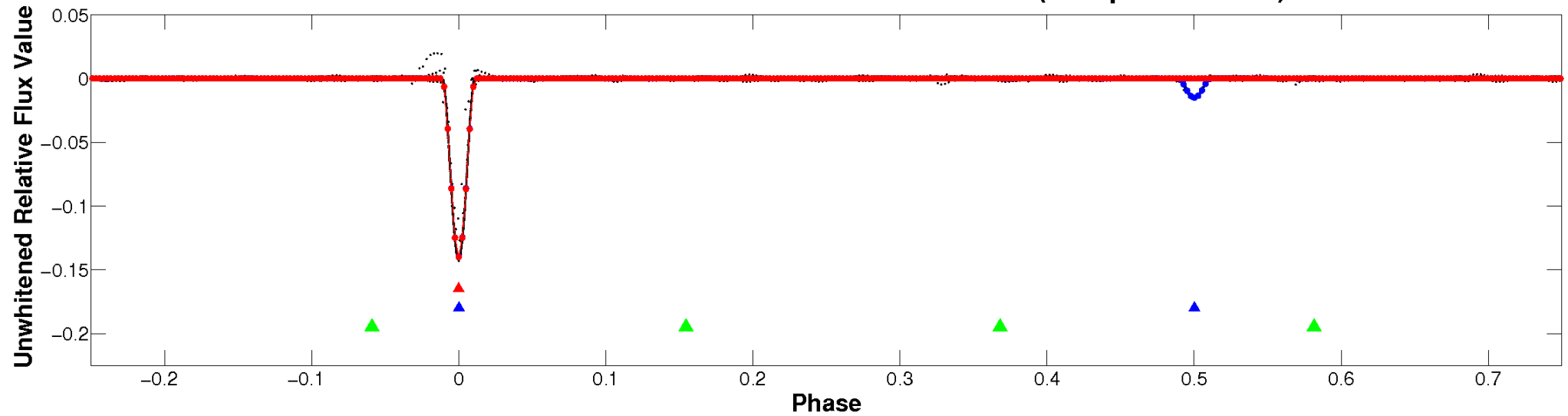
ALT Odd/Even

TCE 008906676-01

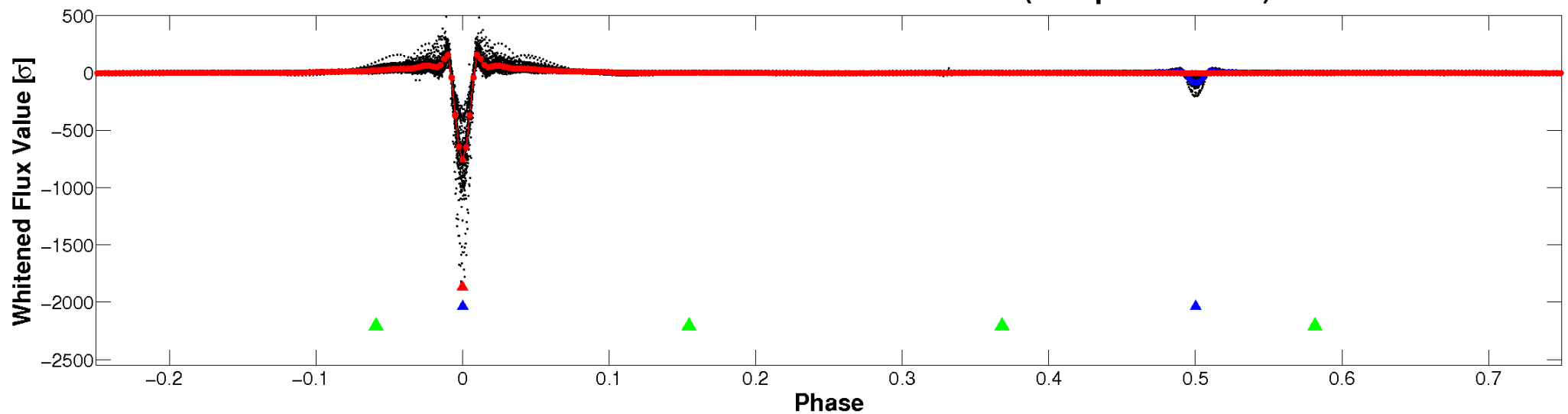


Non-Whitened Vs. Whitened Light Curve

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

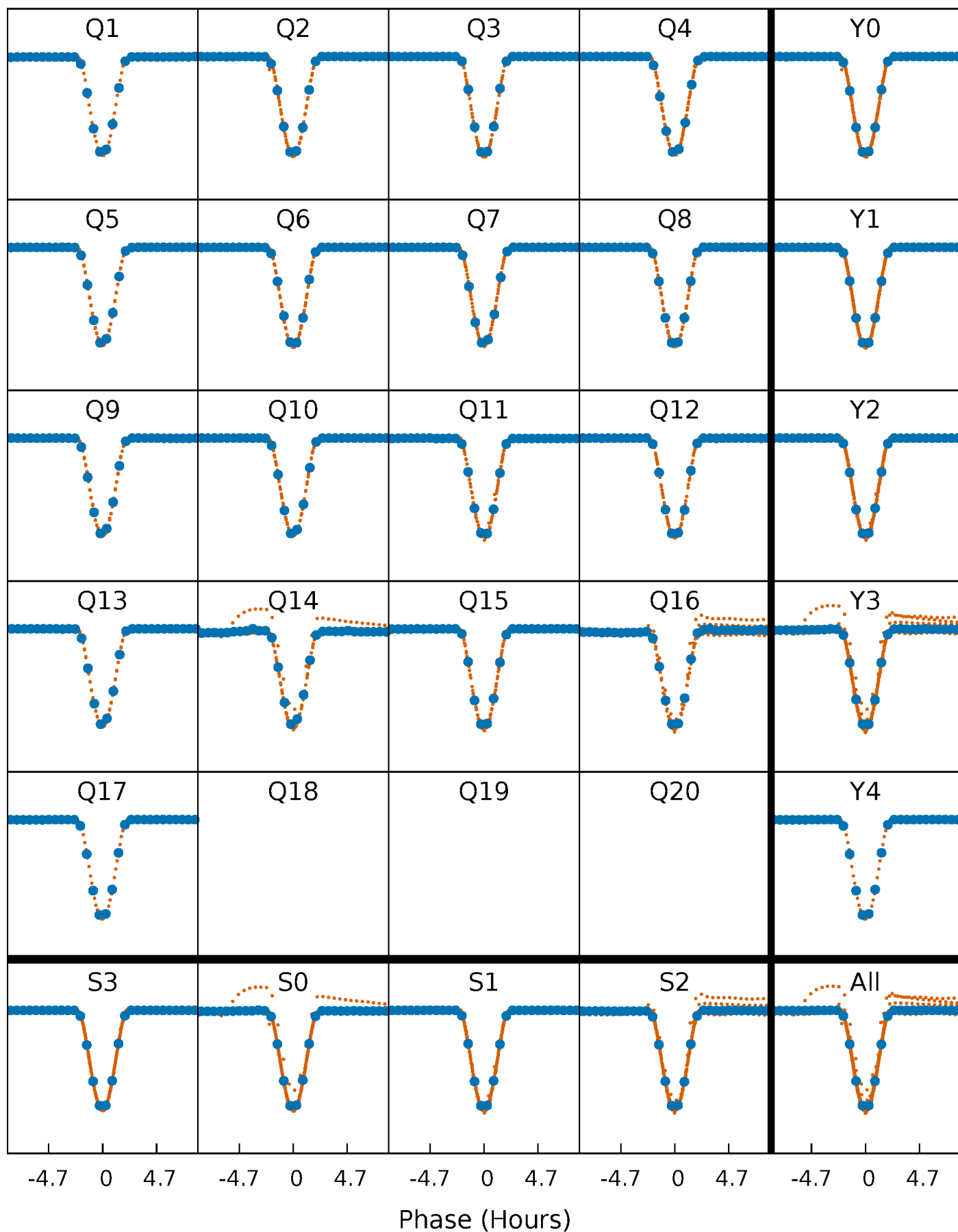


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



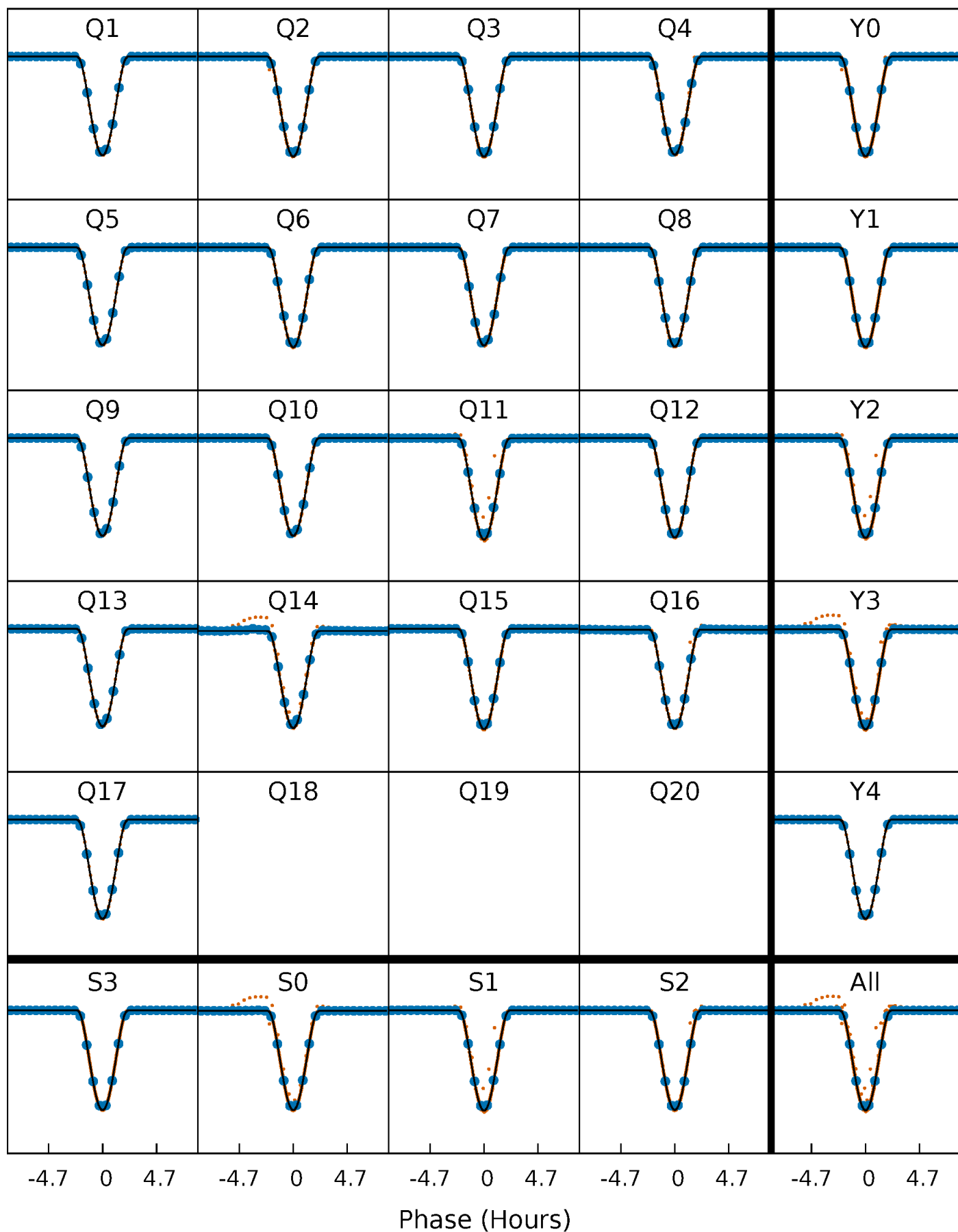
PDC Quarter-Phased Transit Curves

TCE 008906676-01 P= 8.209515 Days $T_0=134.063214$ (BKJD)



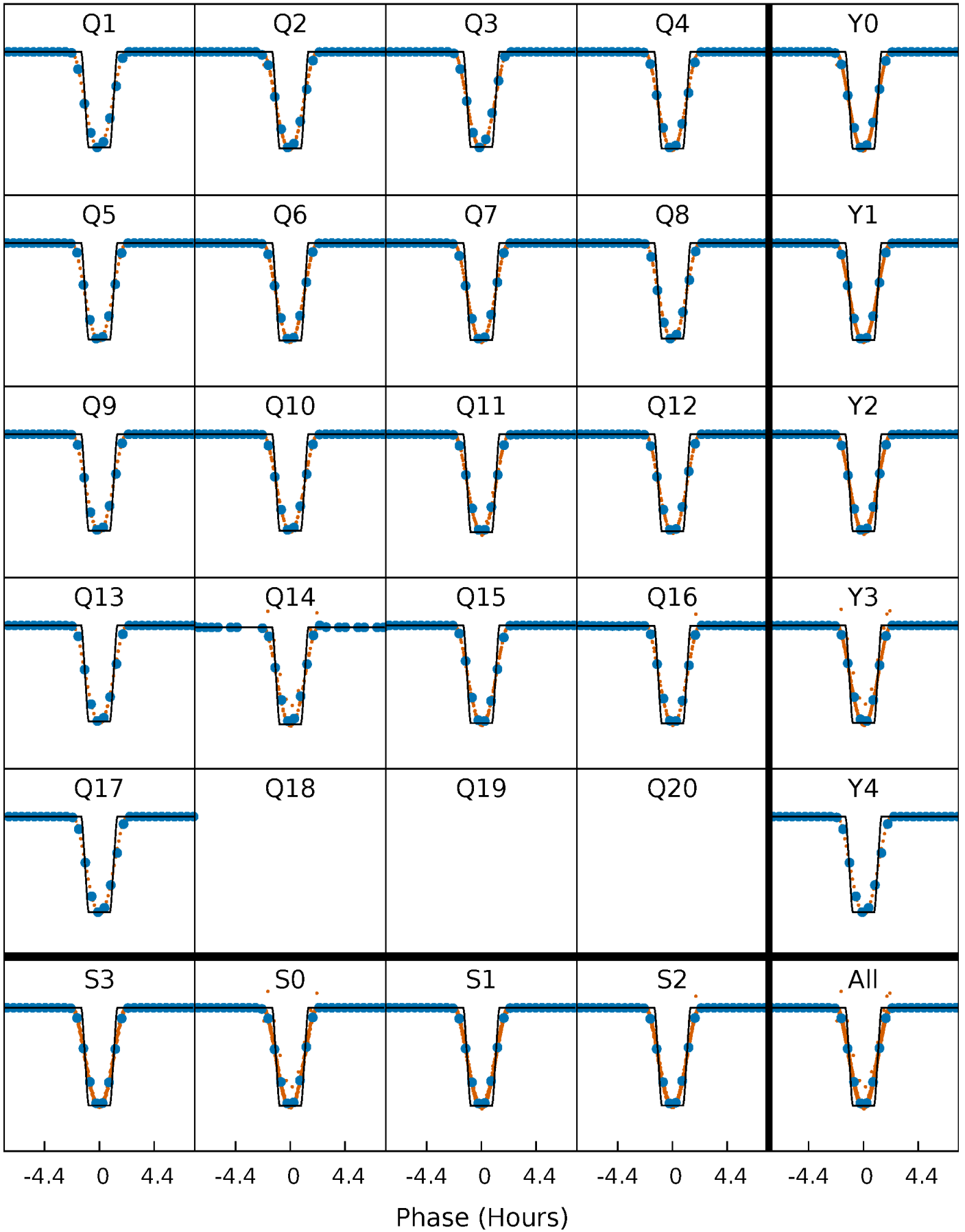
DV Quarter-Phased Transit Curves

TCE 008906676-01 P= 8.209515 Days $T_0=134.063214$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

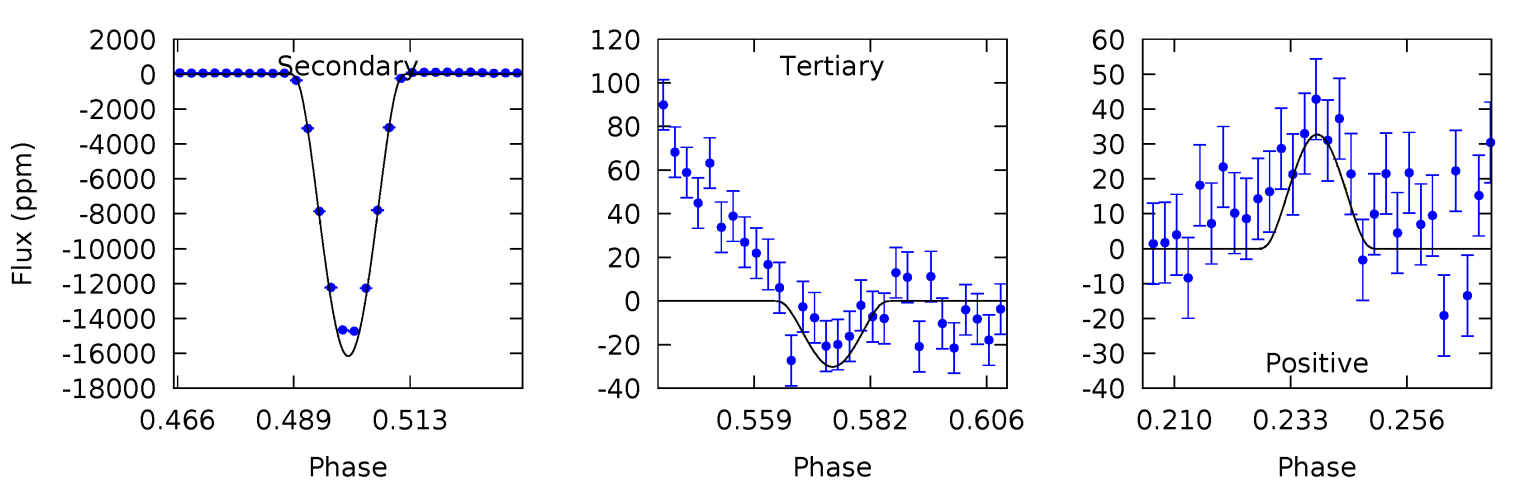
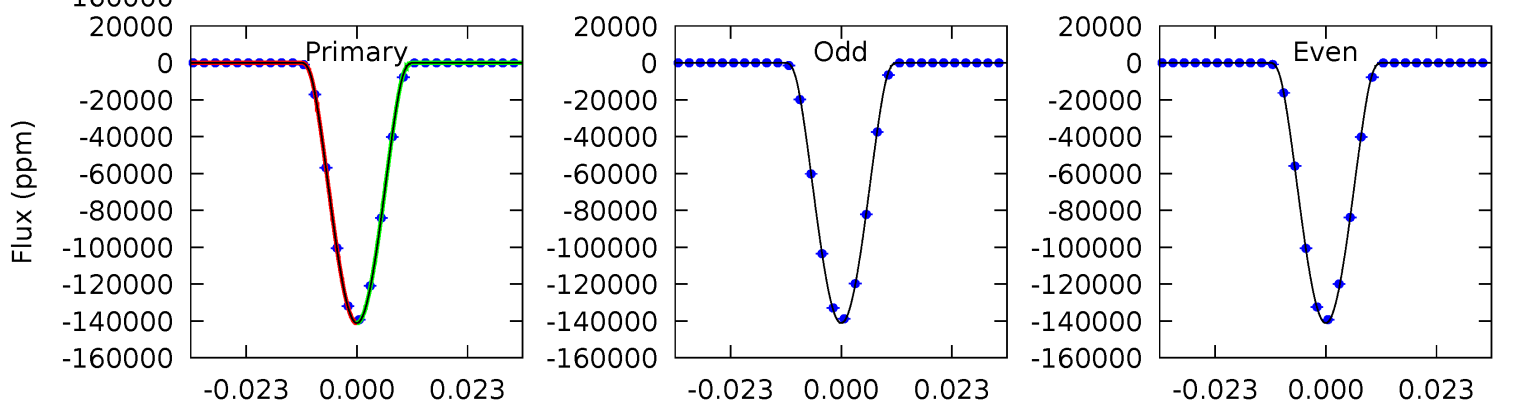
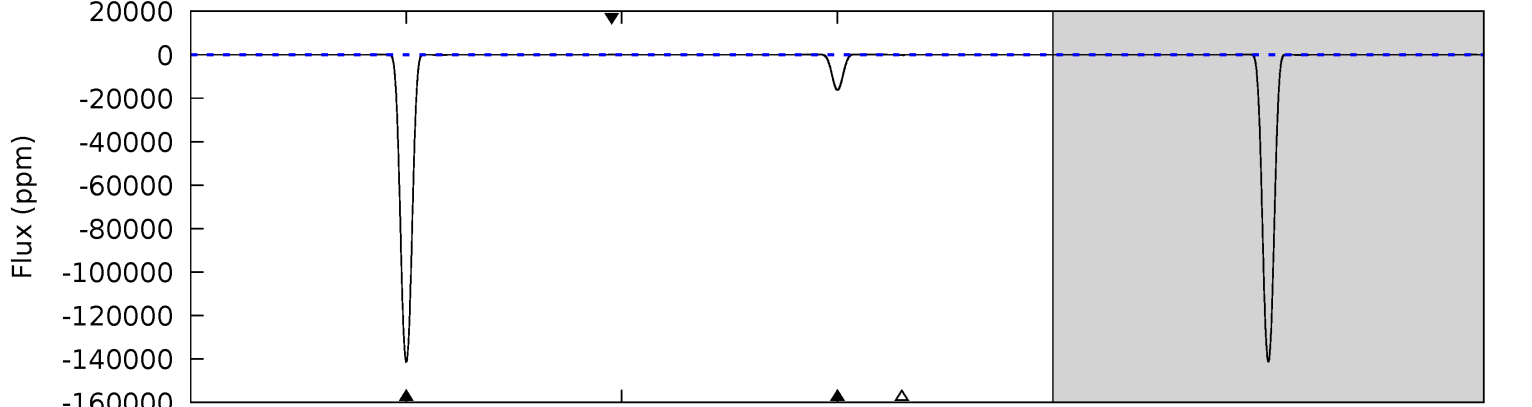
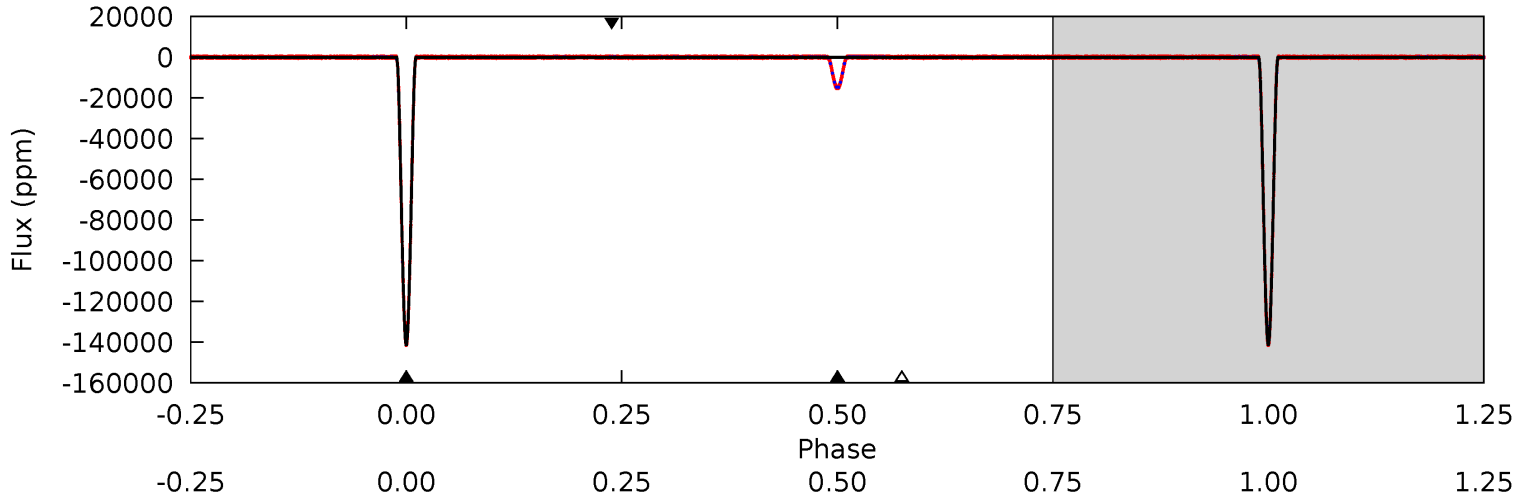
TCE 008906676-01 P= 8.209490 Days $T_0=134.065365$ (BKJD)



DV Model-Shift Uniqueness Test

008906676-01, P = 8.209515 Days, E = 125.853699 Days

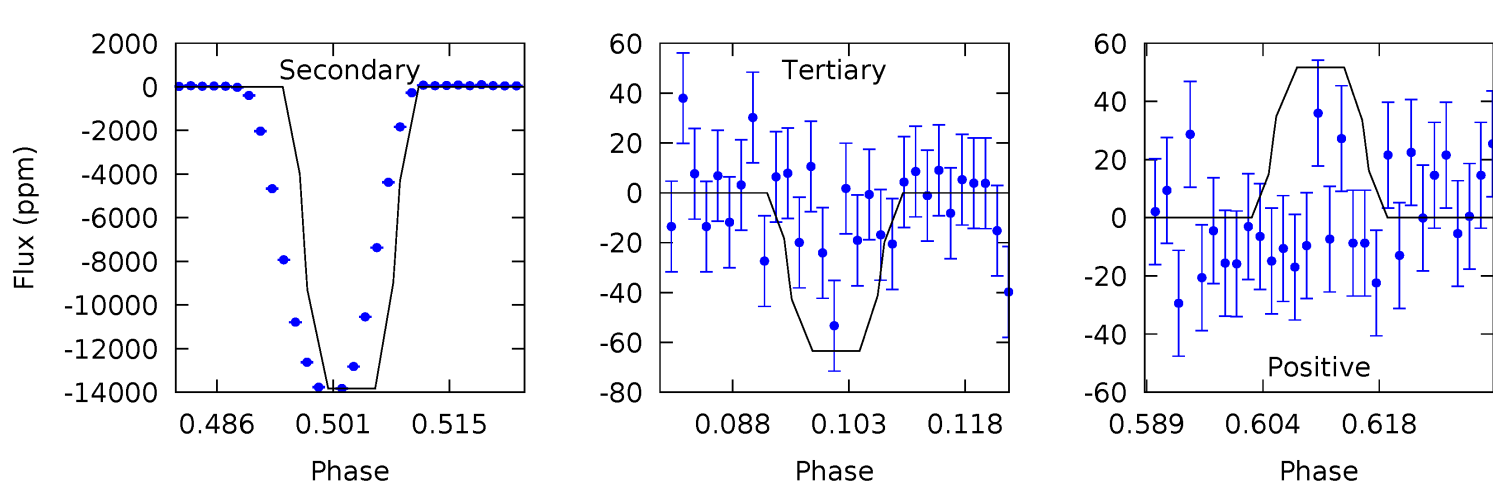
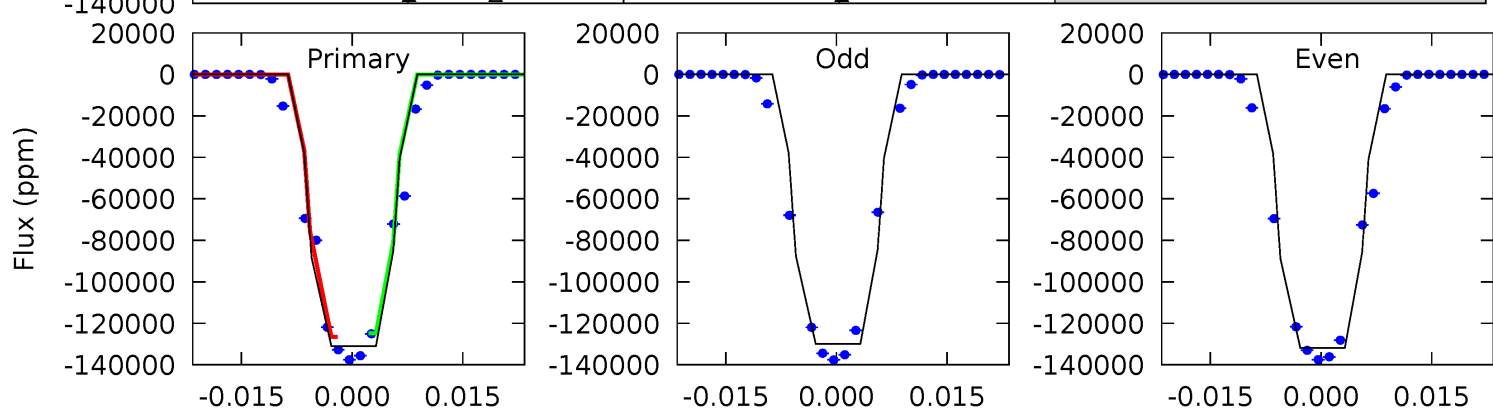
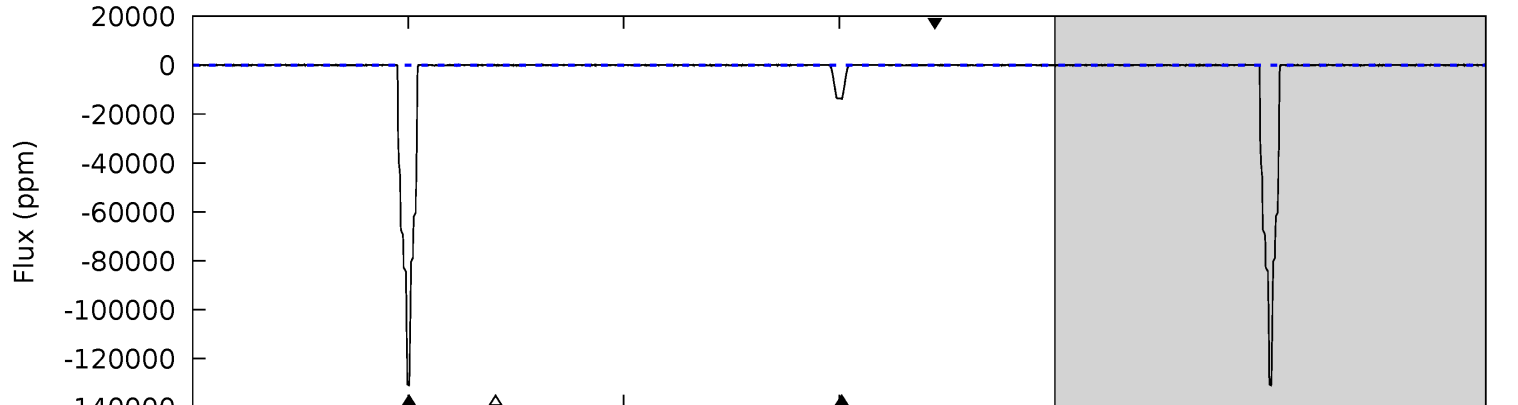
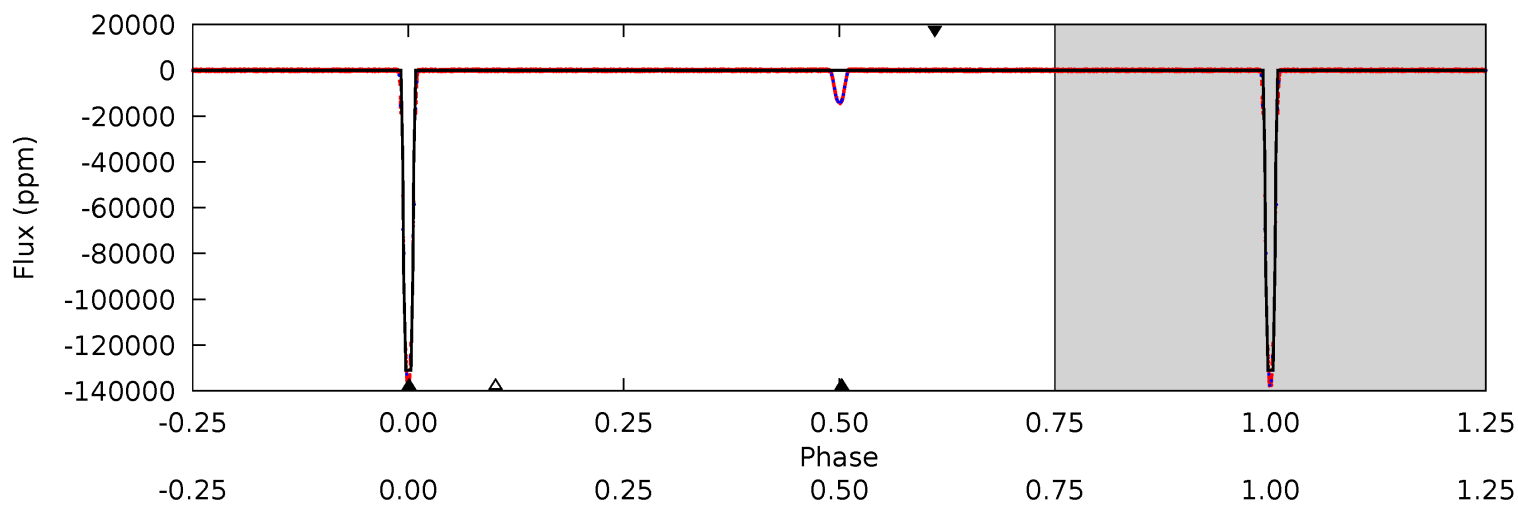
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
33310	3813	7.12	7.71	4.86	2.27	5.29	33303	33303	3806	3806	3.86	0.99	0.00	3.64



Alt Model-Shift Uniqueness Test

008906676-01, P = 8.209490 Days, E = 125.855875 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8591	907.2	4.17	3.39	4.95	2.44	1.29	8587	8588	903.1	903.8	60.7	1.00	0.00	0



Stellar Parameters For KIC 008906676

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6258^{+203}_{-248}	$3.882^{+0.464}_{-0.116}$	$-0.200^{+0.250}_{-0.300}$	$2.111^{+0.505}_{-0.938}$	$1.237^{+0.185}_{-0.255}$	$0.185^{+0.739}_{-0.076}$
	+3%/-4%	+12%/-3%	+125%/-150%	+24%/-44%	+15%/-21%	+399%/-41%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 008906676-01 / KOI 7108.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-16163 ± 4	$110.49^{+20.26}_{-26.64}$	1856^{+152}_{-234}	3562^{+84}_{-99}	$5.420^{+3.661}_{-1.376}$
Alt.	-13827 ± 15	$81.78^{+13.41}_{-19.68}$	1854^{+153}_{-216}	3862^{+96}_{-114}	$8.468^{+5.720}_{-1.995}$

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 $A_{obs} \gg 1.0$

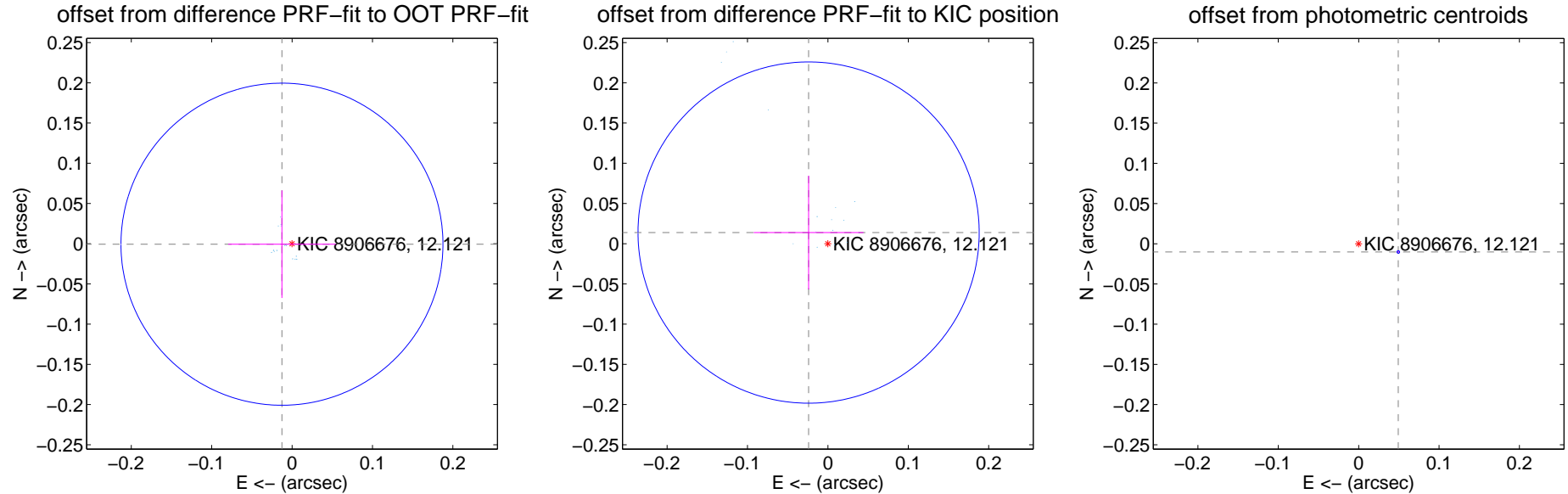
DV Centroid Data

Supplemental centroid analysis for 008906676-01. Kepler magnitude: 12.12. Transit SNR 16074.40

There are 17 quarters with good PRF difference image offsets

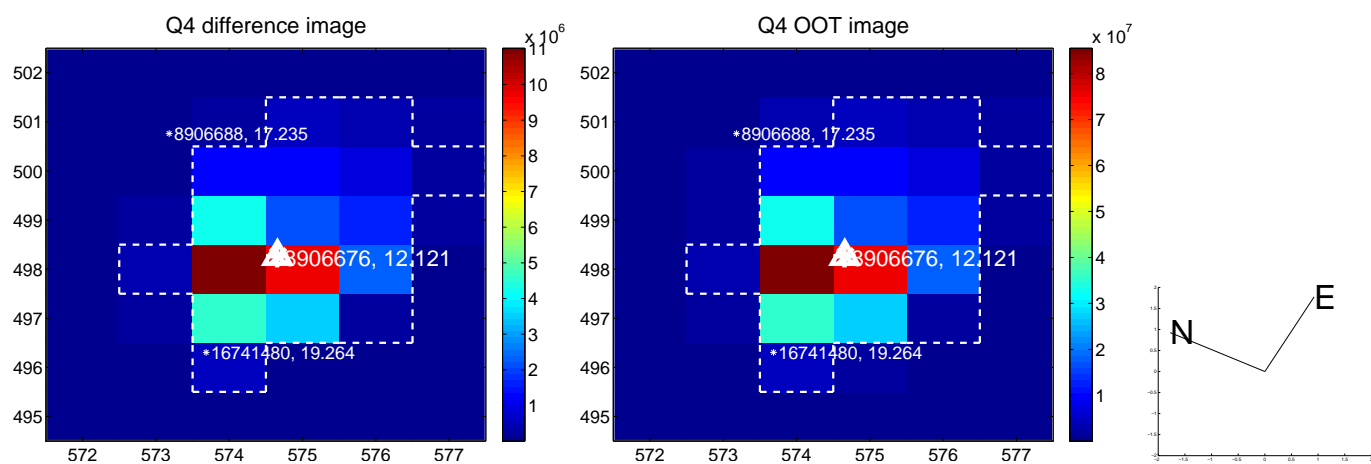
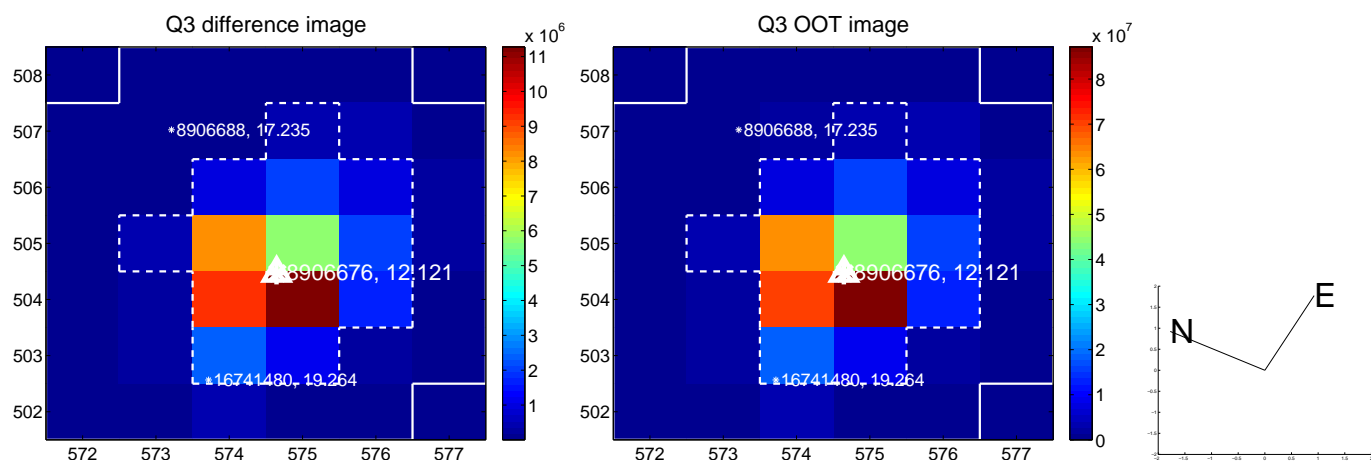
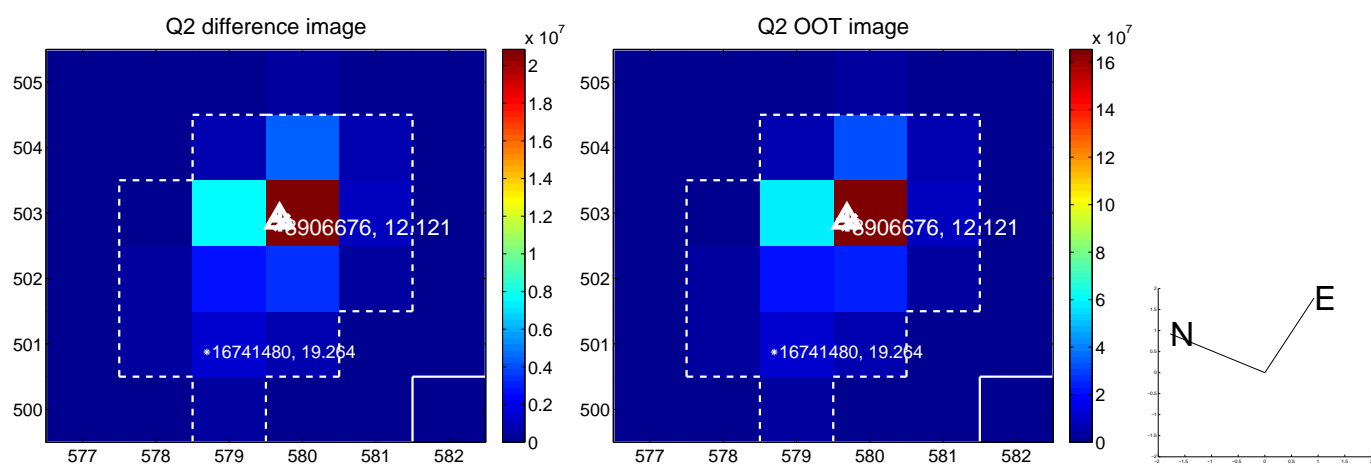
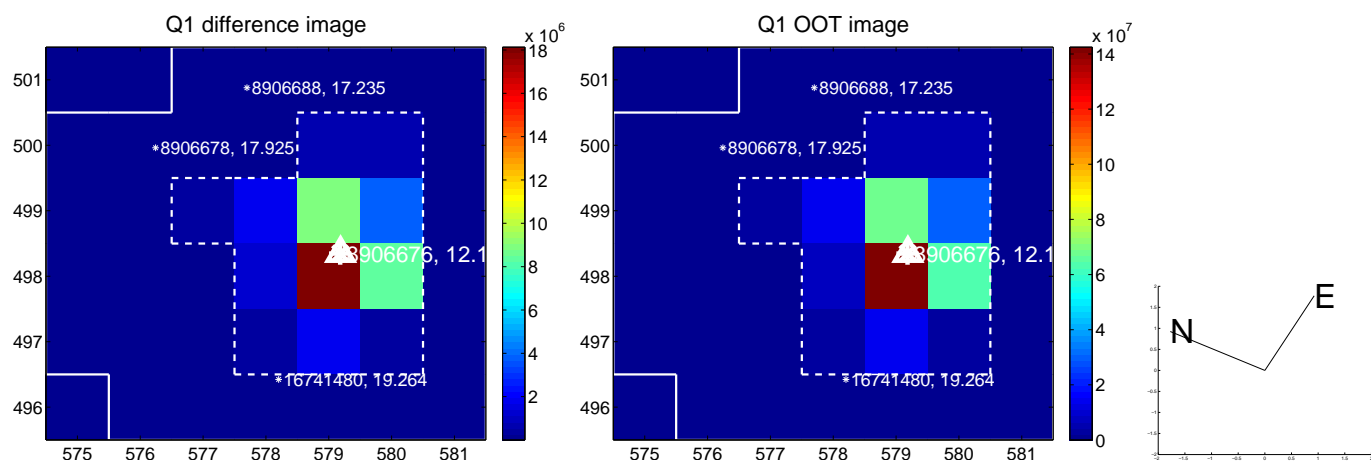
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.013 ± 0.067	0.19	0.013 ± 0.067	-0.001 ± 0.067
PRF-fit source offset from KIC position	0.028 ± 0.071	0.39	0.024 ± 0.068	0.014 ± 0.071
photometric centroid source offset	0.05 ± 0.00	92.26	-0.05 ± 0.00	-0.01 ± 0.00

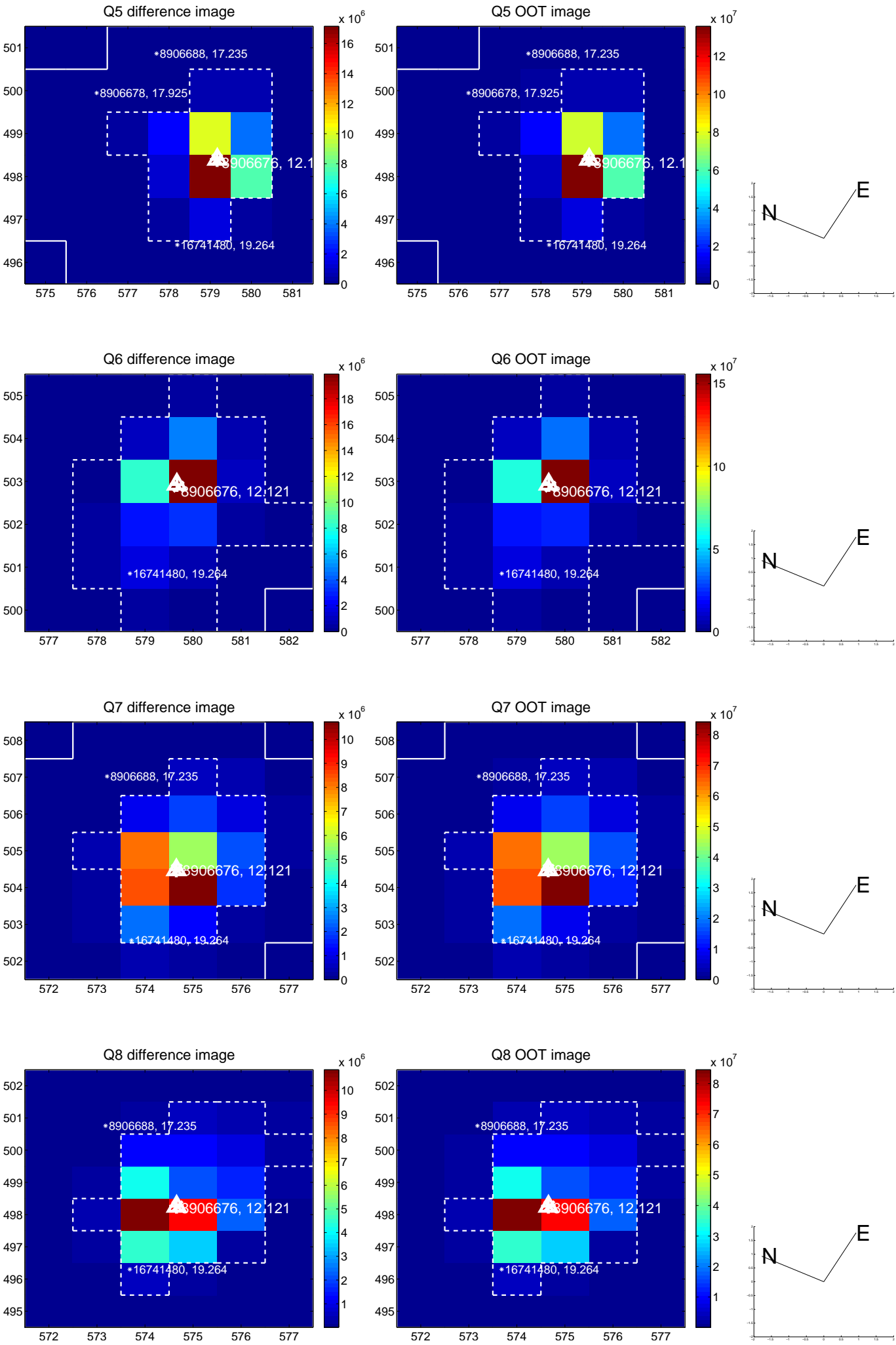


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

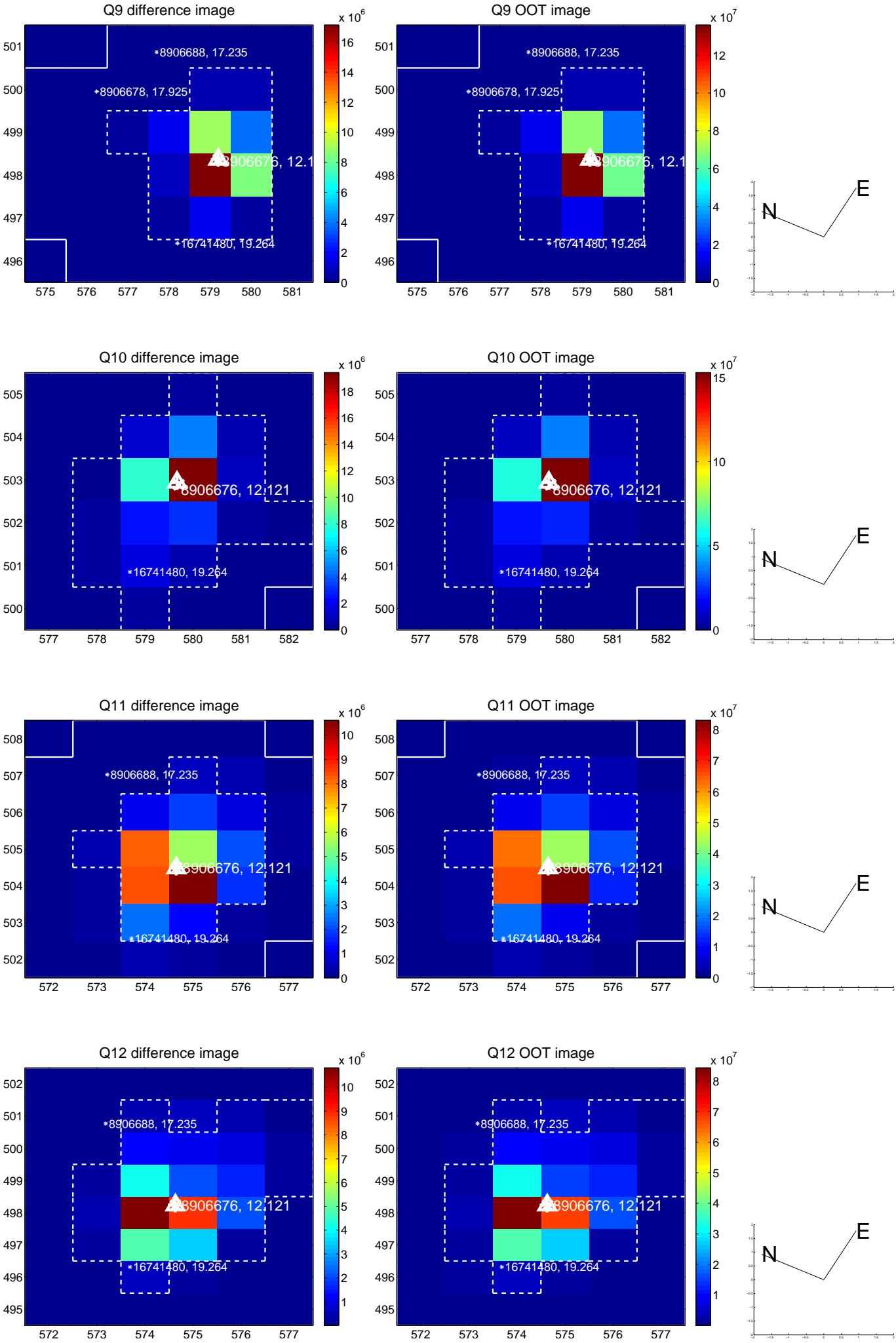
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



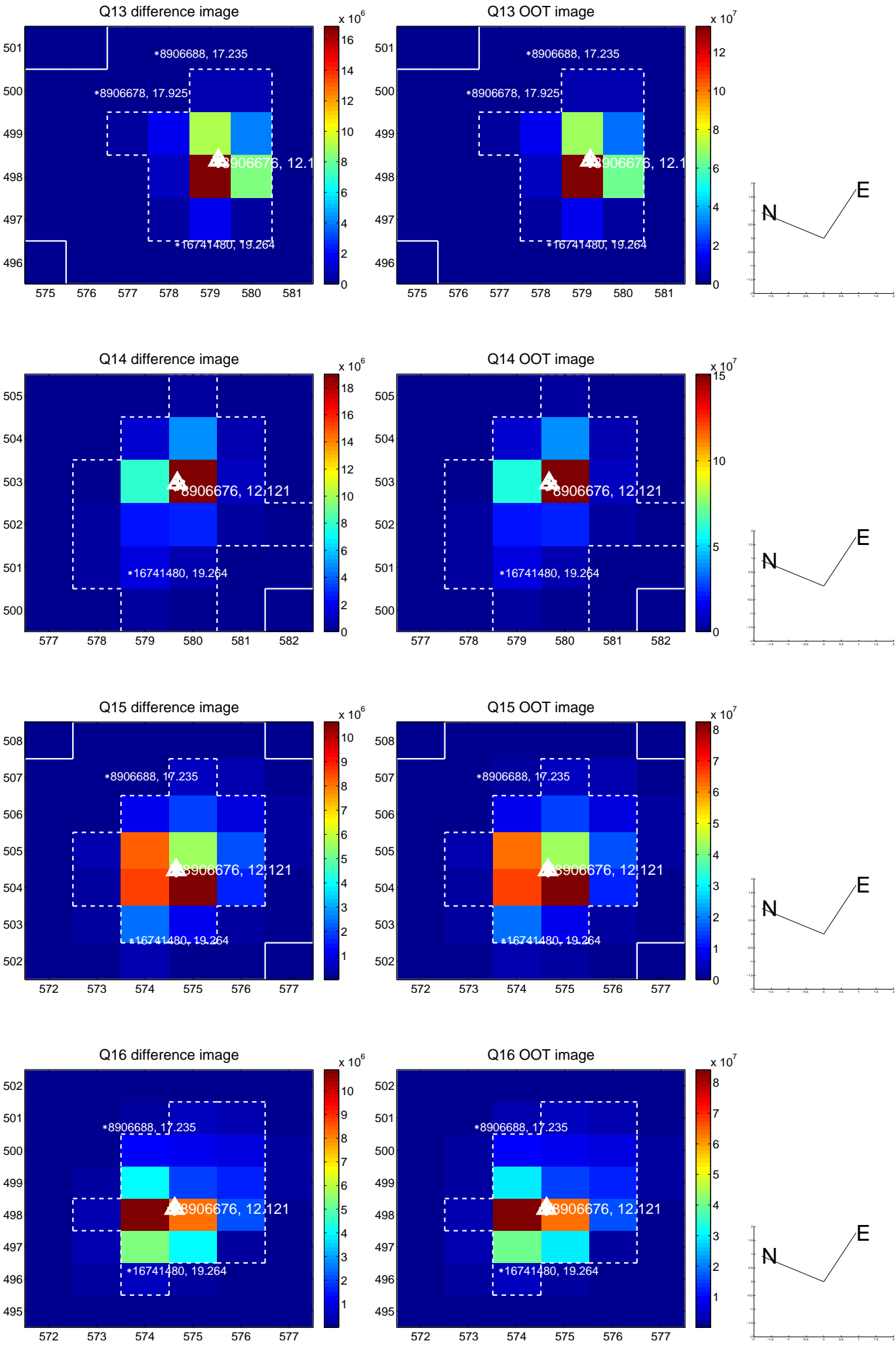
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



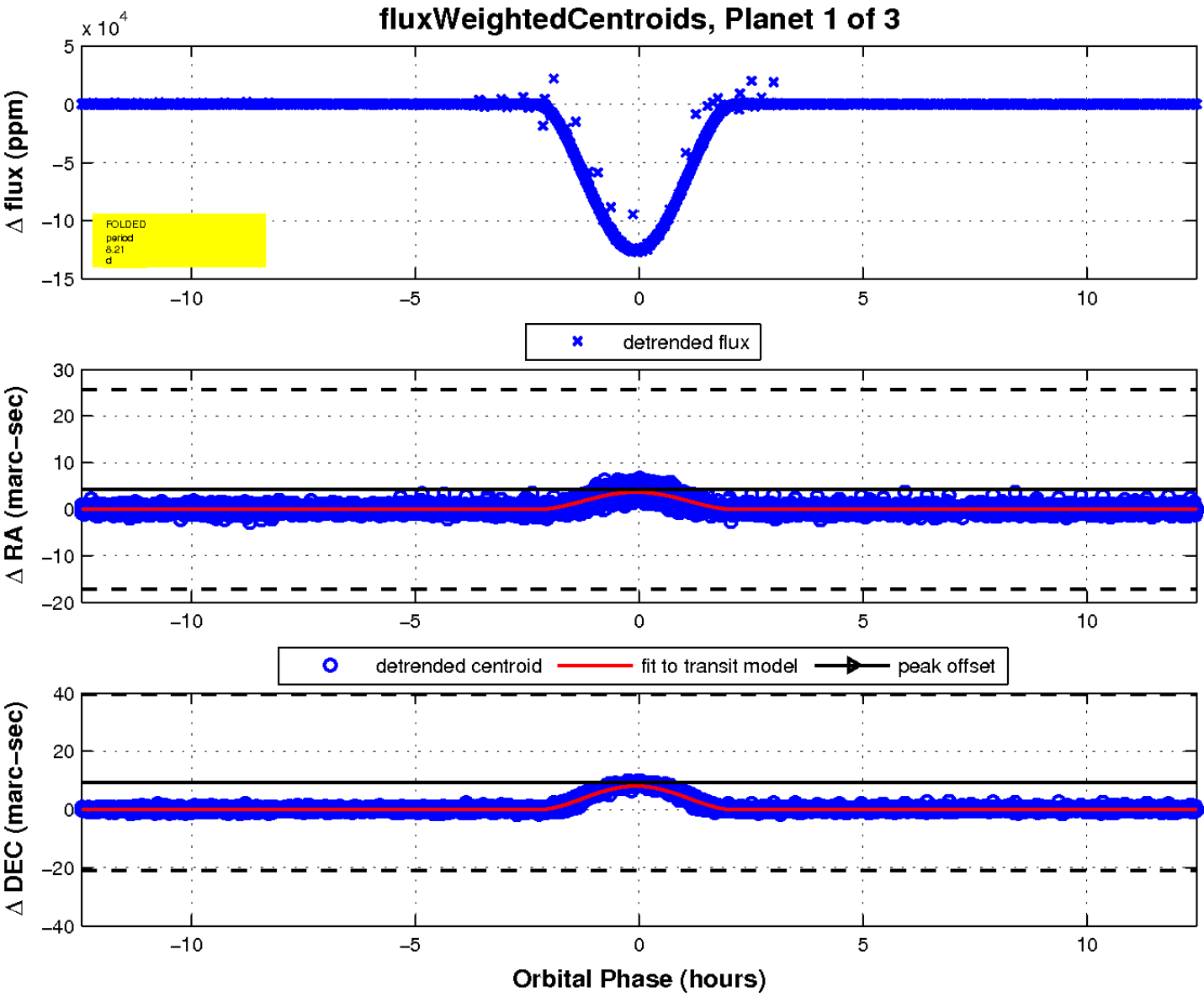
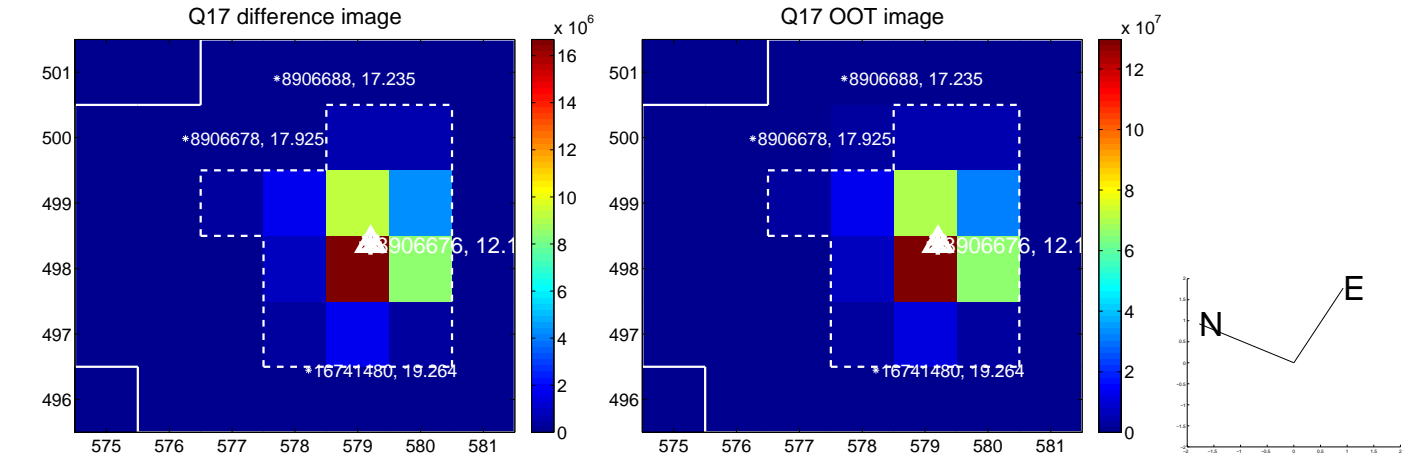
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

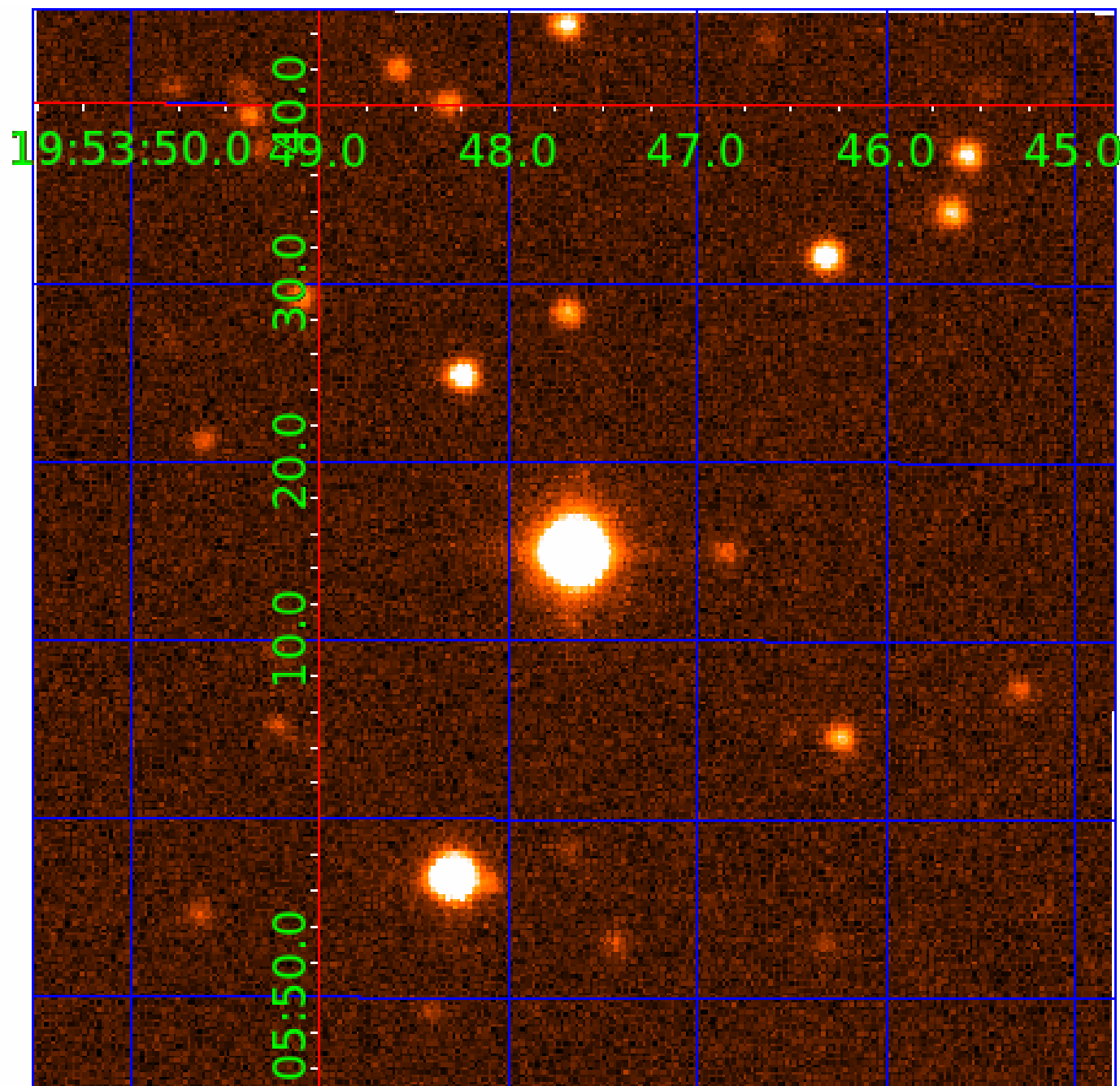


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008906676

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
008906676-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—MOD_ODDEVEN_ALT—DEEP_V_SHAPED—HAS_SEC_TCE
008906676-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
008906676-03	OBS	FP	0.00	1	0	0	0	LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS

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.

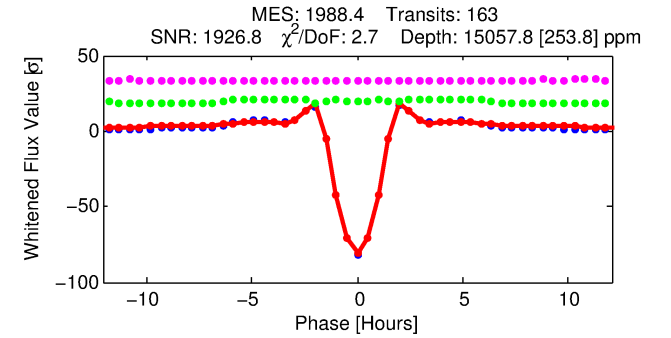
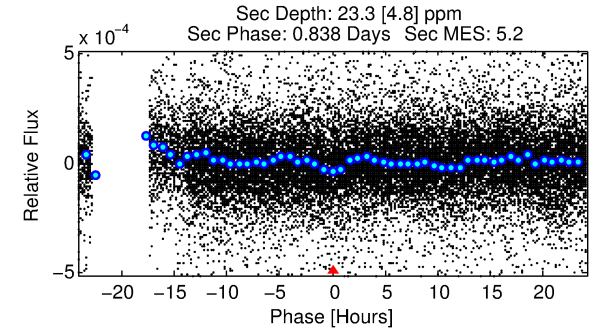
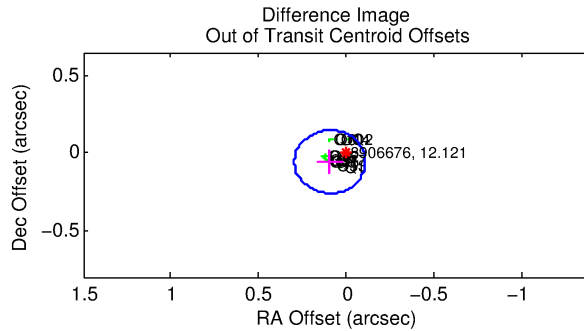
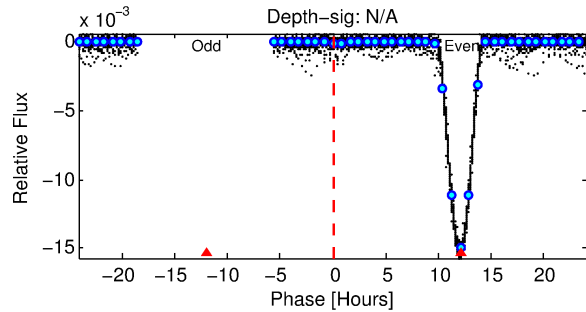
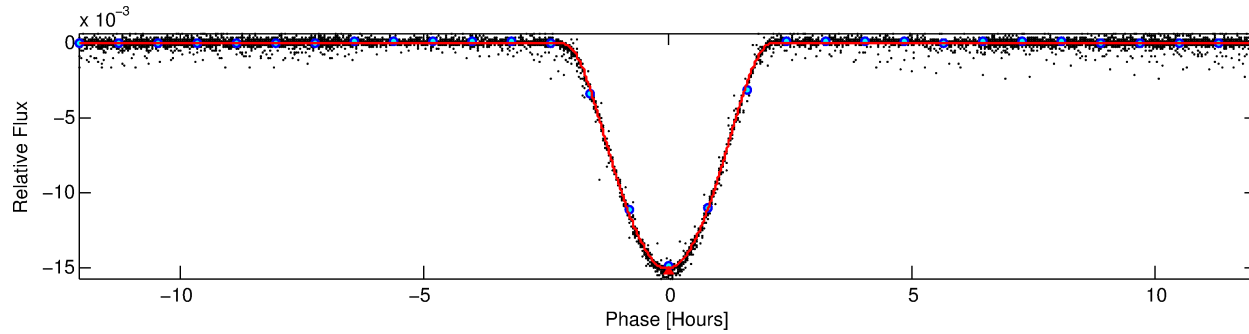
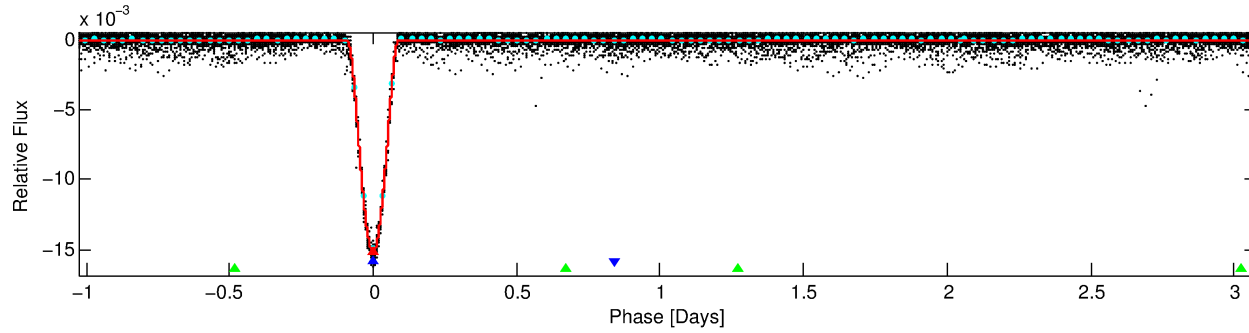
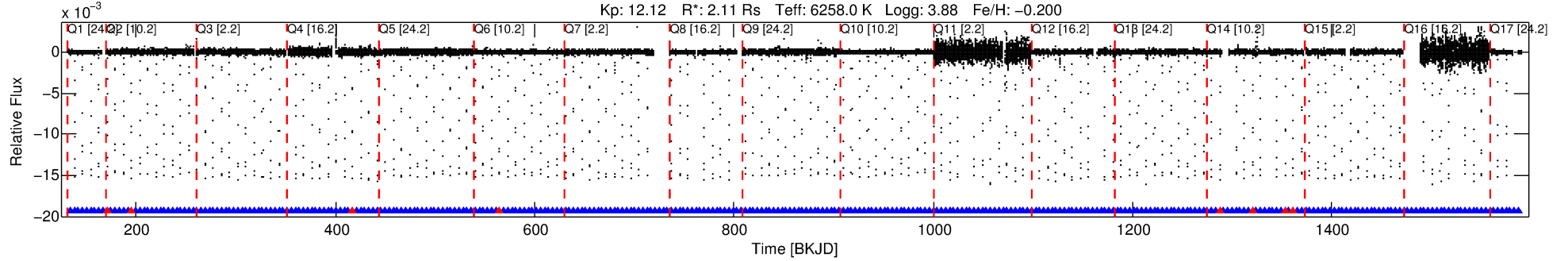
Ephemeris Match Information For 008906676-02

No Significant Match Found

DV One-Page Summary

KIC: 8906676 Candidate: 2 of 3 Period: 4.105 d
KOI: K07108 Corr: No Ephemeris Match

Kp: 12.12 R*: 2.11 Rs Teff: 6258.0 K Logg: 3.88 Fe/H: -0.200



DV Fit Results:

Period = 4.10476 [0.00000] d
Epoch = 134.0651 [0.0001] BKJD
Rp/R* = 0.1979 [0.0074]
a/R* = 5.25 [0.02]
b = 1.00 [0.01]
Seff = 2108.20 [1660.27]
Teff = 1728 [340] K
Rp = 45.59 [20.33] Re
a = 0.0539 [0.0250] AU
Ag = 0.02 [0.01] [-68.49σ]
Teffp = 977 [66] K [-2.17σ]

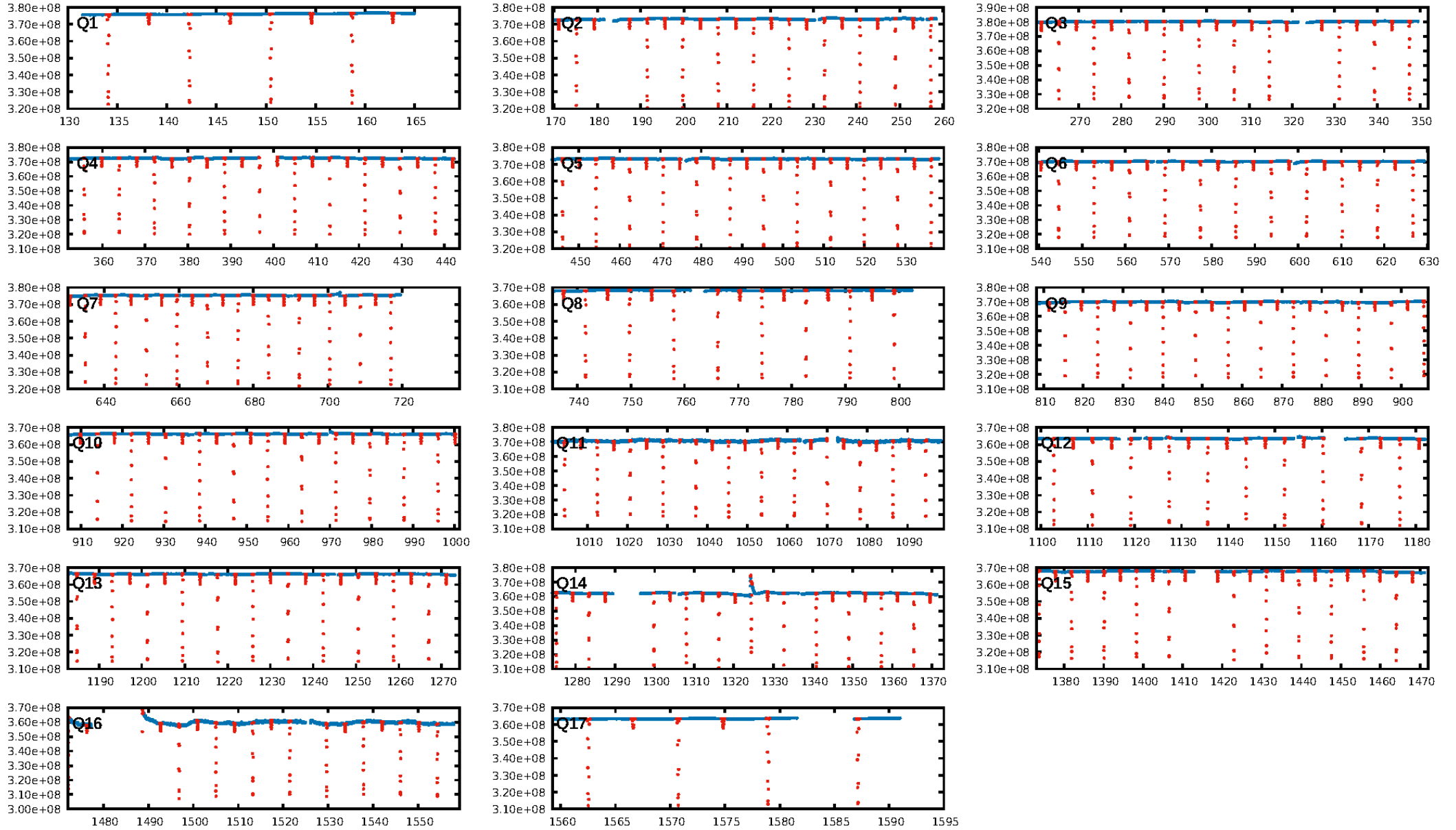
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [17.04σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 0.95 [149/157]
GhostDiagnostic-chr: 9.271
Centroid-sig: 0.0%
Centroid-so: 0.062 arcsec [18.04σ]
OotOffset-rm: 0.109 arcsec [1.61σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.094 arcsec [1.40σ]
KicOffset-st: 4/4/4/5 [17]
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DiffImageOverlap-fno: 1.00 [17/17]

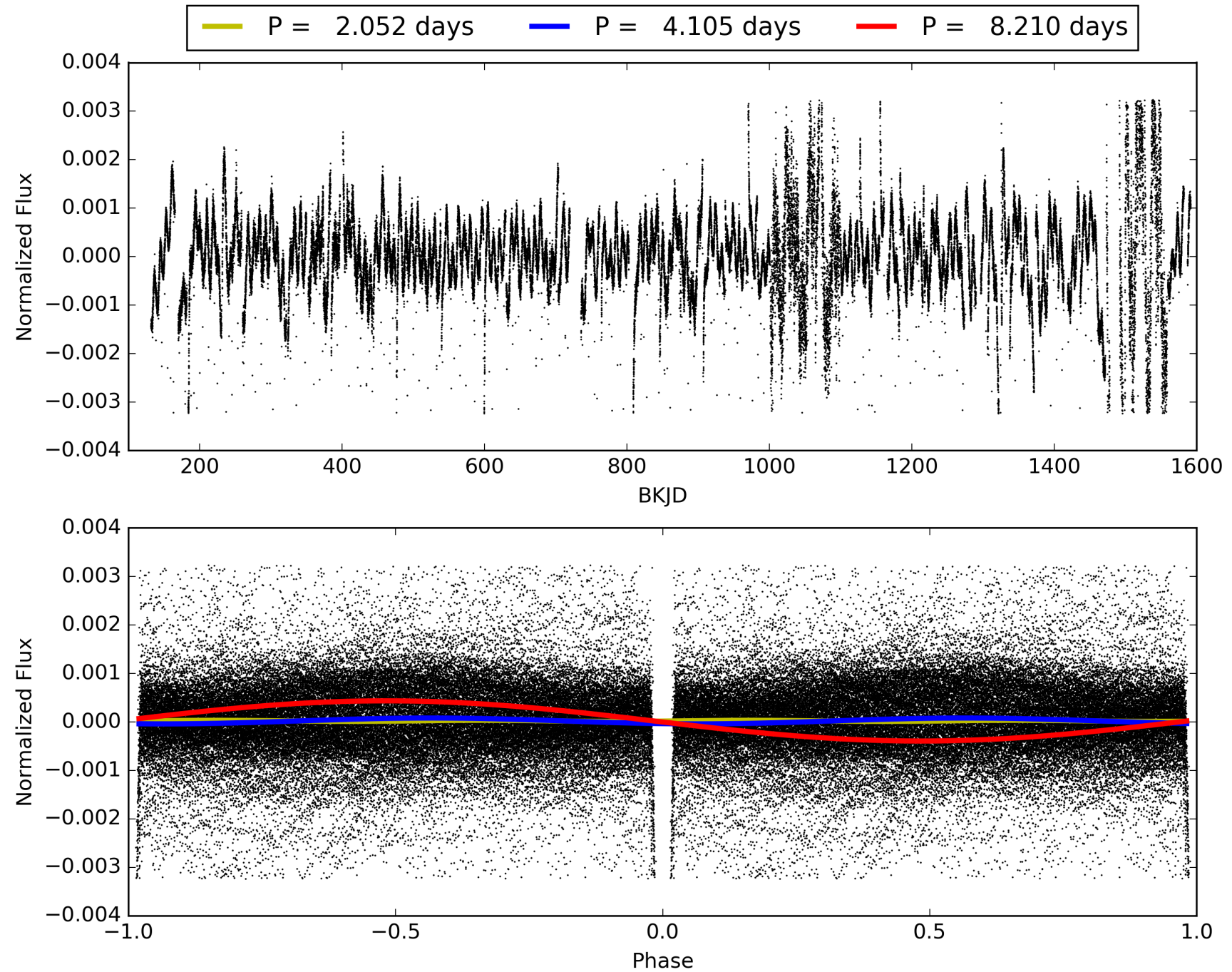
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 23:39:11 Z

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

TCE 008906676-02, PDC Light Curves

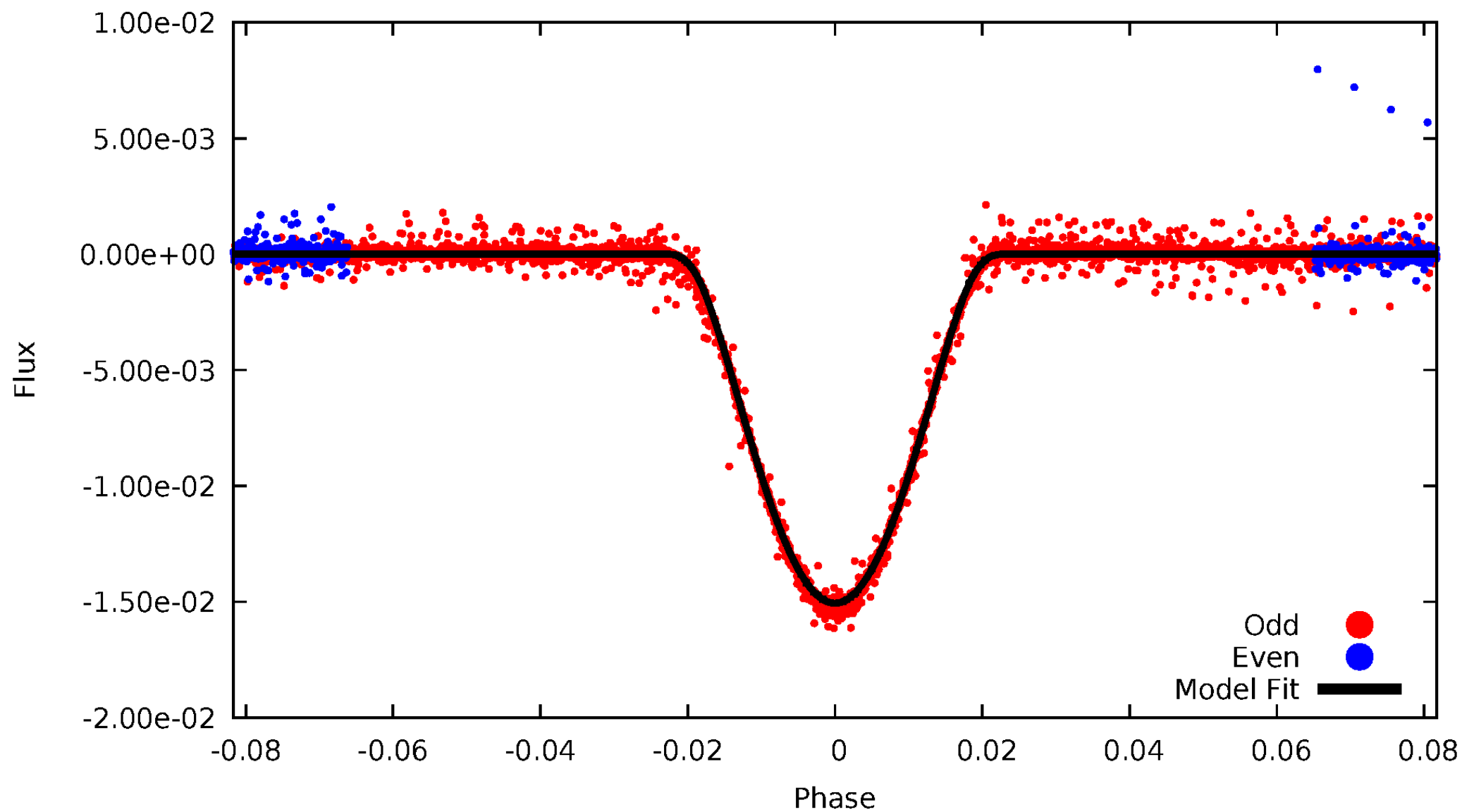


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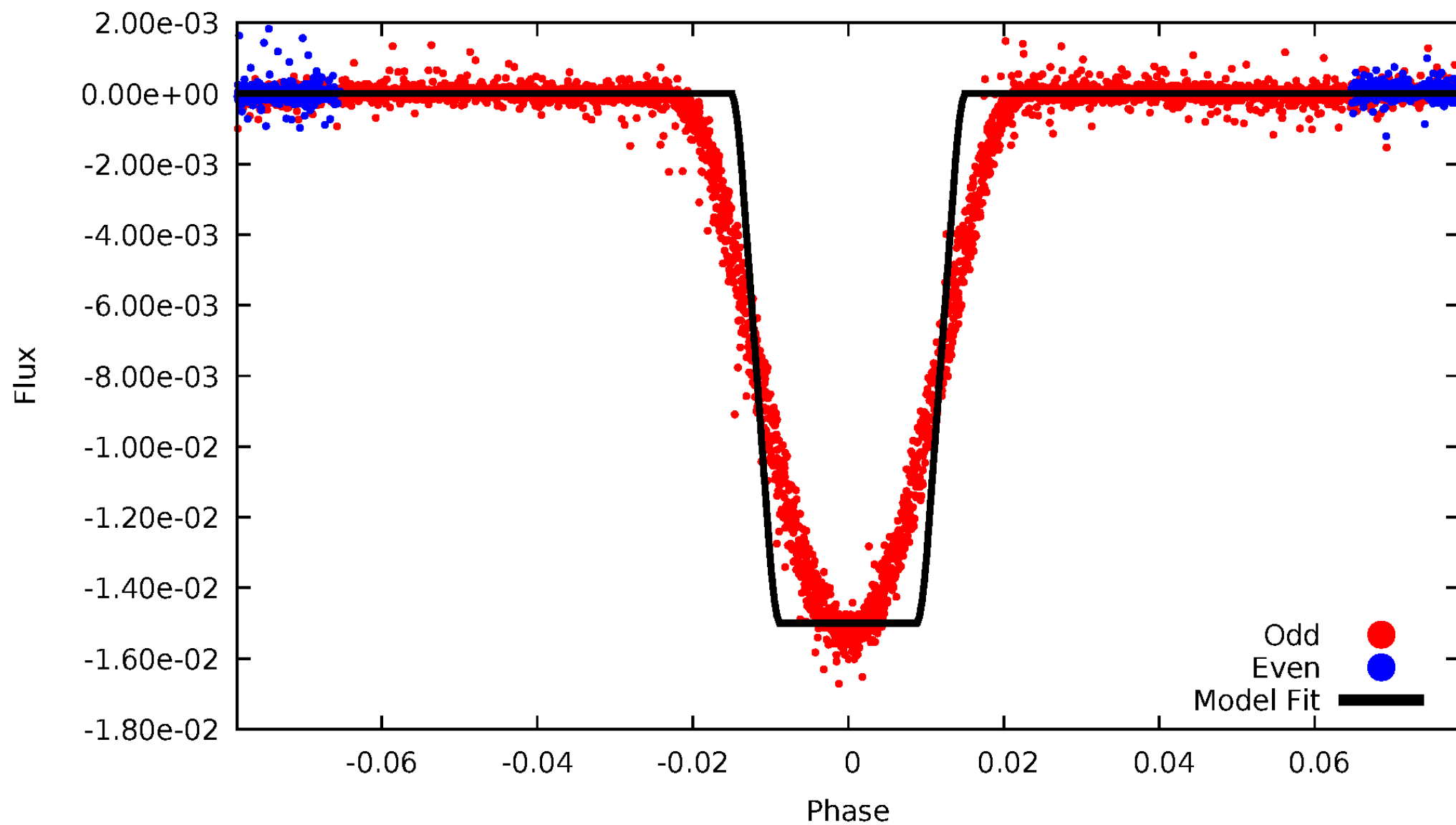
DV Odd/Even

TCE 008906676-02



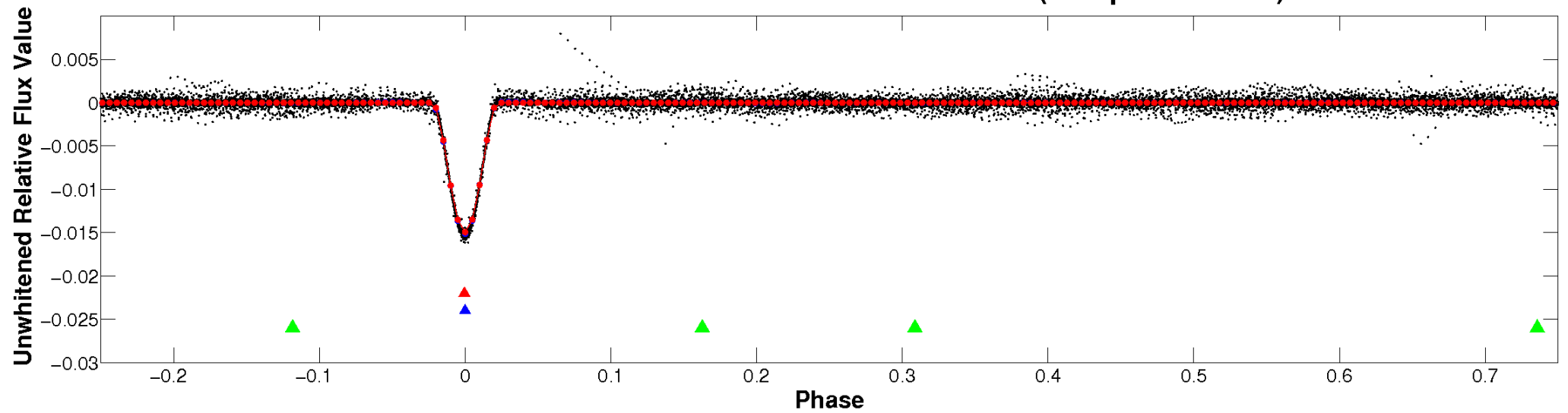
ALT Odd/Even

TCE 008906676-02

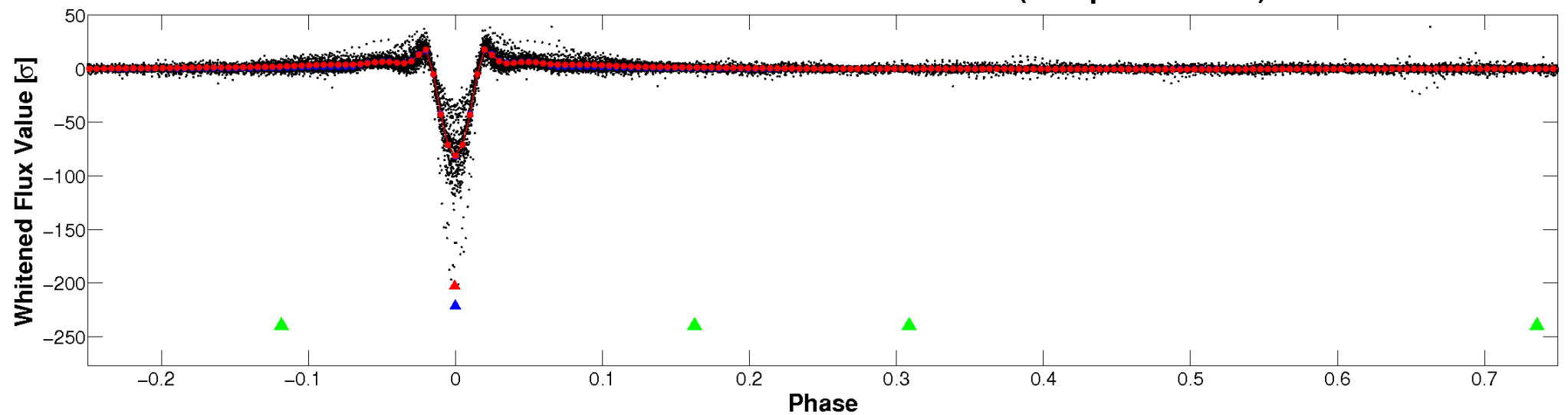


Non-Whitened Vs. Whitened Light Curve

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

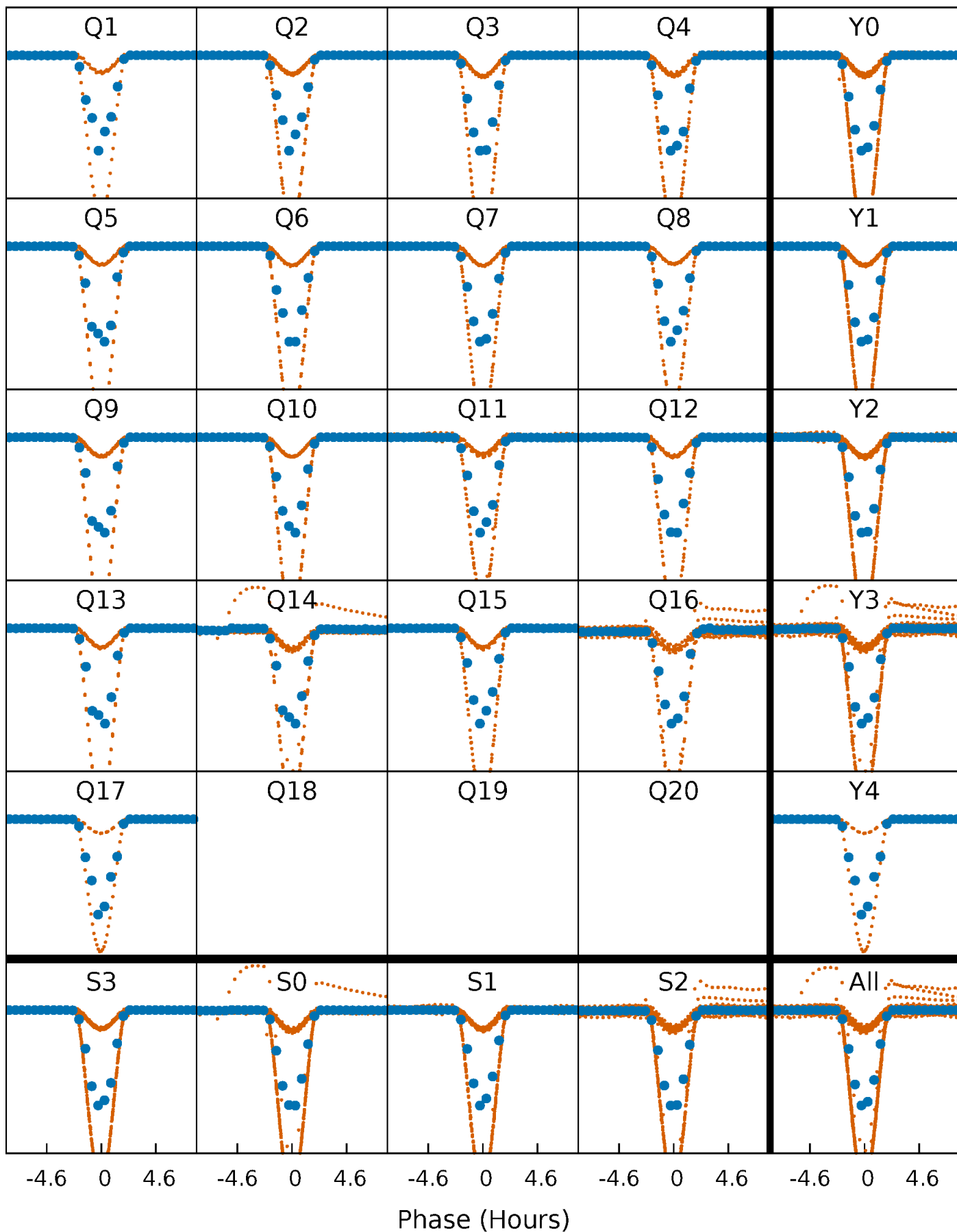


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



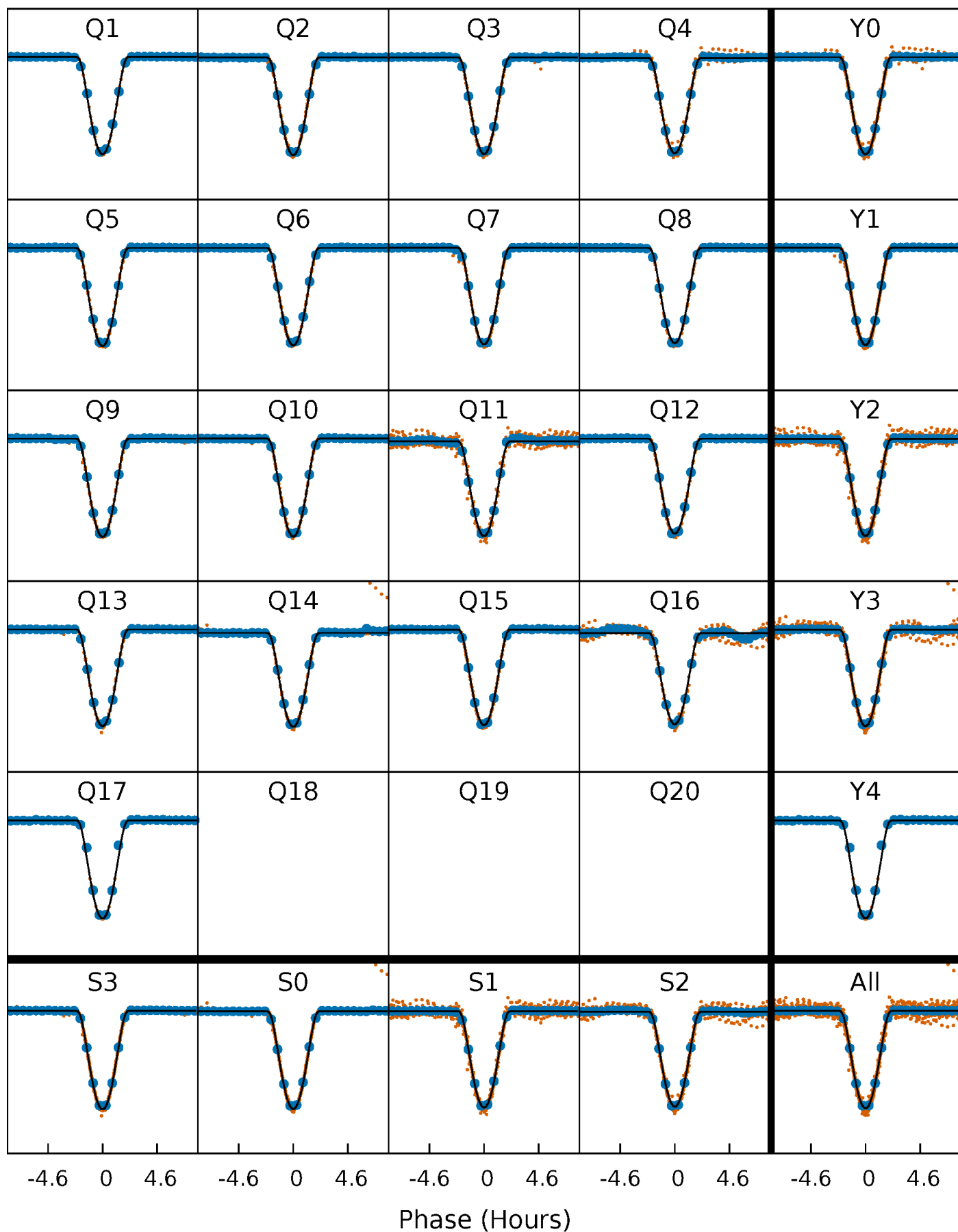
PDC Quarter-Phased Transit Curves

TCE 008906676-02 P= 4.104758 Days $T_0=134.065097$ (BKJD)



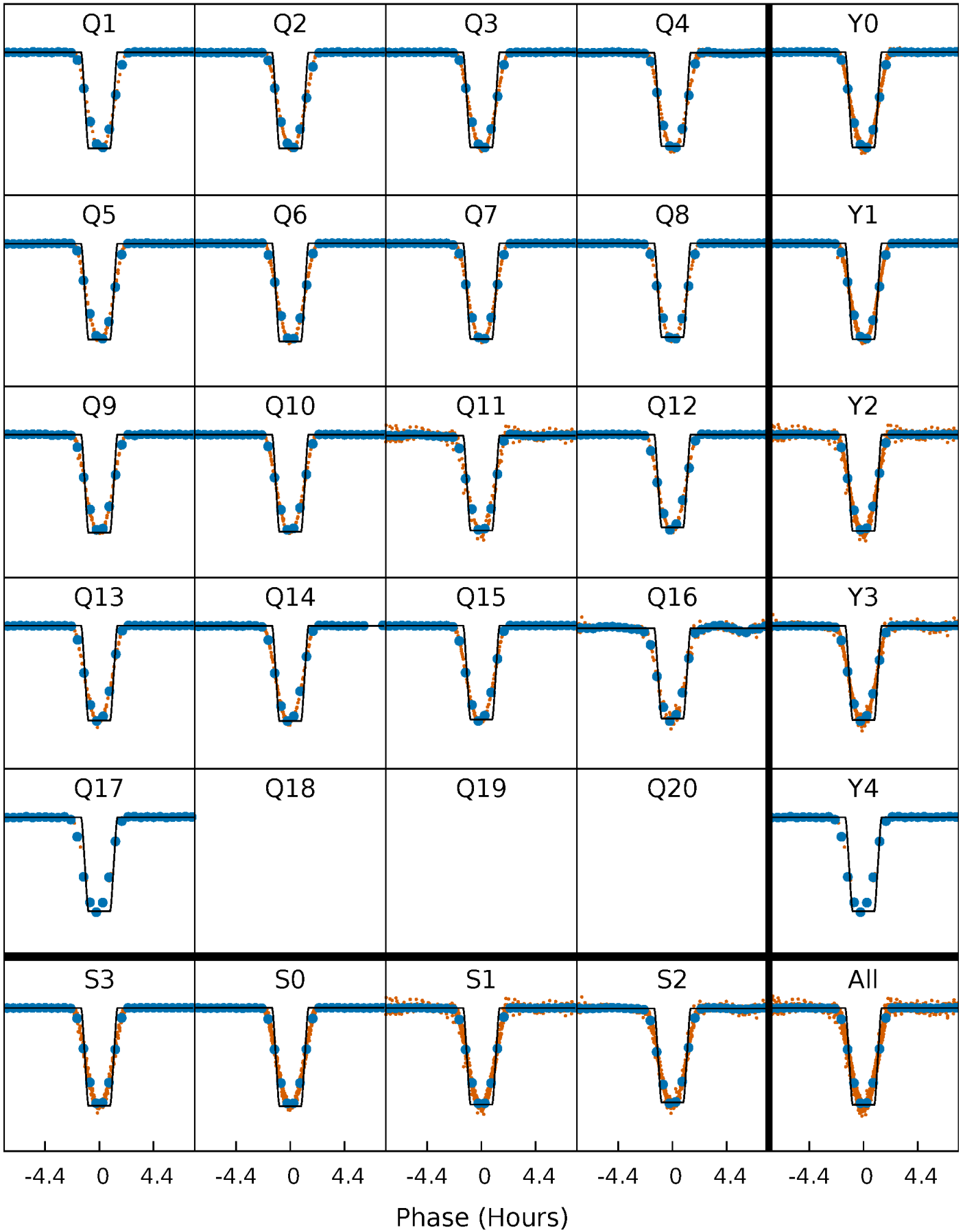
DV Quarter-Phased Transit Curves

TCE 008906676-02 $P = 4.104758$ Days $T_0 = 134.065097$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

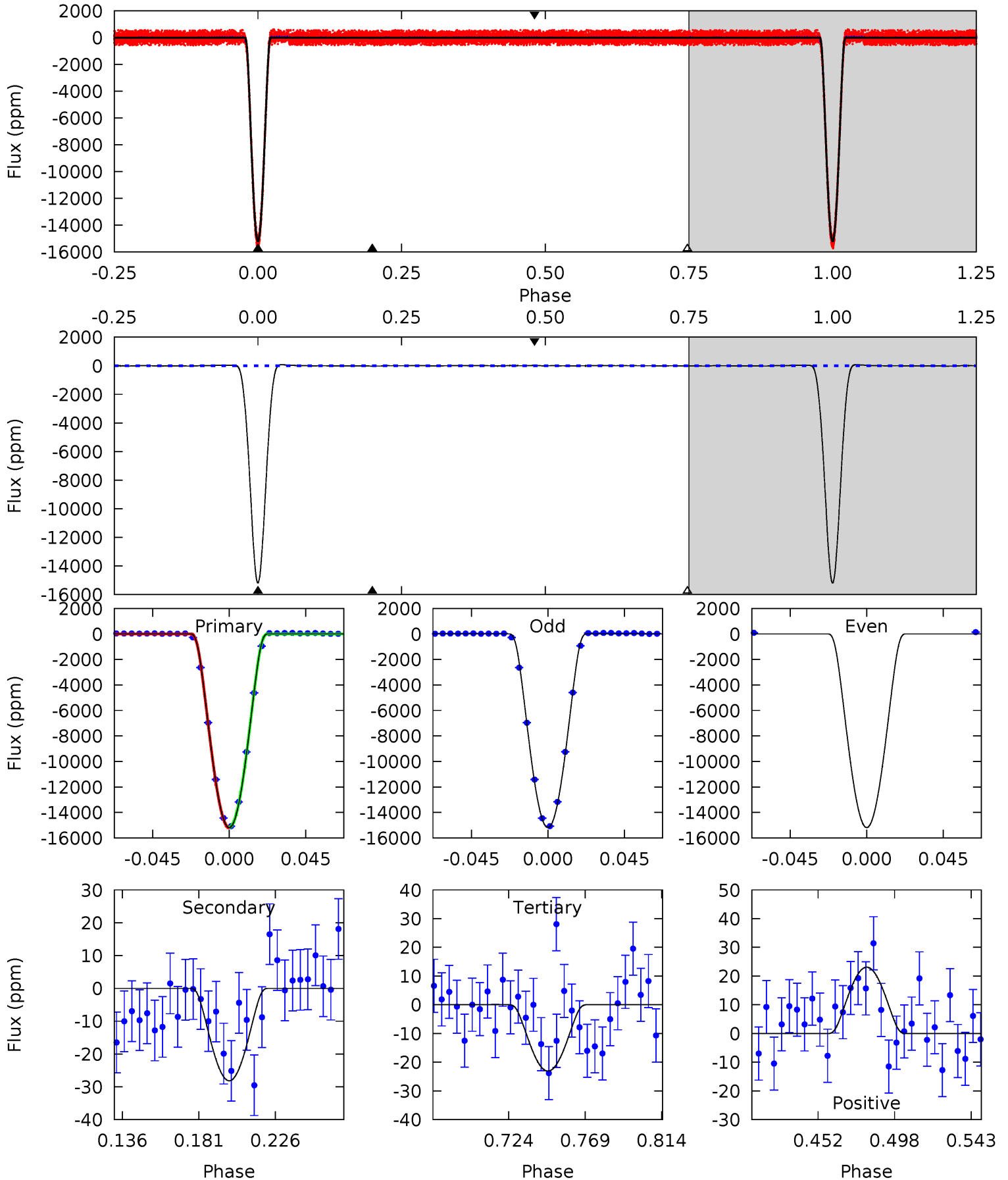
TCE 008906676-02 P= 4.104786 Days $T_0=134.060164$ (BKJD)



DV Model-Shift Uniqueness Test

008906676-02, P = 4.104758 Days, E = 129.960339 Days

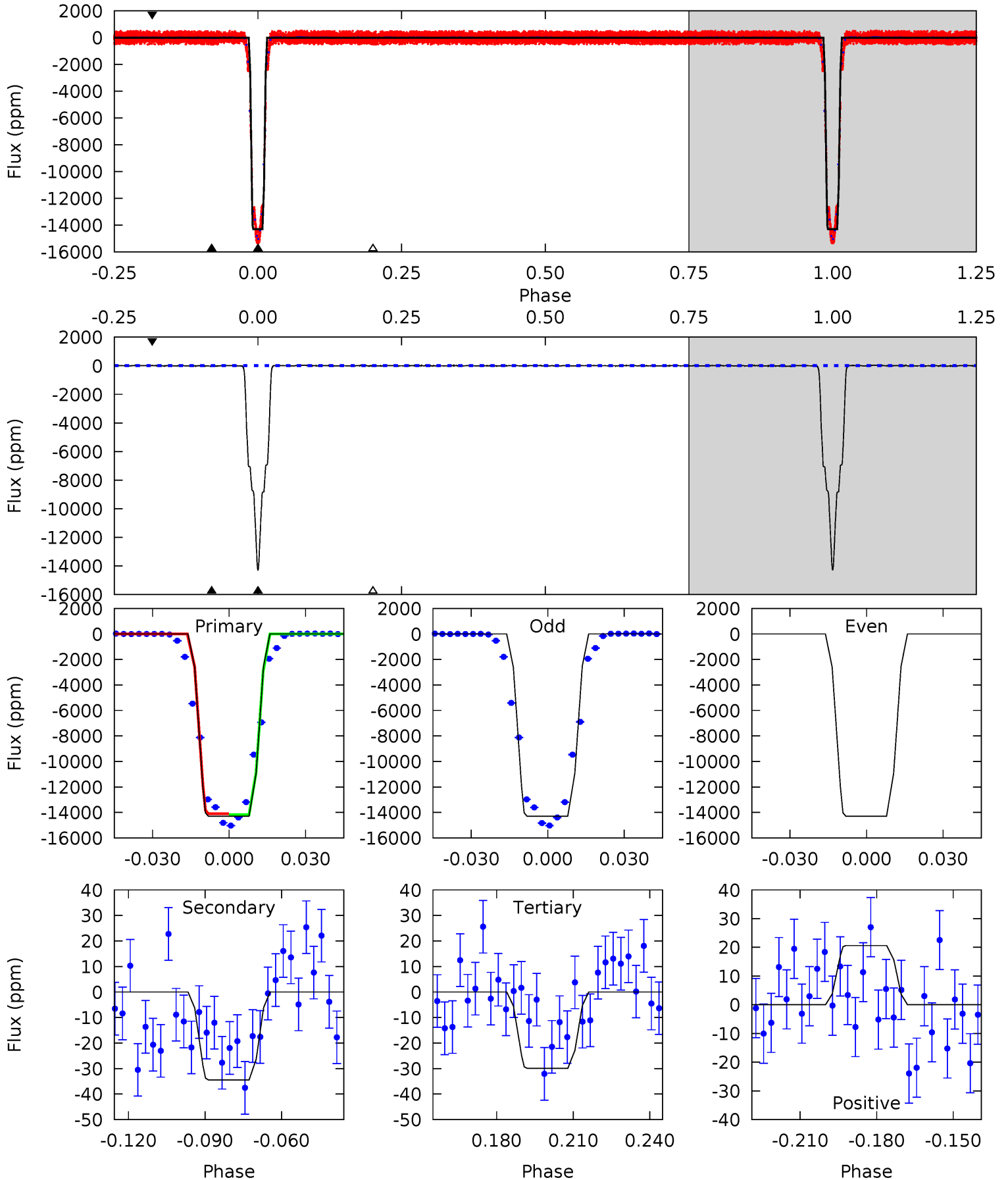
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3735	6.93	5.68	5.68	4.73	2.00	2.95	3729	3729	1.25	1.25	0	1.00	0.00	5.76



Alt Model-Shift Uniqueness Test

008906676-02, P = 4.104786 Days, E = 129.955378 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2114	5.09	4.42	3.05	4.81	2.17	1.37	2110	2111	0.67	2.04	0	1.00	0.00	5.35



Stellar Parameters For KIC 008906676

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6258^{+203}_{-248}	$3.882^{+0.464}_{-0.116}$	$-0.200^{+0.250}_{-0.300}$	$2.111^{+0.505}_{-0.938}$	$1.237^{+0.185}_{-0.255}$	$0.185^{+0.739}_{-0.076}$
	+3%/-4%	+12%/-3%	+125%/-150%	+24%/-44%	+15%/-21%	+399%/-41%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 008906676-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-28 ± 4	$42.75^{+7.50}_{-10.38}$	2324^{+190}_{-297}	-2663^{+189}_{-117}	$0.024^{+0.017}_{-0.006}$
Alt.	-34 ± 7	$26.32^{+5.15}_{-5.97}$	2338^{+190}_{-292}	-2597^{+244}_{-136}	$0.079^{+0.056}_{-0.026}$

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

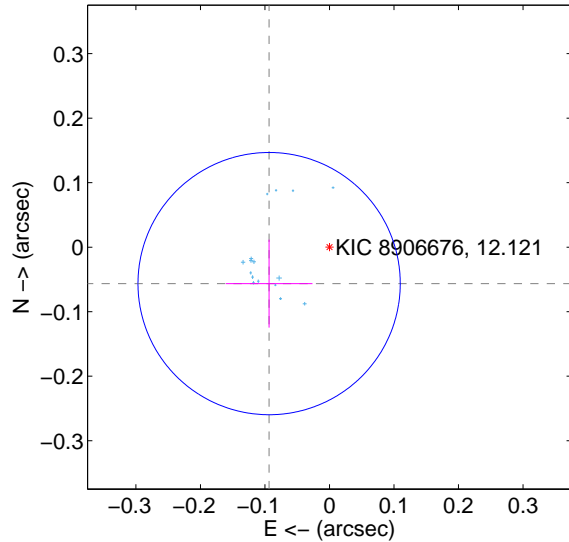
Supplemental centroid analysis for 008906676-02. Kepler magnitude: 12.12. Transit SNR 1926.81

There are 17 quarters with good PRF difference image offsets

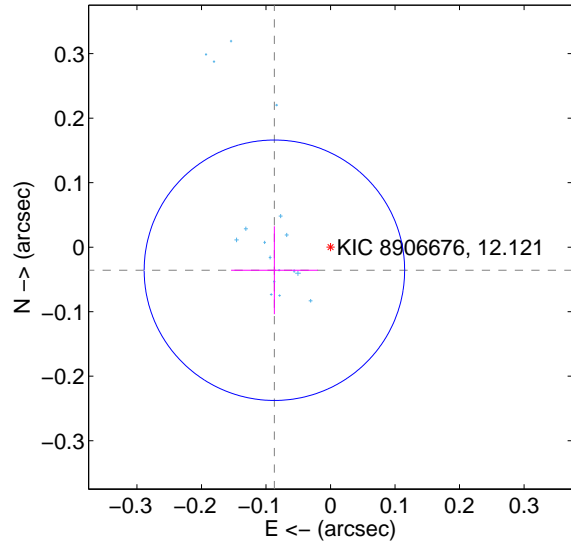
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.109 ± 0.068	1.61	0.094 ± 0.067	-0.056 ± 0.068
PRF-fit source offset from KIC position	0.094 ± 0.067	1.40	0.087 ± 0.067	-0.036 ± 0.068
photometric centroid source offset	0.06 ± 0.00	18.04	0.06 ± 0.00	-0.00 ± 0.00

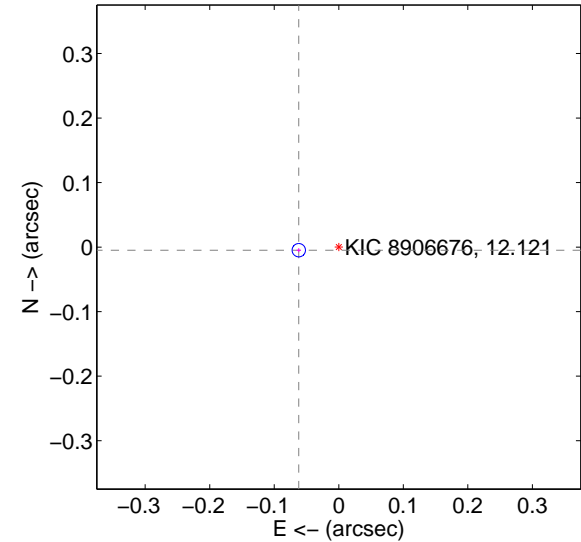
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

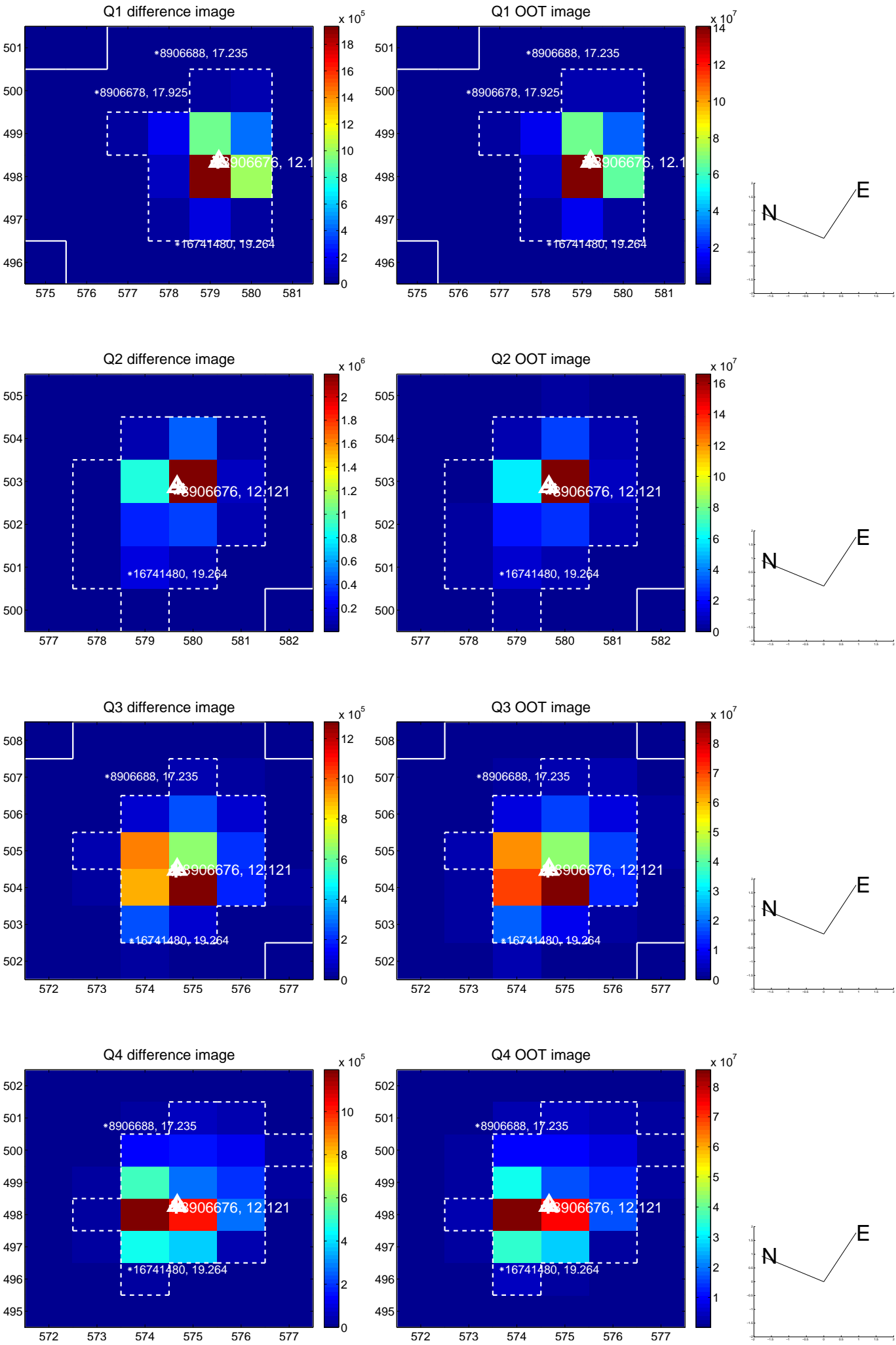


offset from photometric centroids

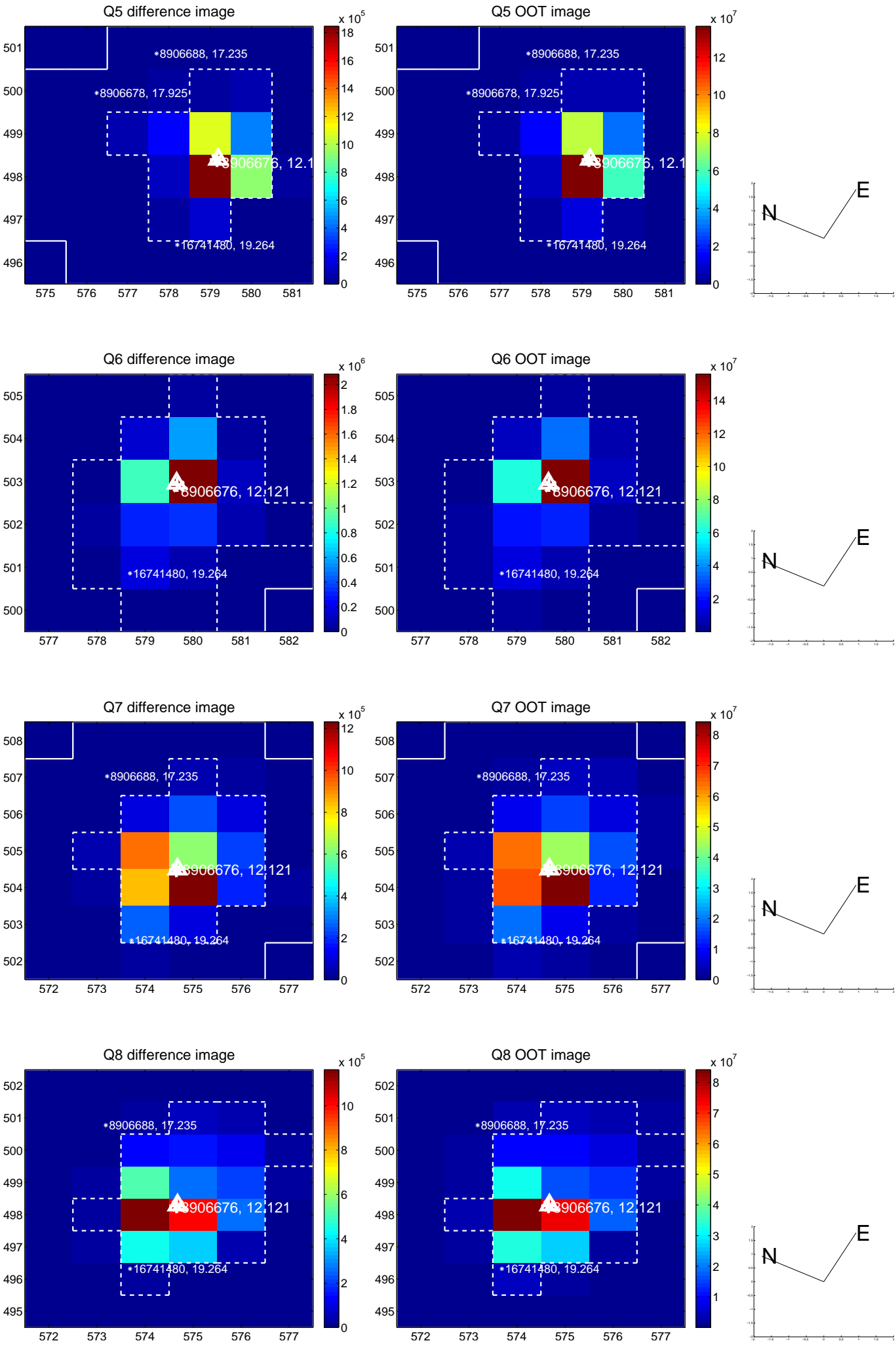


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

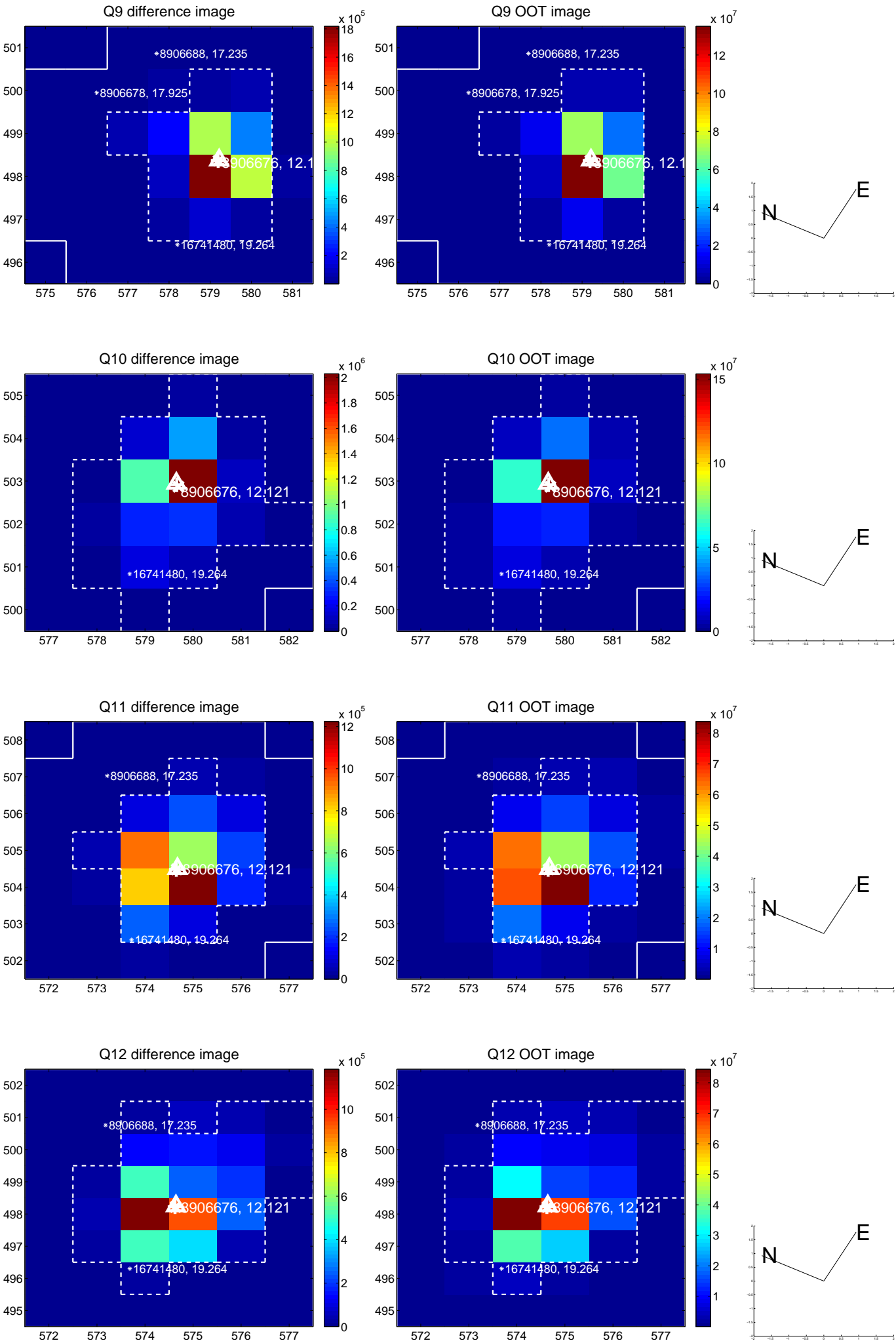
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



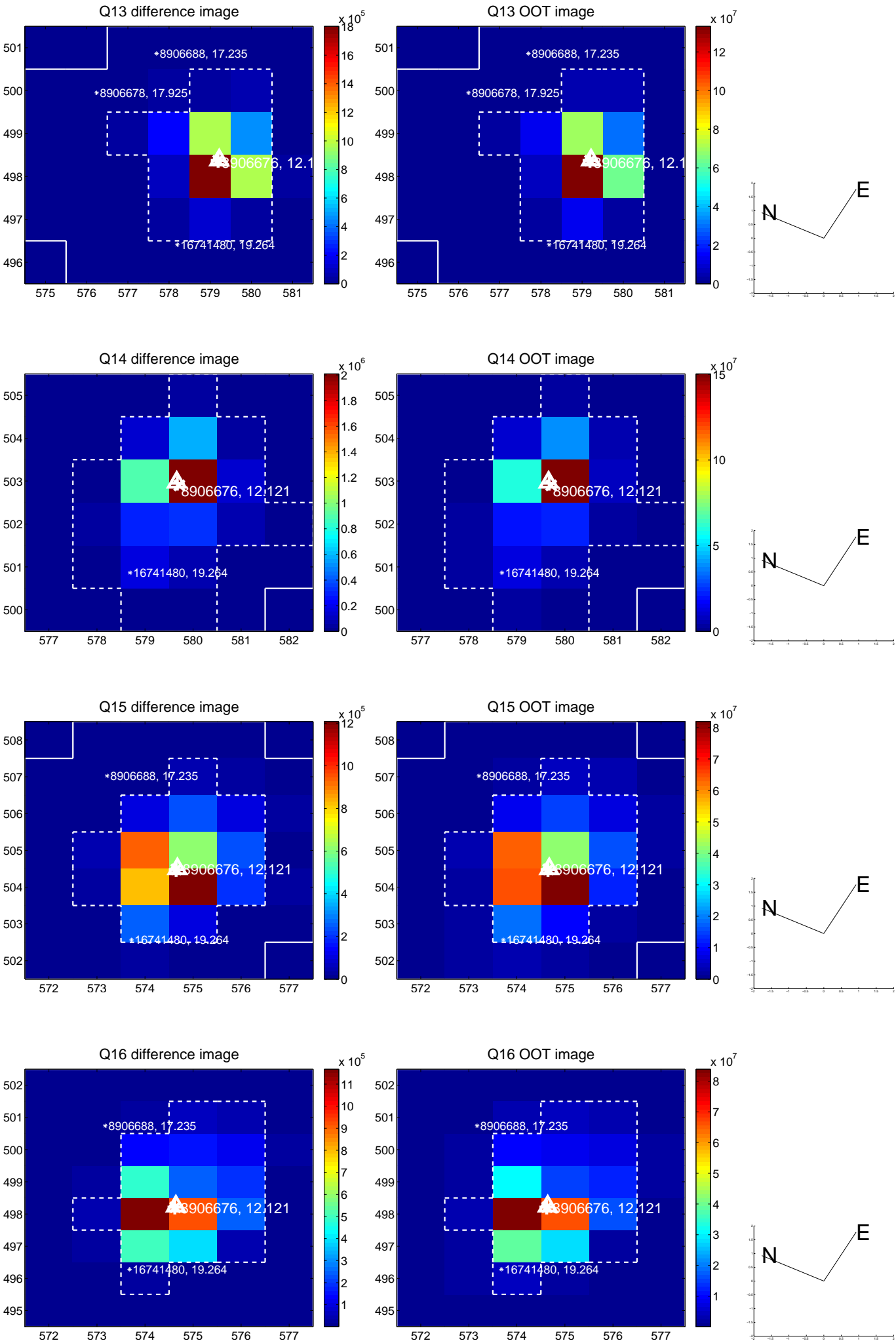
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



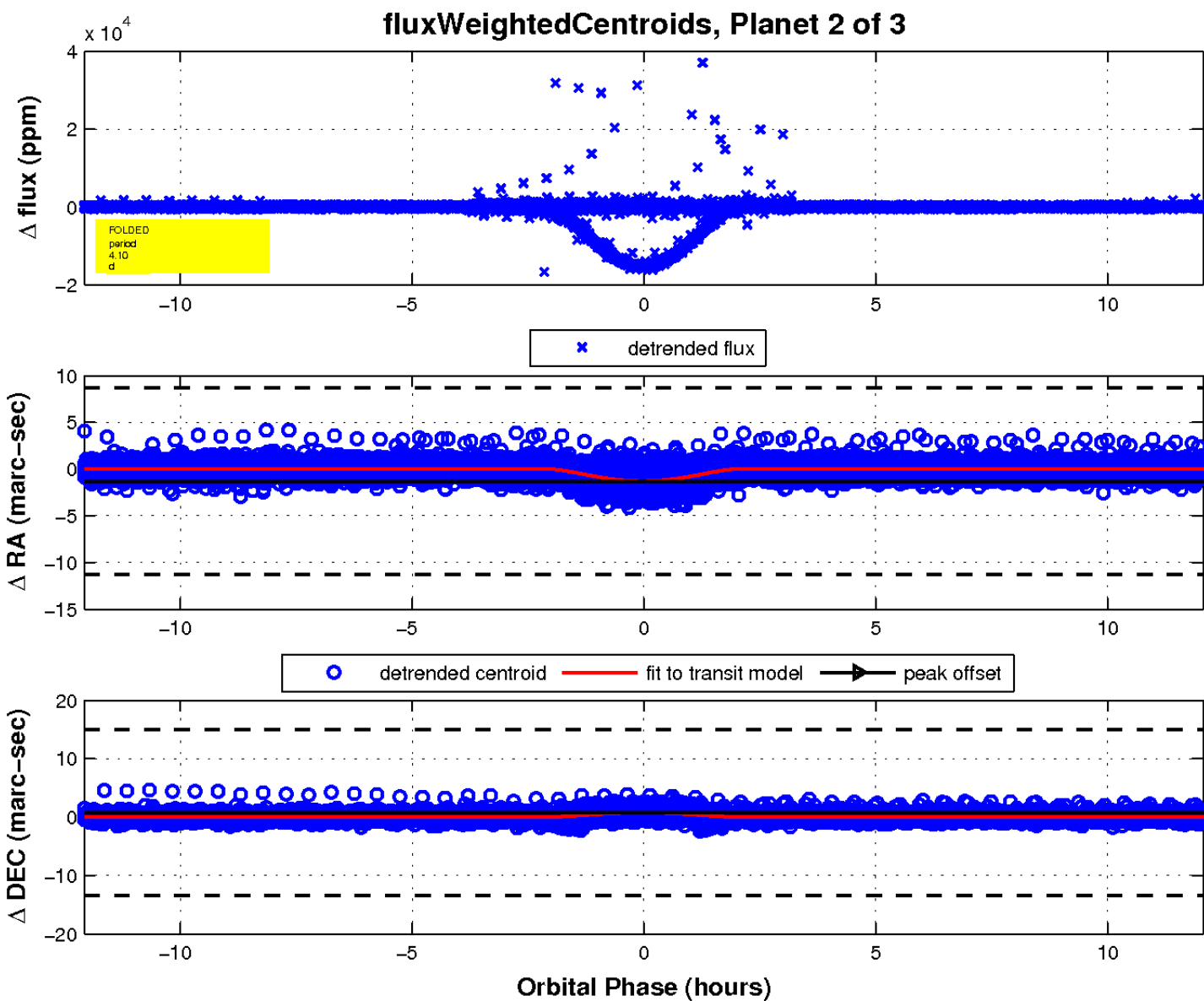
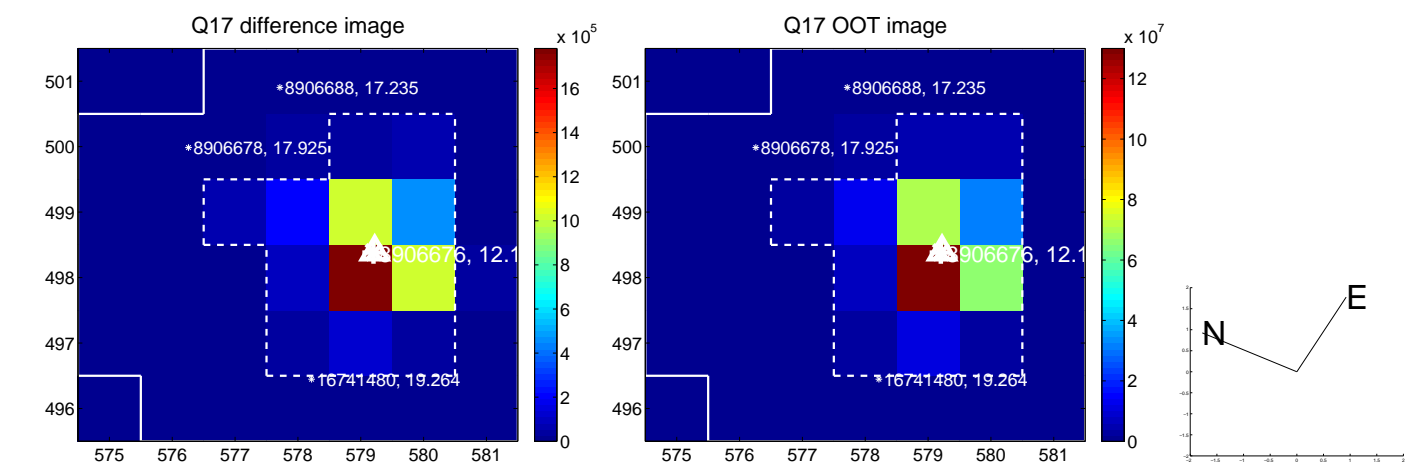
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

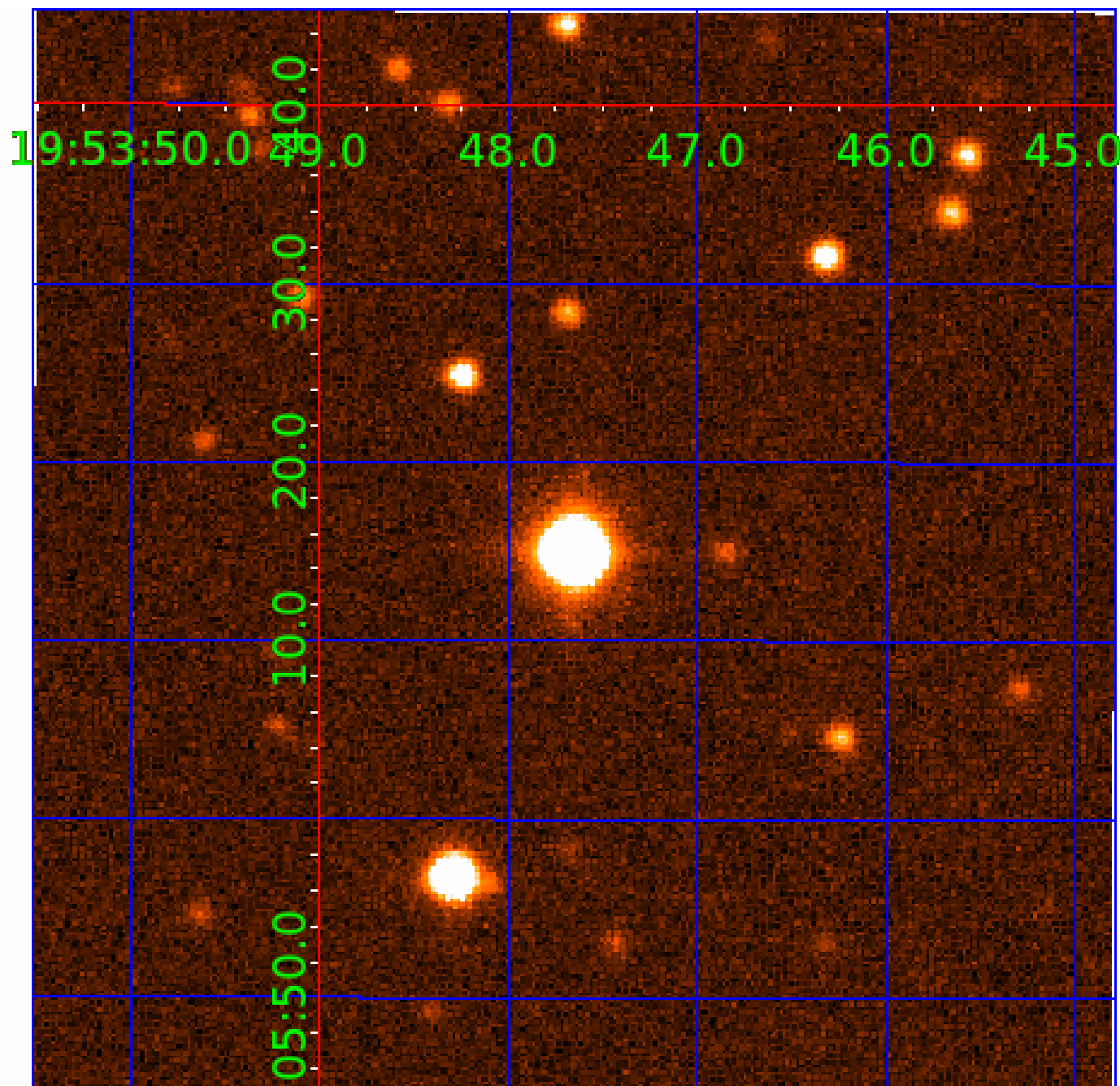


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008906676

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})
008906676-01	OBS	7108.01	8.209514	134.063214	141186.3	4.152	17207.6	16074.4	2.11	6258	117.54	836.64
008906676-02	OBS	No	4.104758	134.065097	15057.8	4.023	1988.4	1926.8	2.11	6258	45.59	2108.20
008906676-03	OBS	No	310.208686	393.333009	444.1	15.000	30.5	-1.0	2.11	6258	4.46	6.60

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008906676-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—MOD_ODDEVEN_ALT—DEEP_V_SHAPED—HAS_SEC_TCE
008906676-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
008906676-03	OBS	FP	0.00	1	0	0	0	LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS

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.

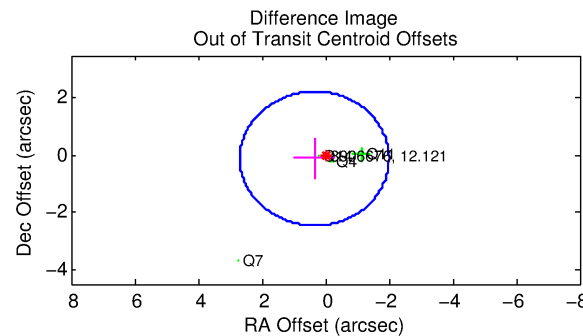
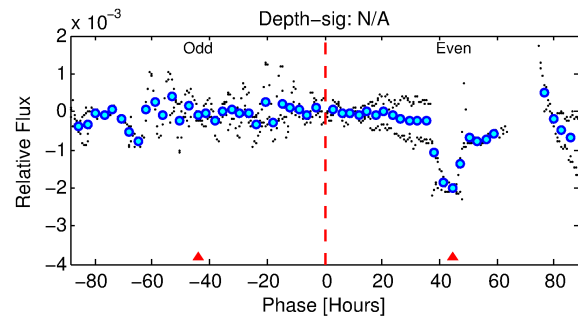
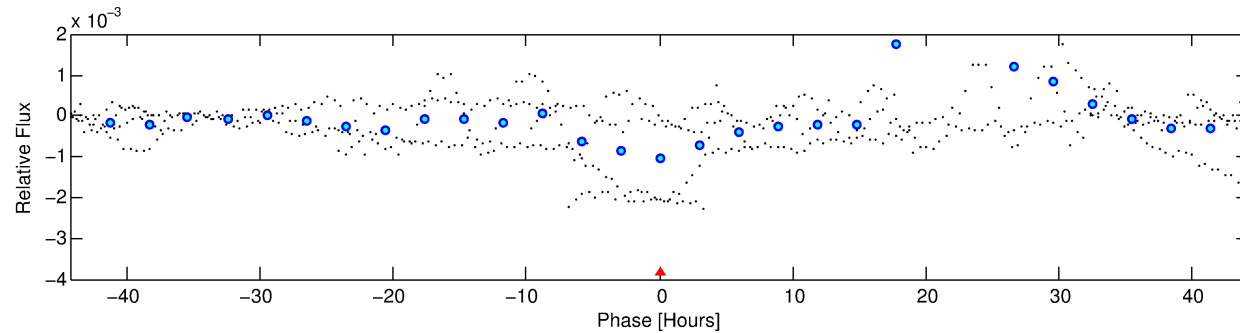
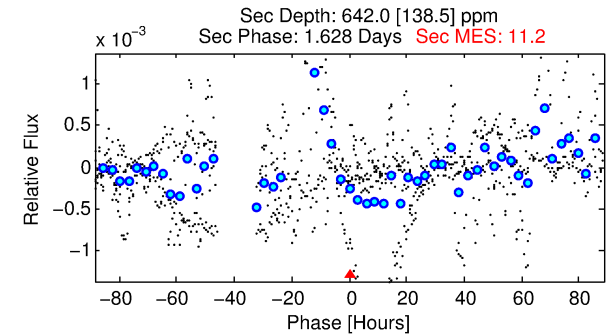
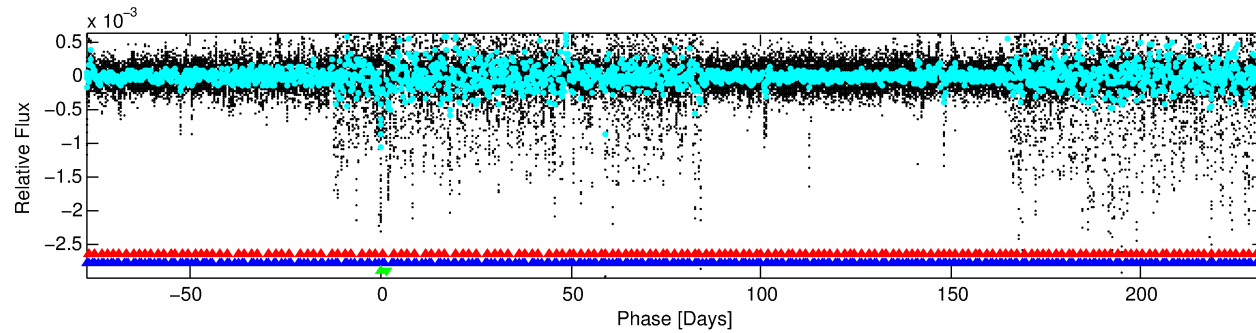
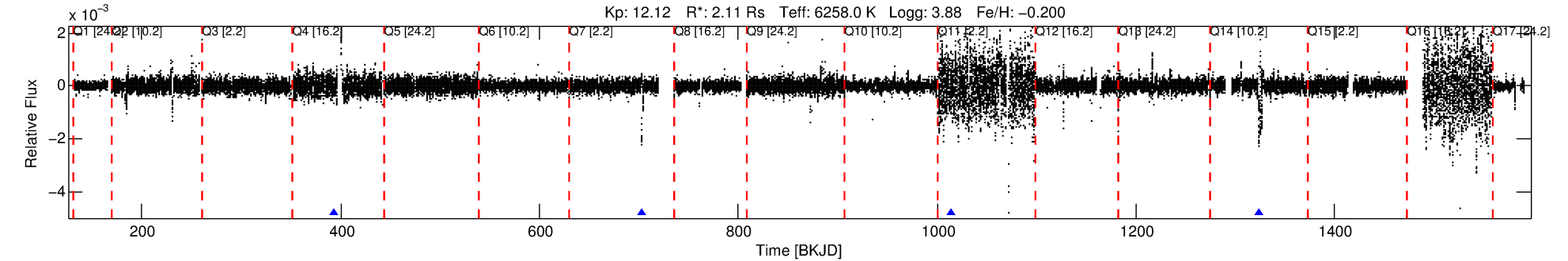
Ephemeris Match Information For 008906676-03

No Significant Match Found

DV One-Page Summary

KIC: 8906676 Candidate: 3 of 3 Period: 310.209 d
KOI: K07108 Corr: No Ephemeris Match

Kp: 12.12 R*: 2.11 Rs Teff: 6258.0 K Logg: 3.88 Fe/H: -0.200



TPS TCE Results:

Period = 310.20869 d
Epoch = 393.3330 BKJD

DV fit results are unavailable

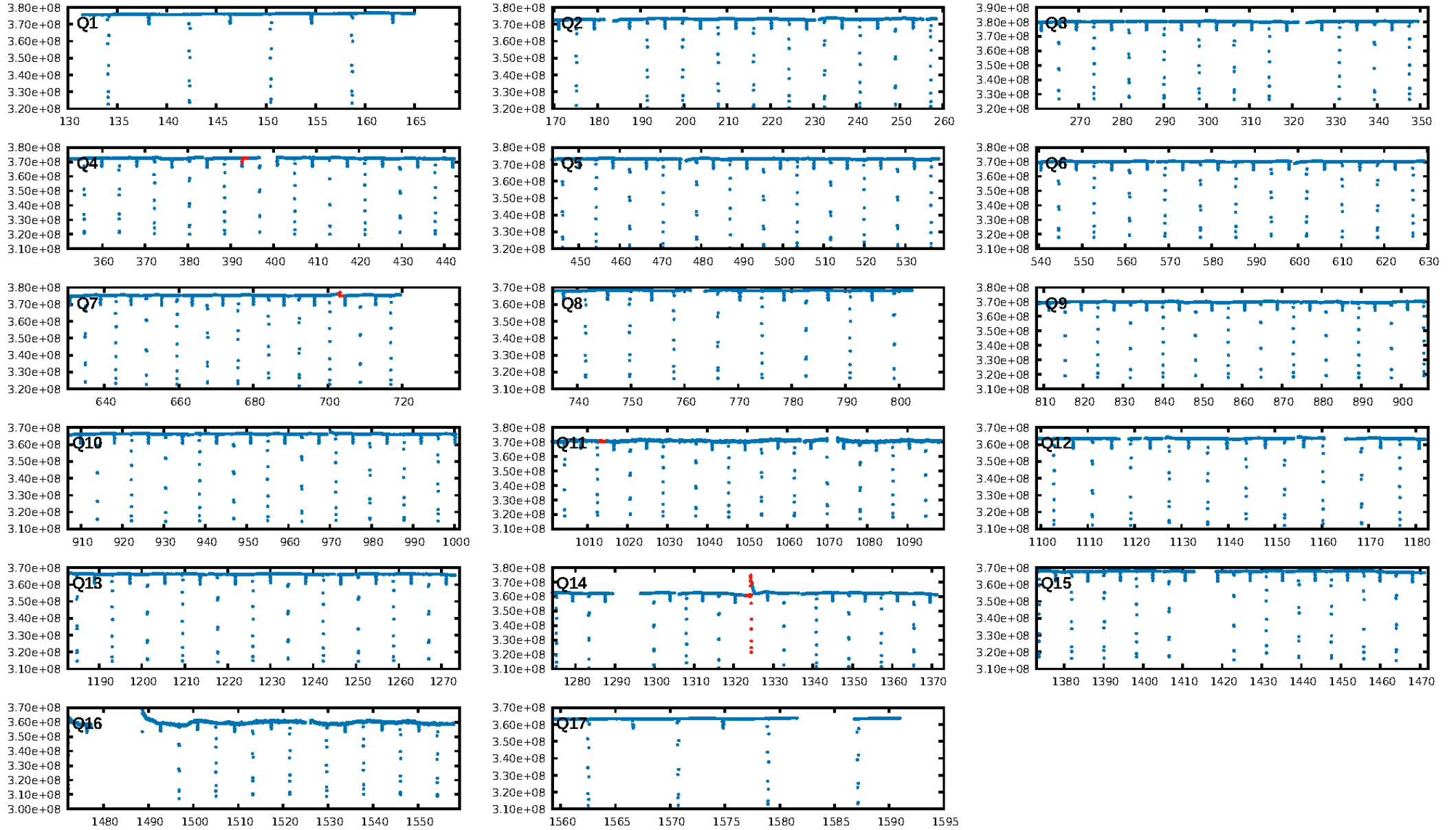
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [465.68σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -1.019
Centroid-sig: 0.0%
Centroid-so: 0.392 arcsec [3.25σ]
OotOffset-rm: 0.361 arcsec [0.46σ]
KicOffset-rm: 0.430 arcsec [0.85σ]
OotOffset-st: 1/2/1/0 [4]
KicOffset-st: 1/2/1/0 [4]
DiffImageQuality-fgm: 0.25 [1/4]
DiffImageOverlap-fno: 0.25 [1/4]

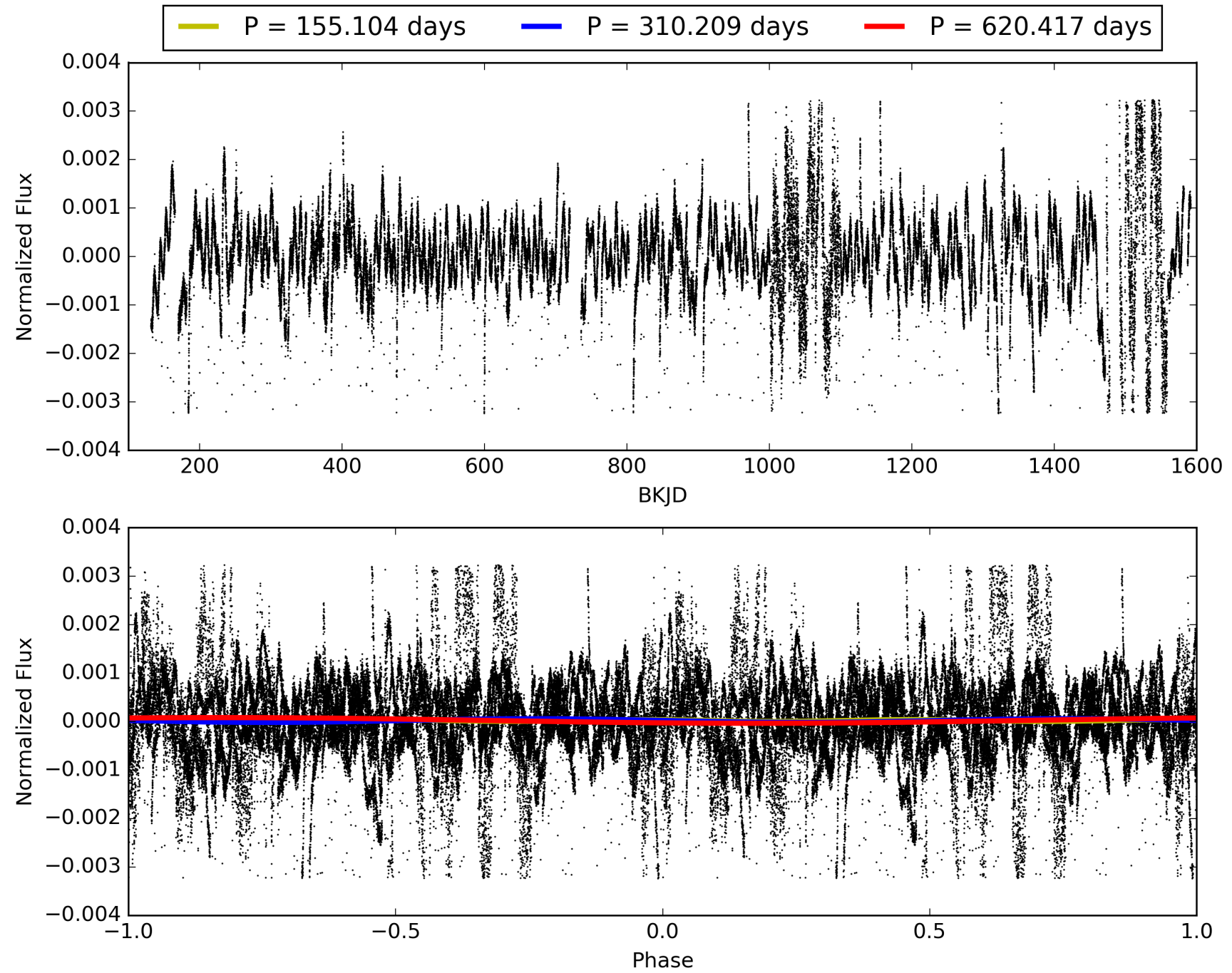
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 23:39:19 Z

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

TCE 008906676-03, PDC Light Curves

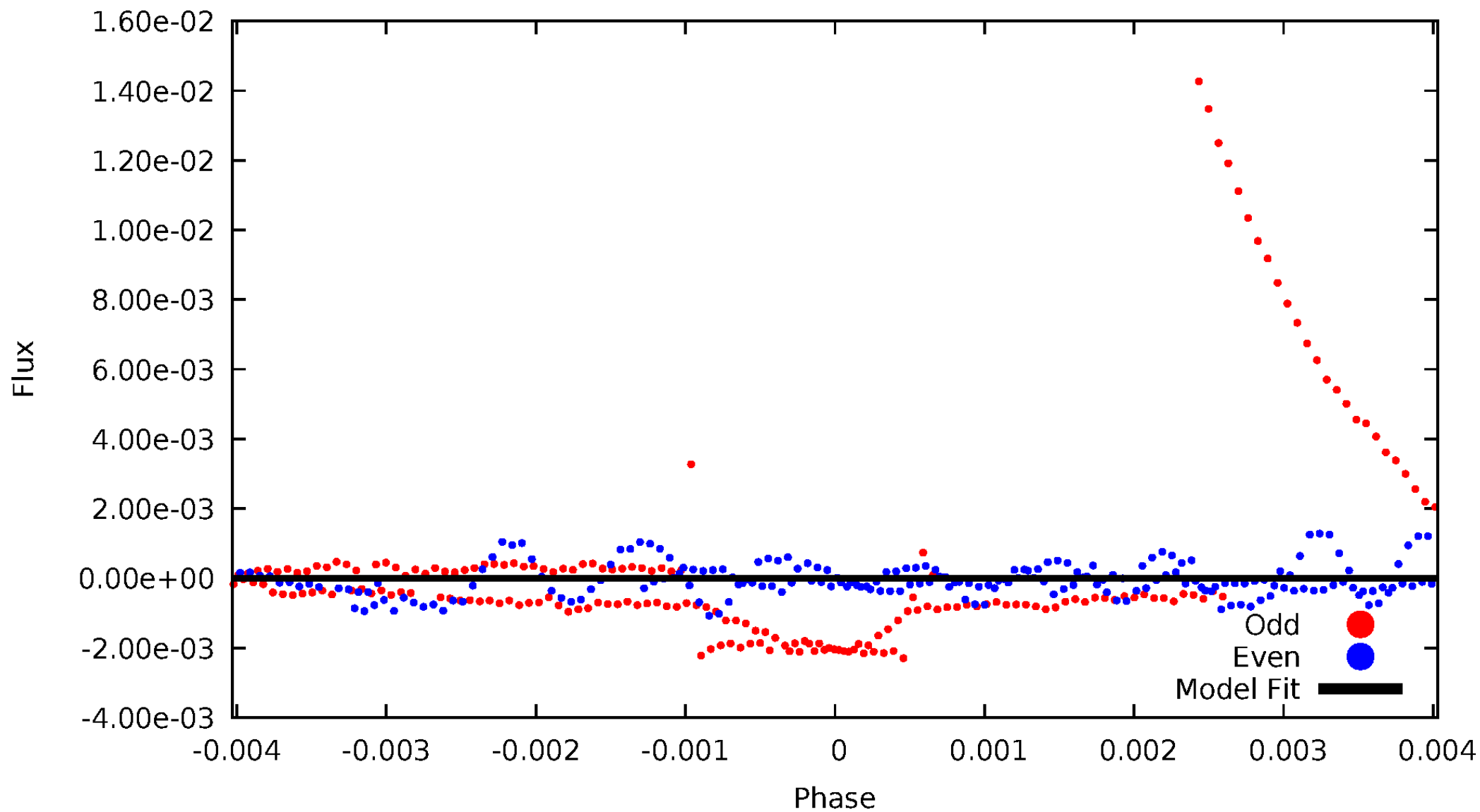


TCE 008906676-03



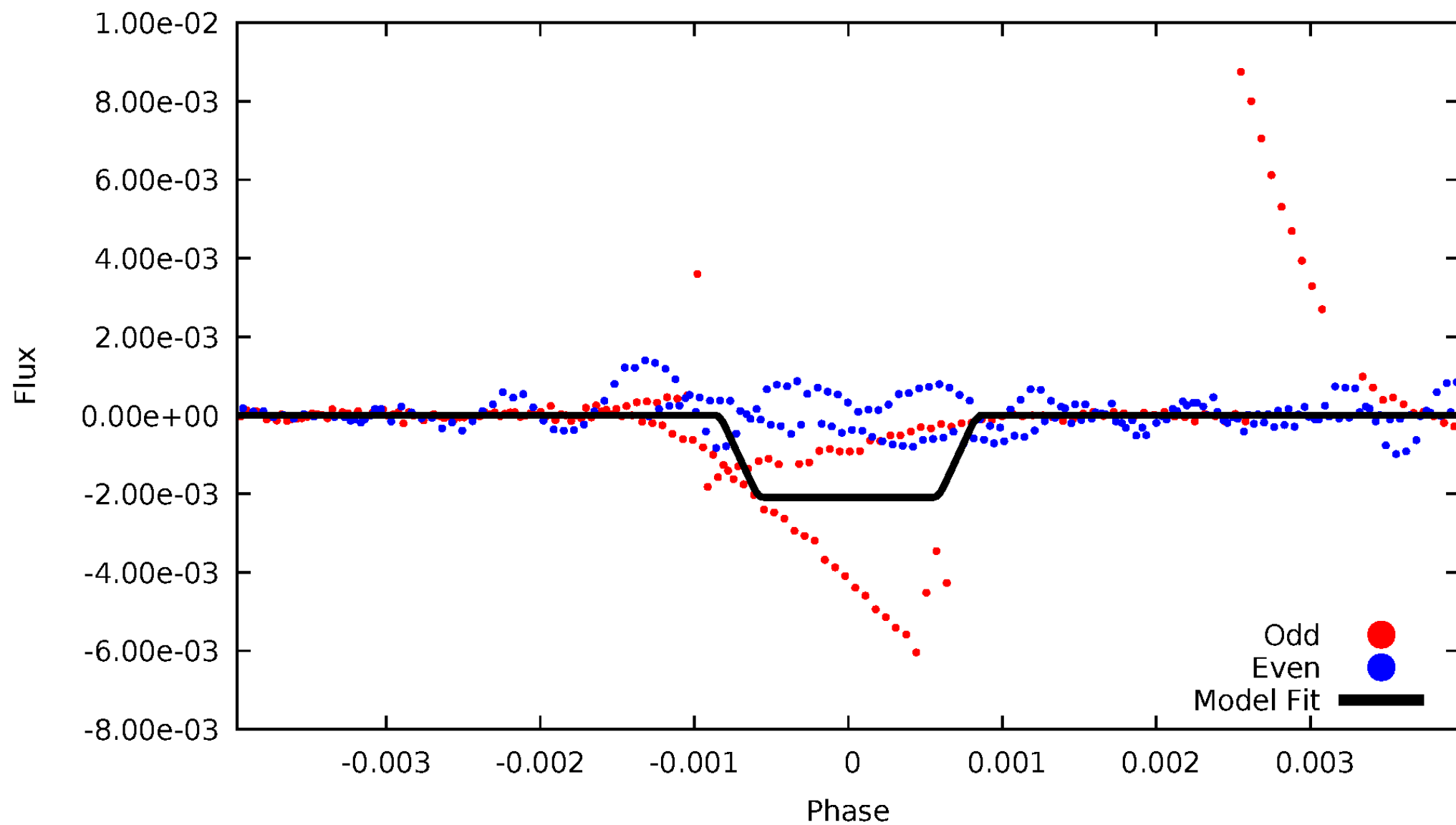
DV Odd/Even

TCE 008906676-03



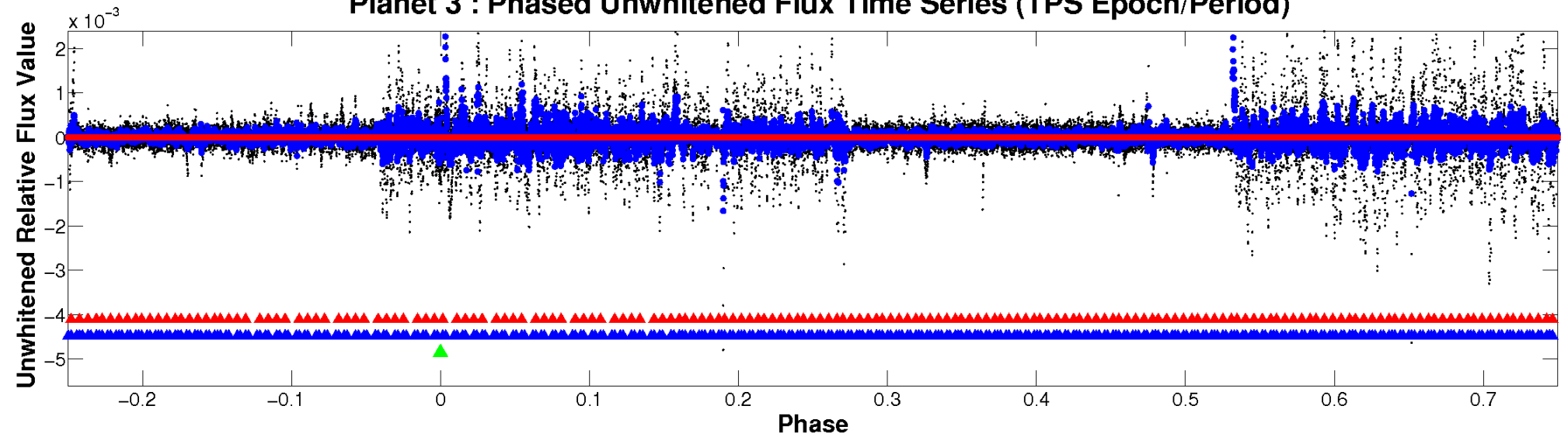
ALT Odd/Even

TCE 008906676-03

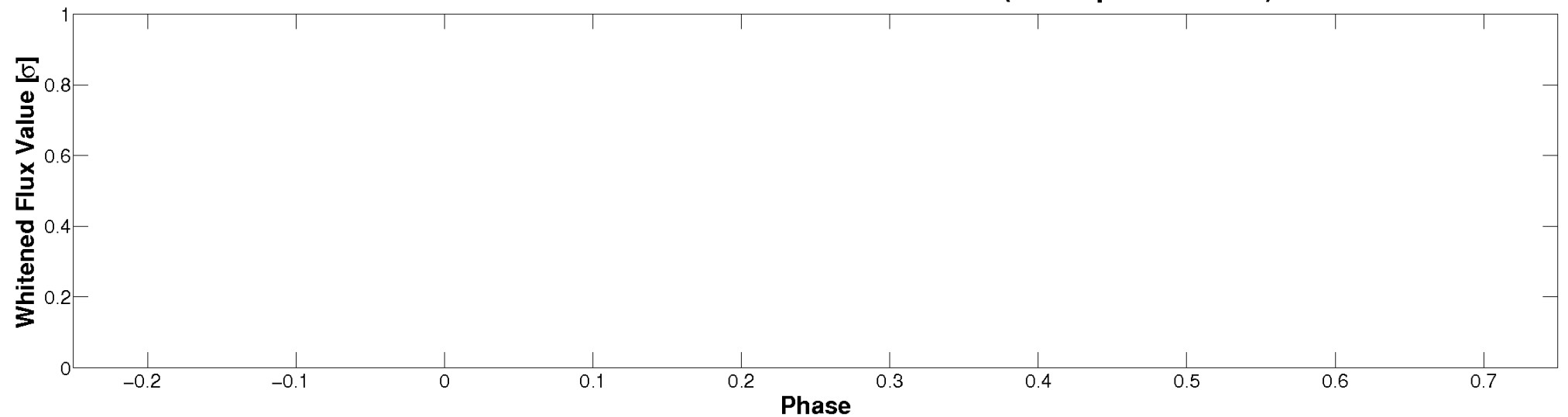


Non-Whitened Vs. Whitened Light Curve

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

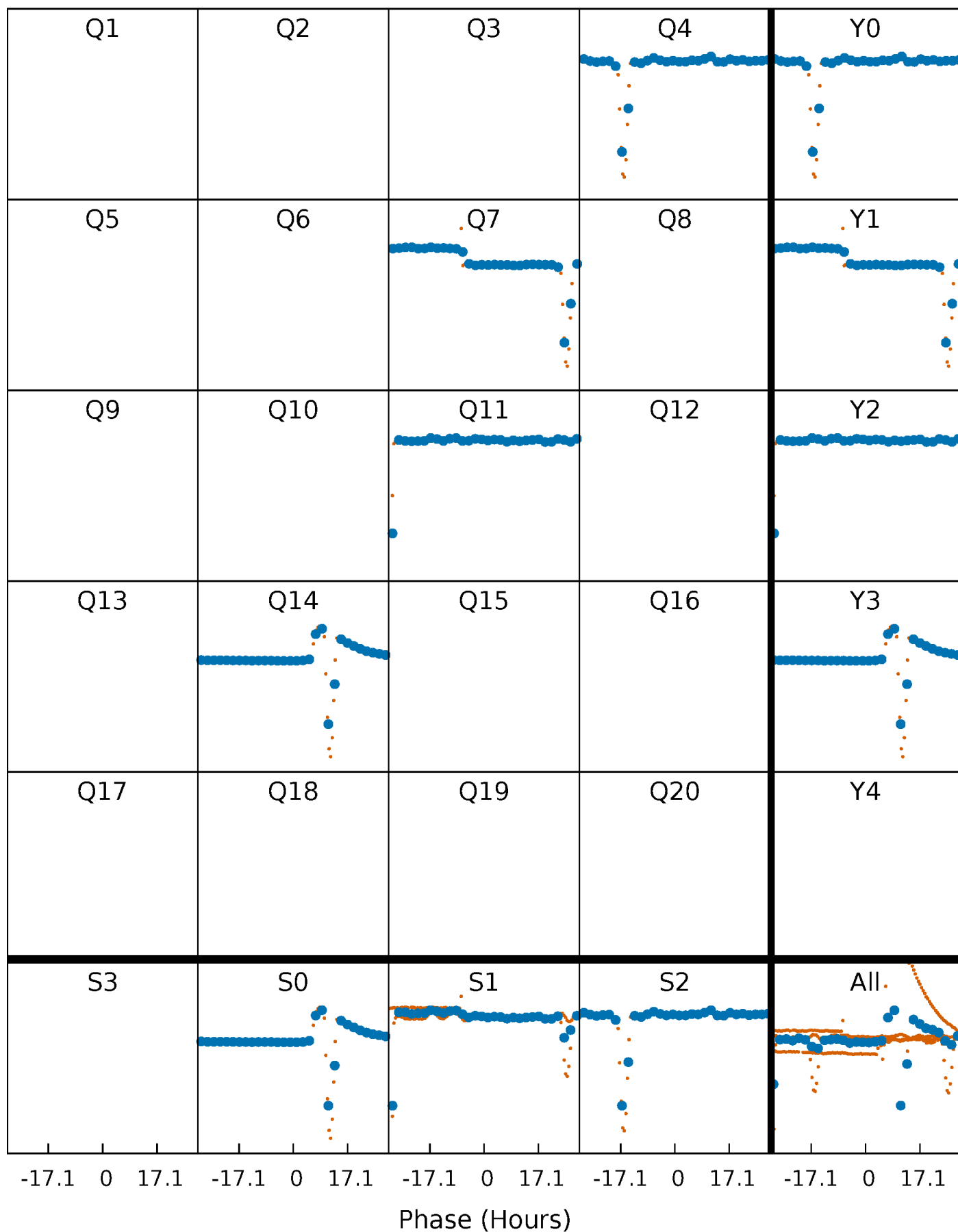


Planet 3 : Phased Whitened Flux Time Series (TPS Epoch/Period)



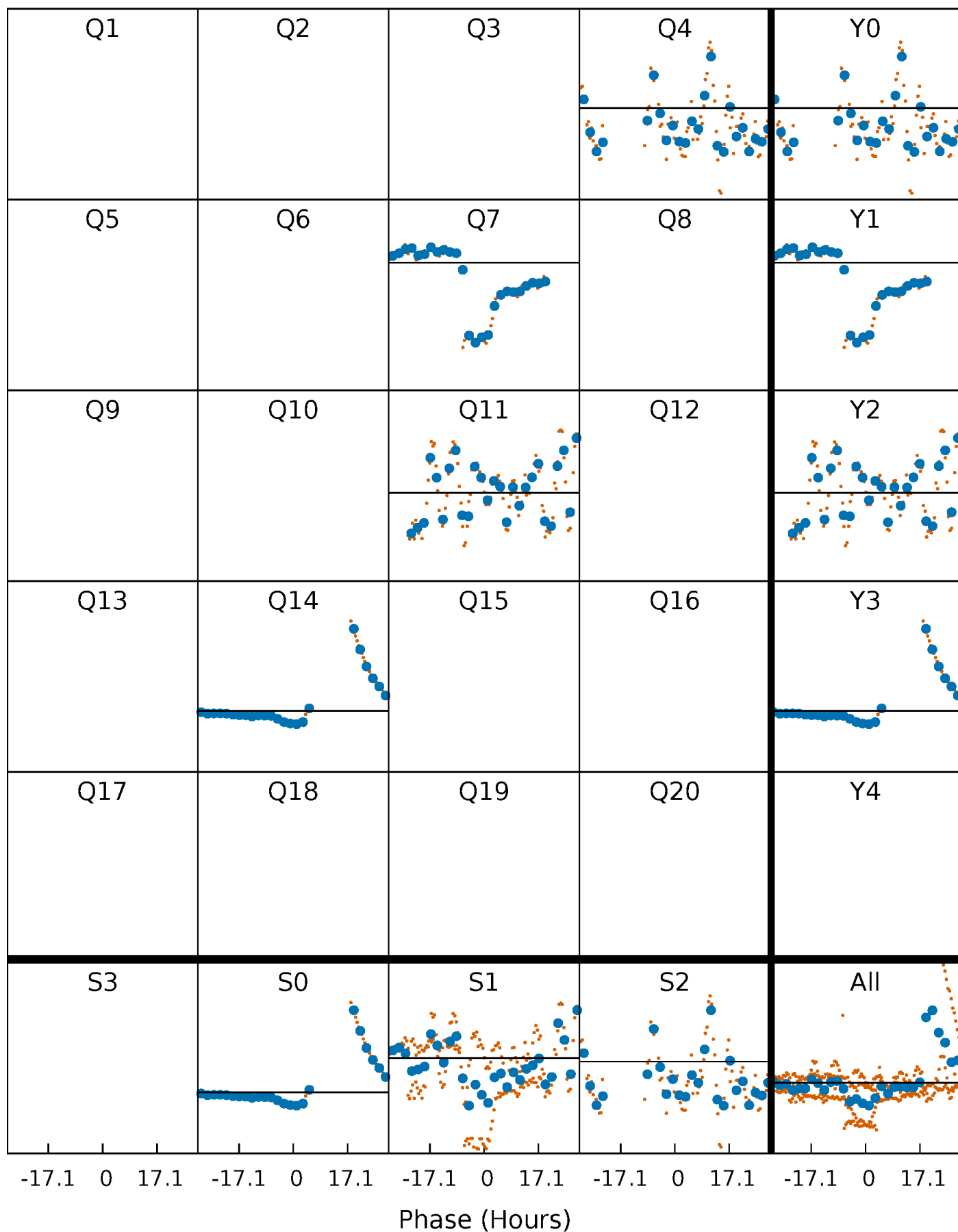
PDC Quarter-Phased Transit Curves

TCE 008906676-03 P=310.208686 Days $T_0=393.333009$ (BKJD)



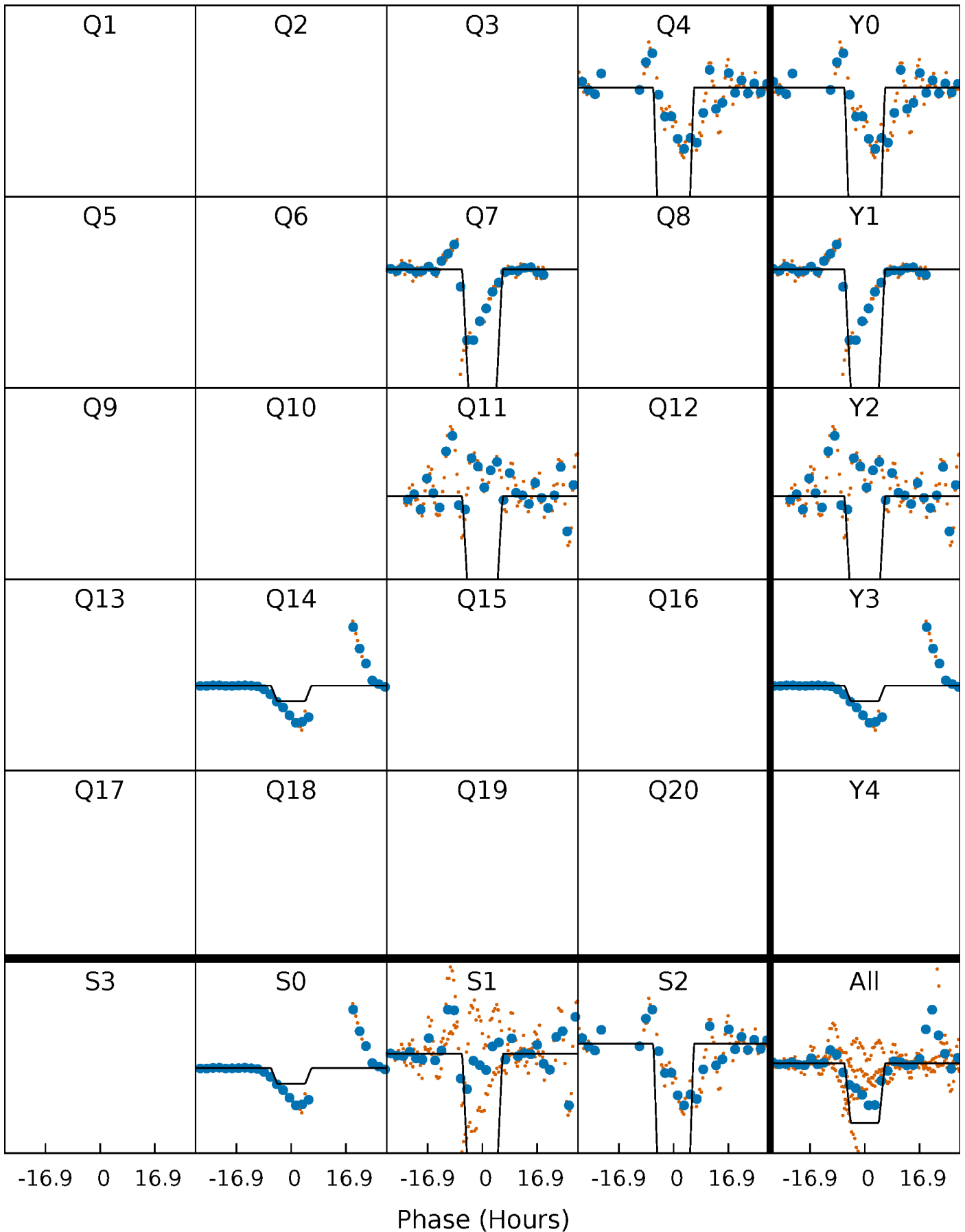
DV Quarter-Phased Transit Curves

TCE 008906676-03 P=310.208686 Days $T_0=393.333009$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

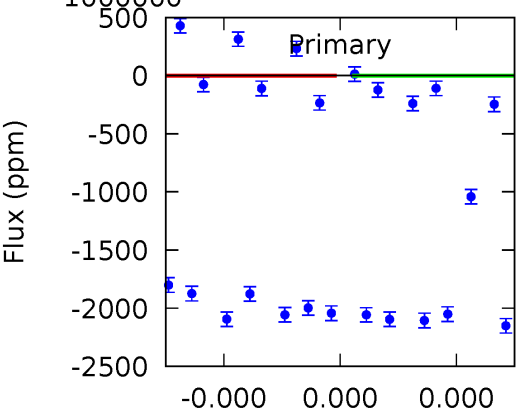
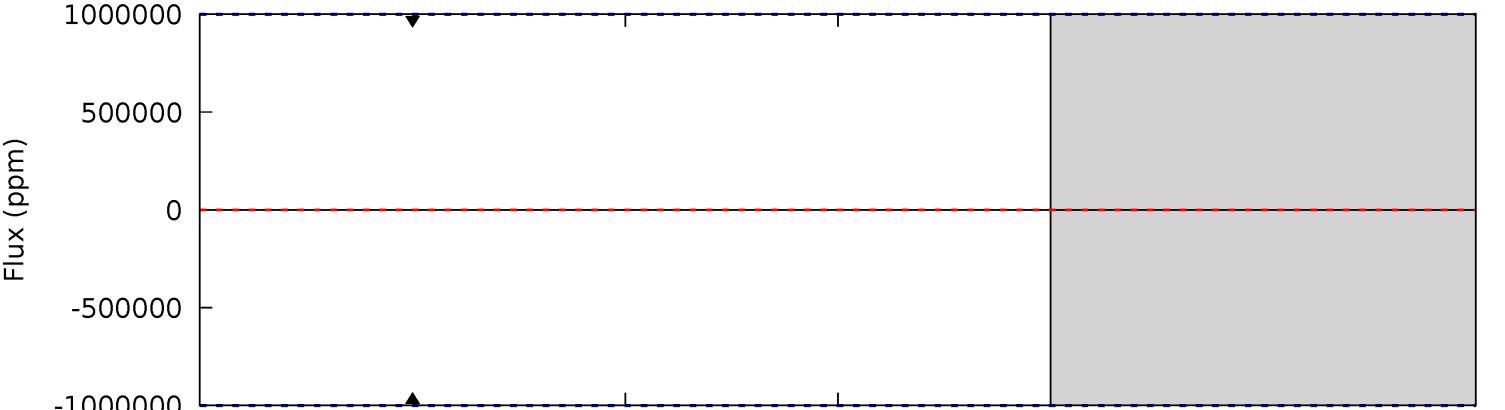
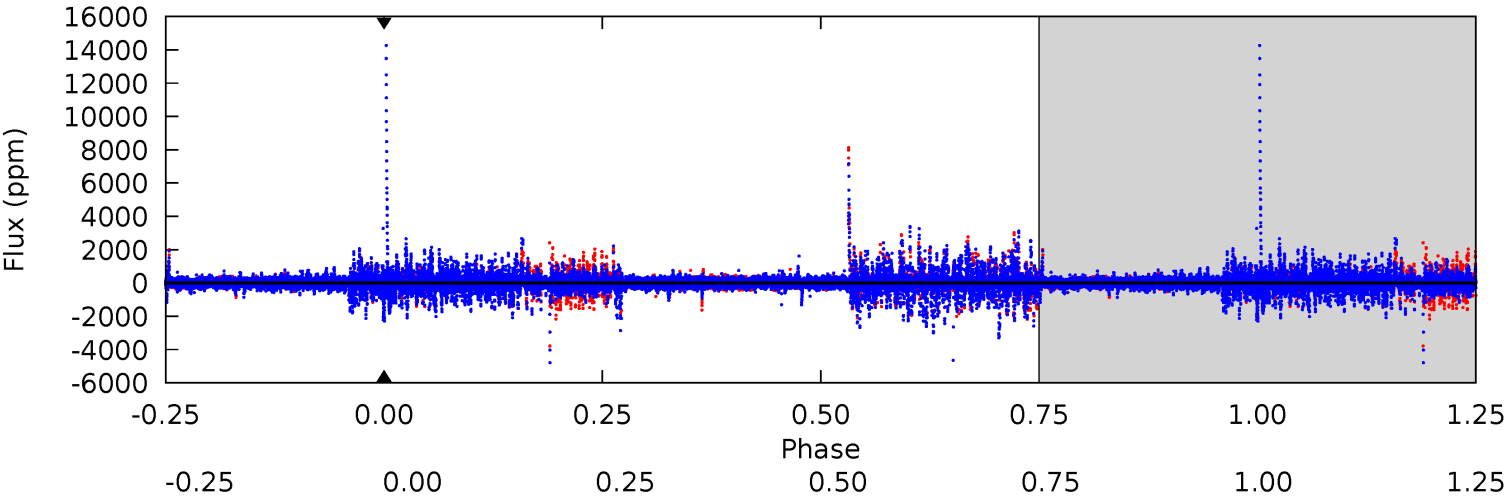
TCE 008906676-03 $P=310.208686$ Days $T_0=393.338083$ (BKJD)



DV Model-Shift Uniqueness Test

008906676-03, P = 310.208686 Days, E = 83.124323 Days

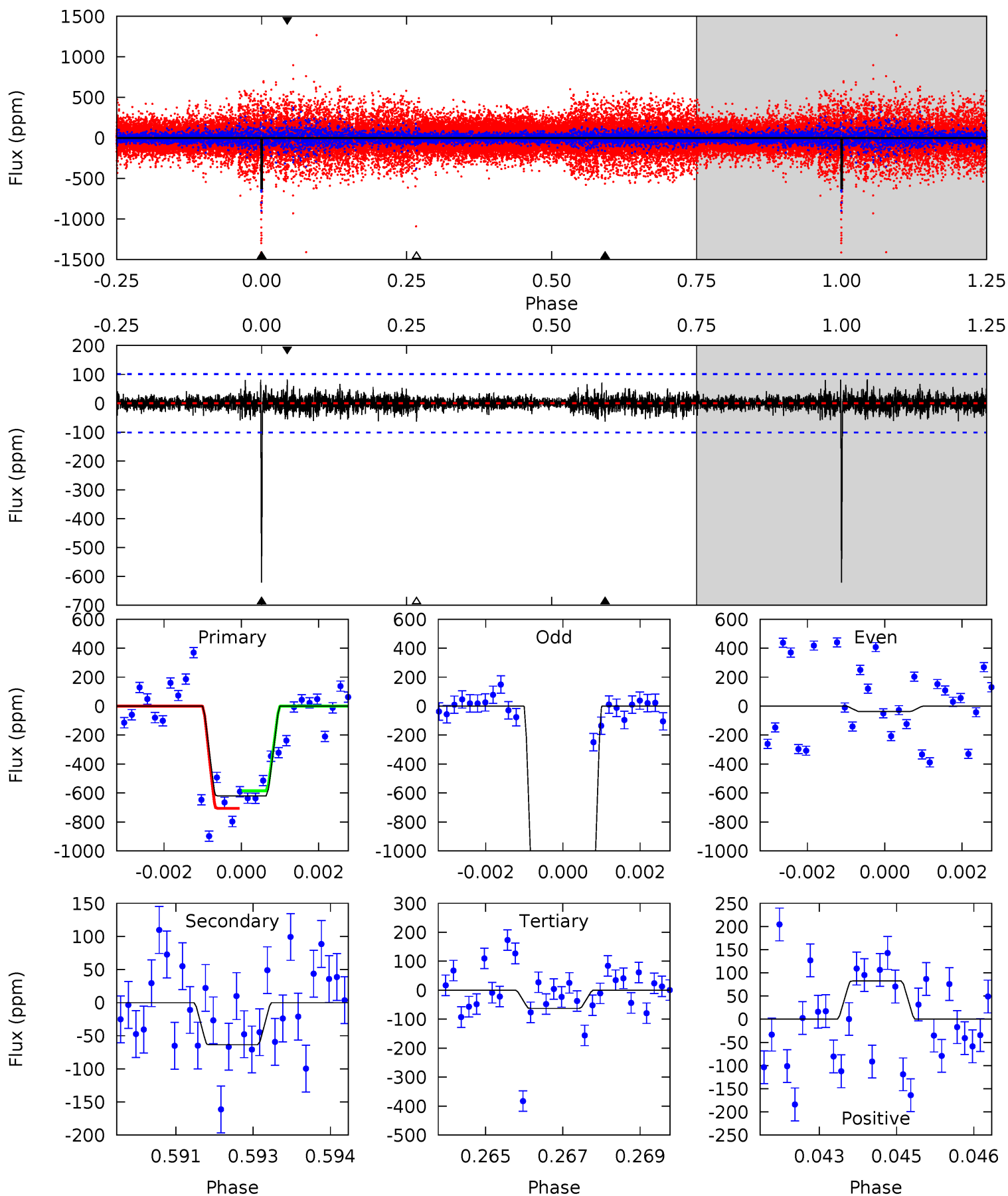
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008906676-03, P = 310.208686 Days, E = 83.129397 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.9	3.37	3.34	4.37	5.35	3.14	0.81	29.6	28.5	0.04	-1.00	65.6	1.83	0.12	0



Stellar Parameters For KIC 008906676

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6258^{+203}_{-248}	$3.882^{+0.464}_{-0.116}$	$-0.200^{+0.250}_{-0.300}$	$2.111^{+0.505}_{-0.938}$	$1.237^{+0.185}_{-0.255}$	$0.185^{+0.739}_{-0.076}$
	+3%/-4%	+12%/-3%	+125%/-150%	+24%/-44%	+15%/-21%	+399%/-41%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 008906676-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$14.65^{+16.83}_{-10.11}$	552^{+46}_{-62}	3277^{+25777}_{-28682}	$589^{+533434}_{-368150}$
Alt.	-64 ± 19	$17.70^{+19.17}_{-12.36}$	555^{+44}_{-63}	2683^{+1020}_{-438}	93^{+949}_{-71}

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

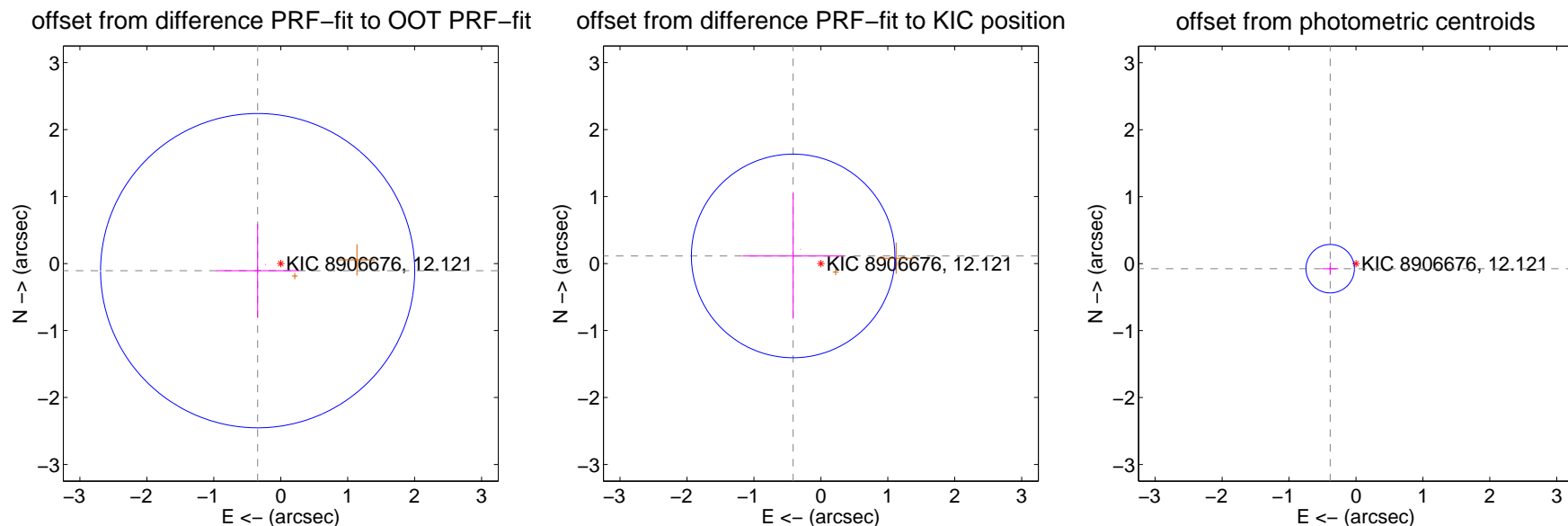
DV Centroid Data

Supplemental centroid analysis for 008906676-03. Kepler magnitude: 12.12. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

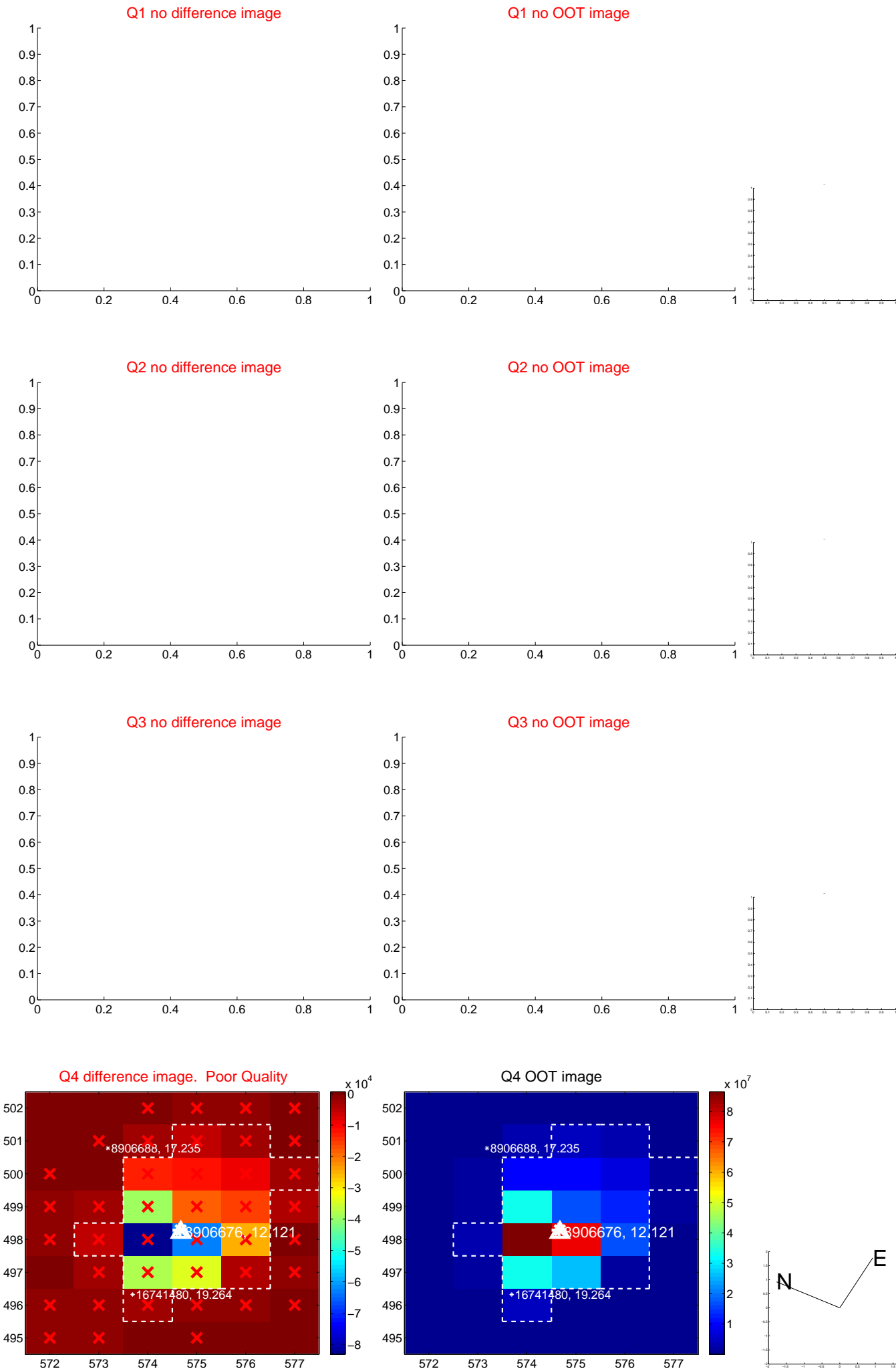
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.361 ± 0.782	0.46	0.345 ± 0.620	-0.106 ± 0.698
PRF-fit source offset from KIC position	0.430 ± 0.507	0.85	0.414 ± 0.757	0.113 ± 0.934
photometric centroid source offset	0.39 ± 0.12	3.25	0.39 ± 0.12	-0.08 ± 0.09



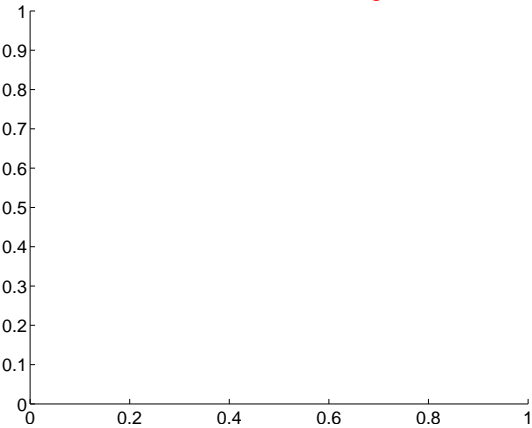
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

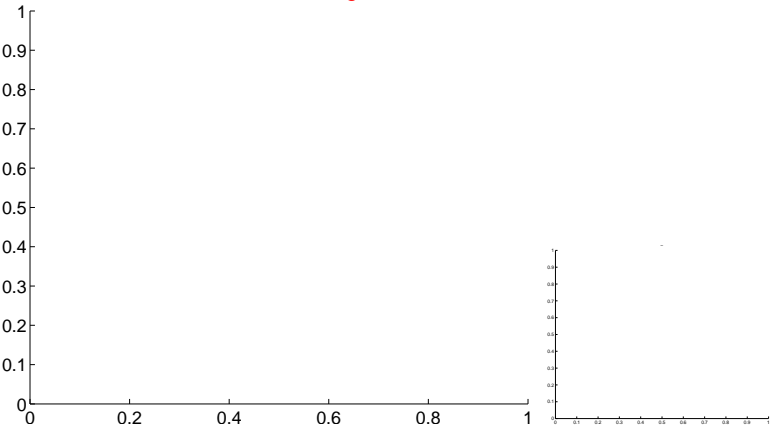


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

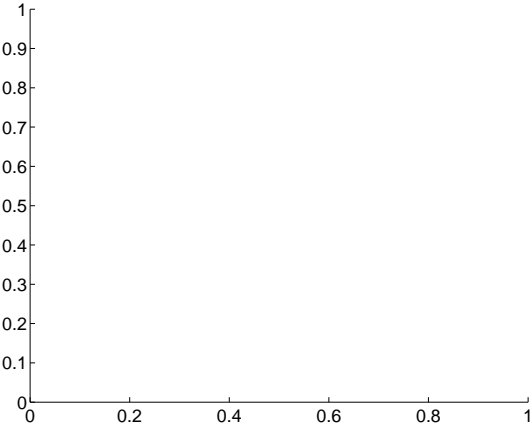
Q5 no difference image



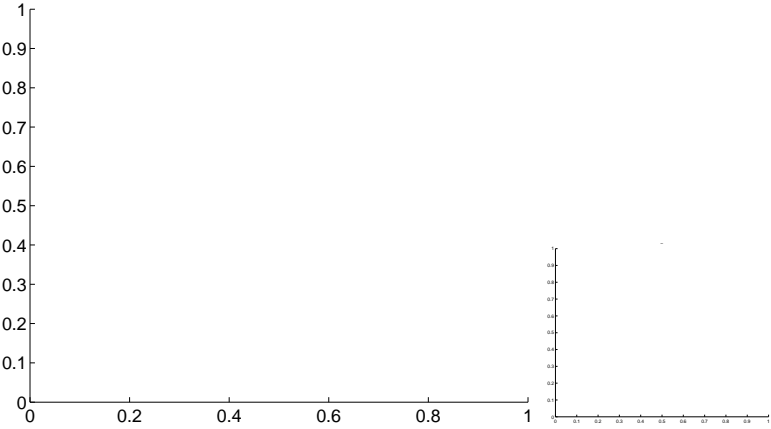
Q5 no OOT image



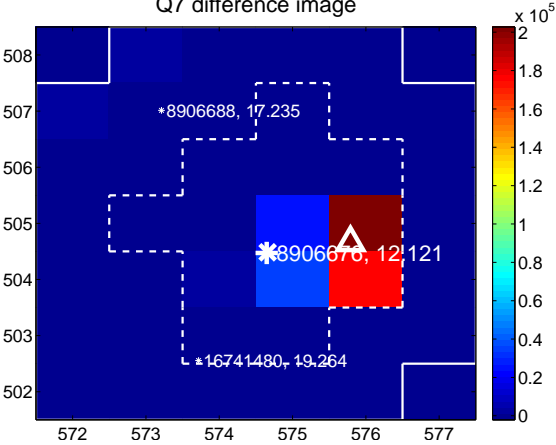
Q6 no difference image



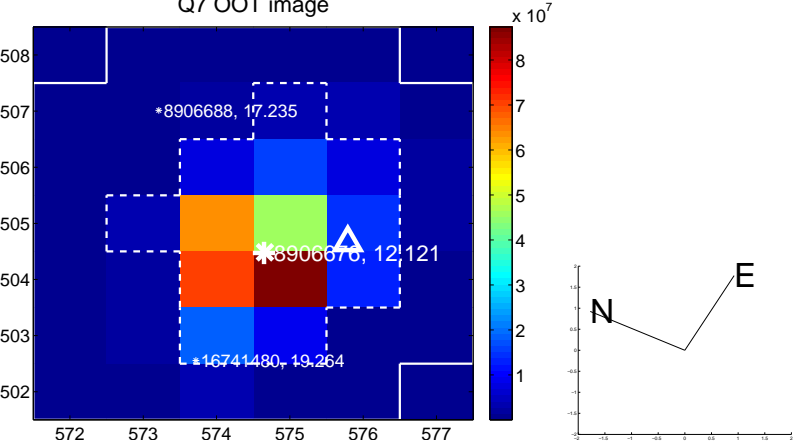
Q6 no OOT image



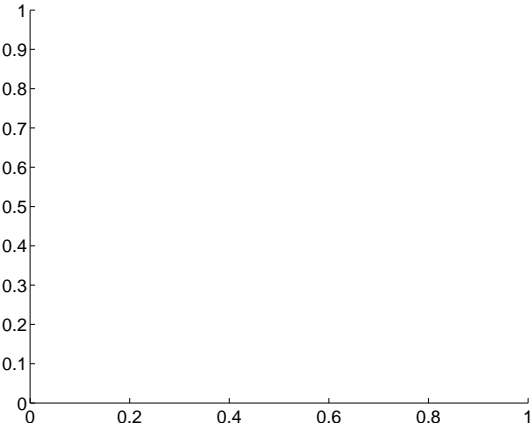
Q7 difference image



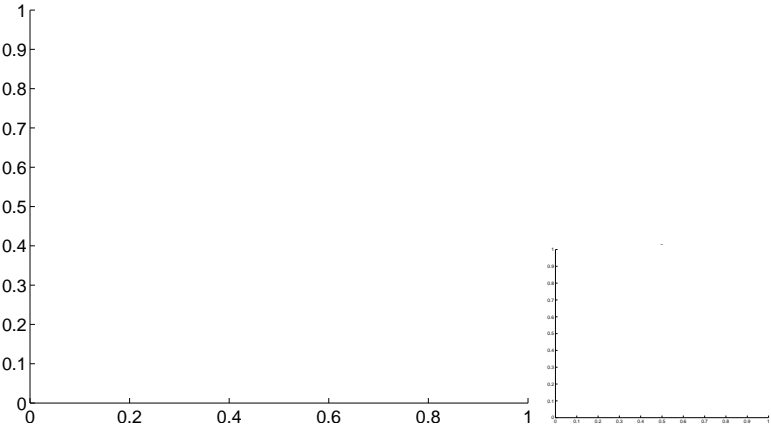
Q7 OOT image



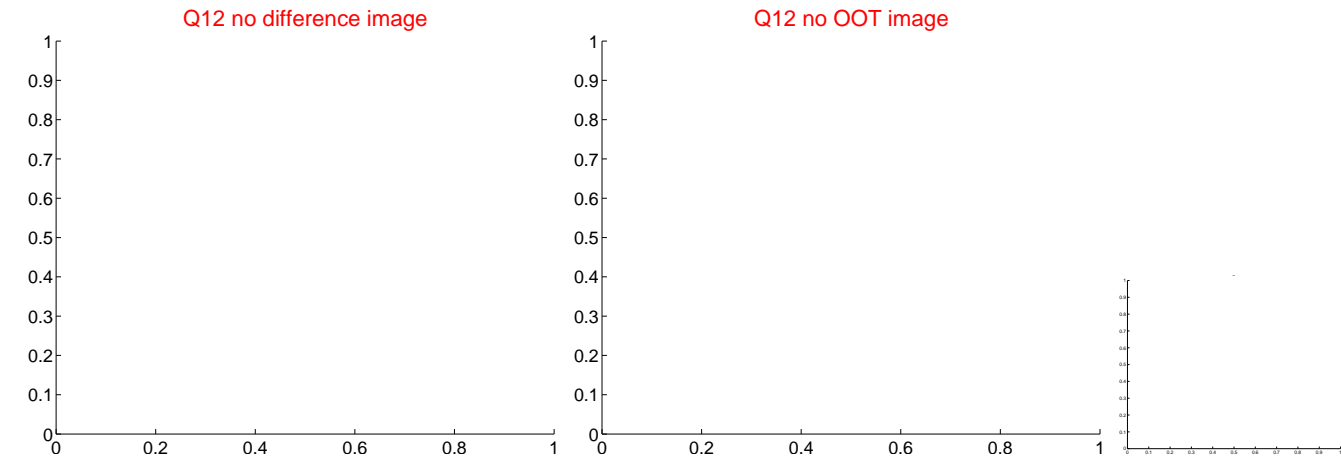
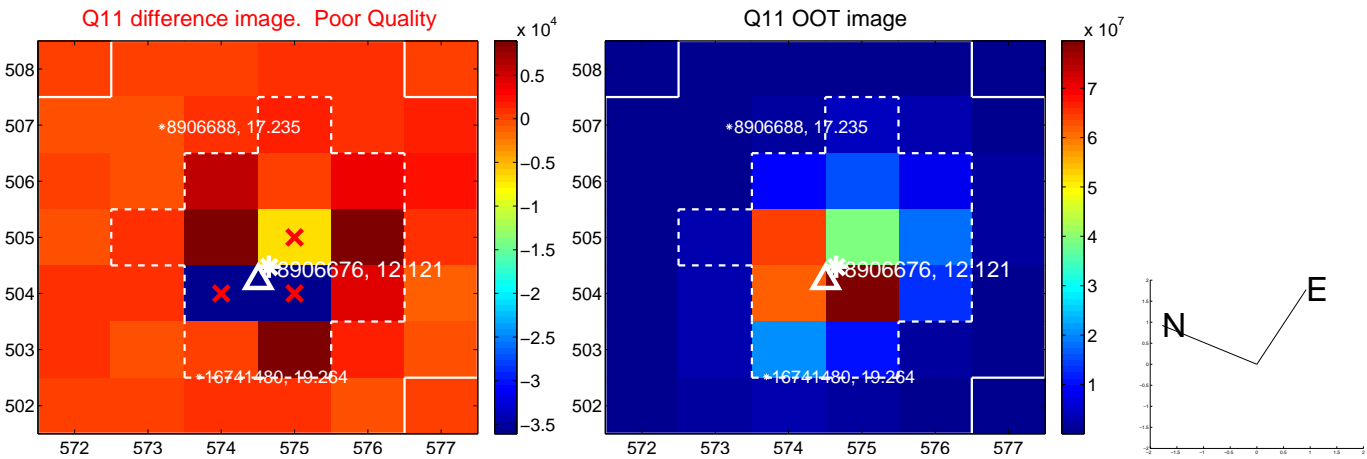
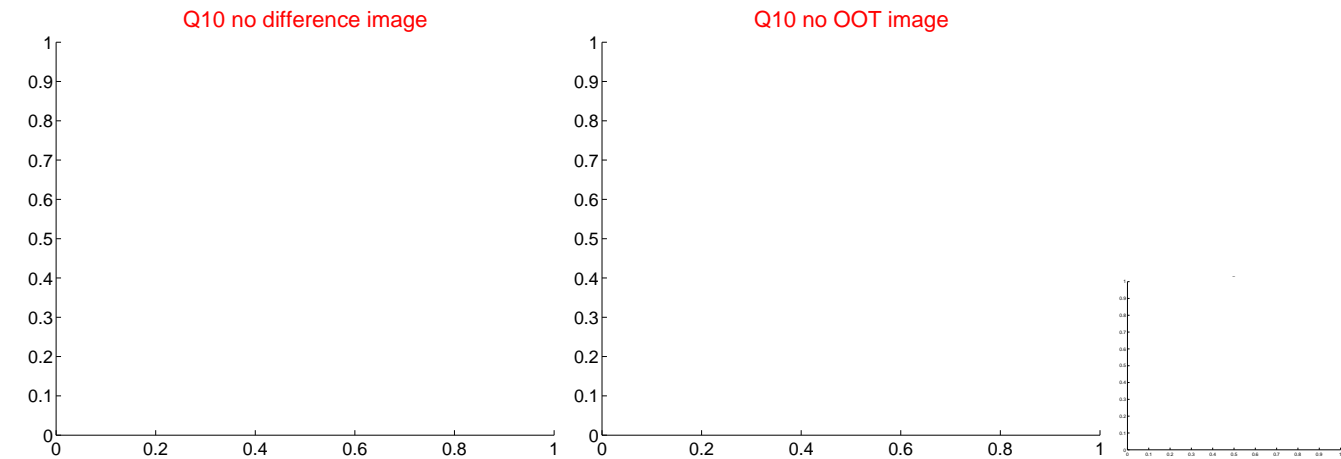
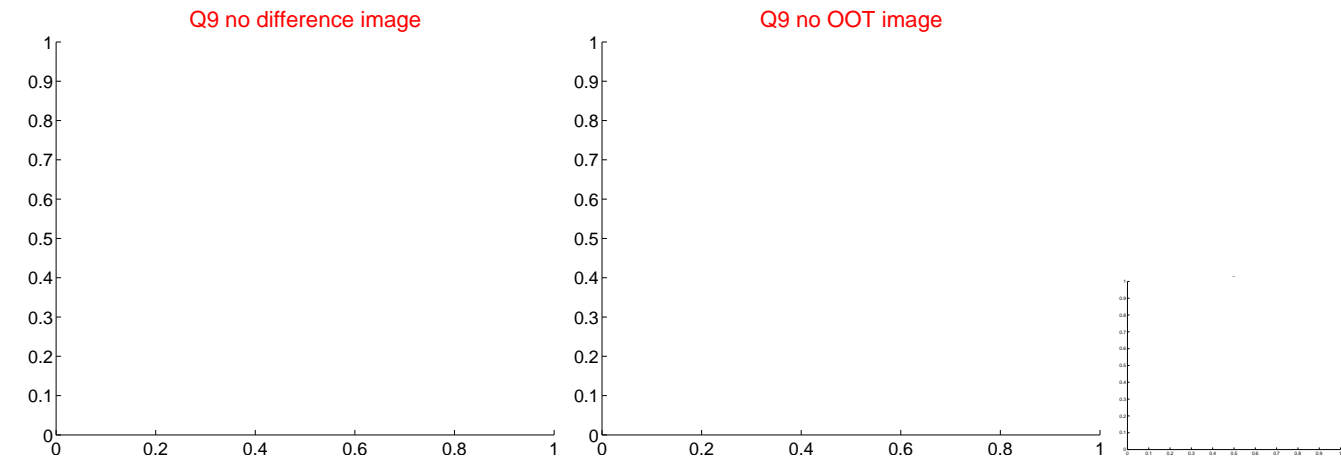
Q8 no difference image



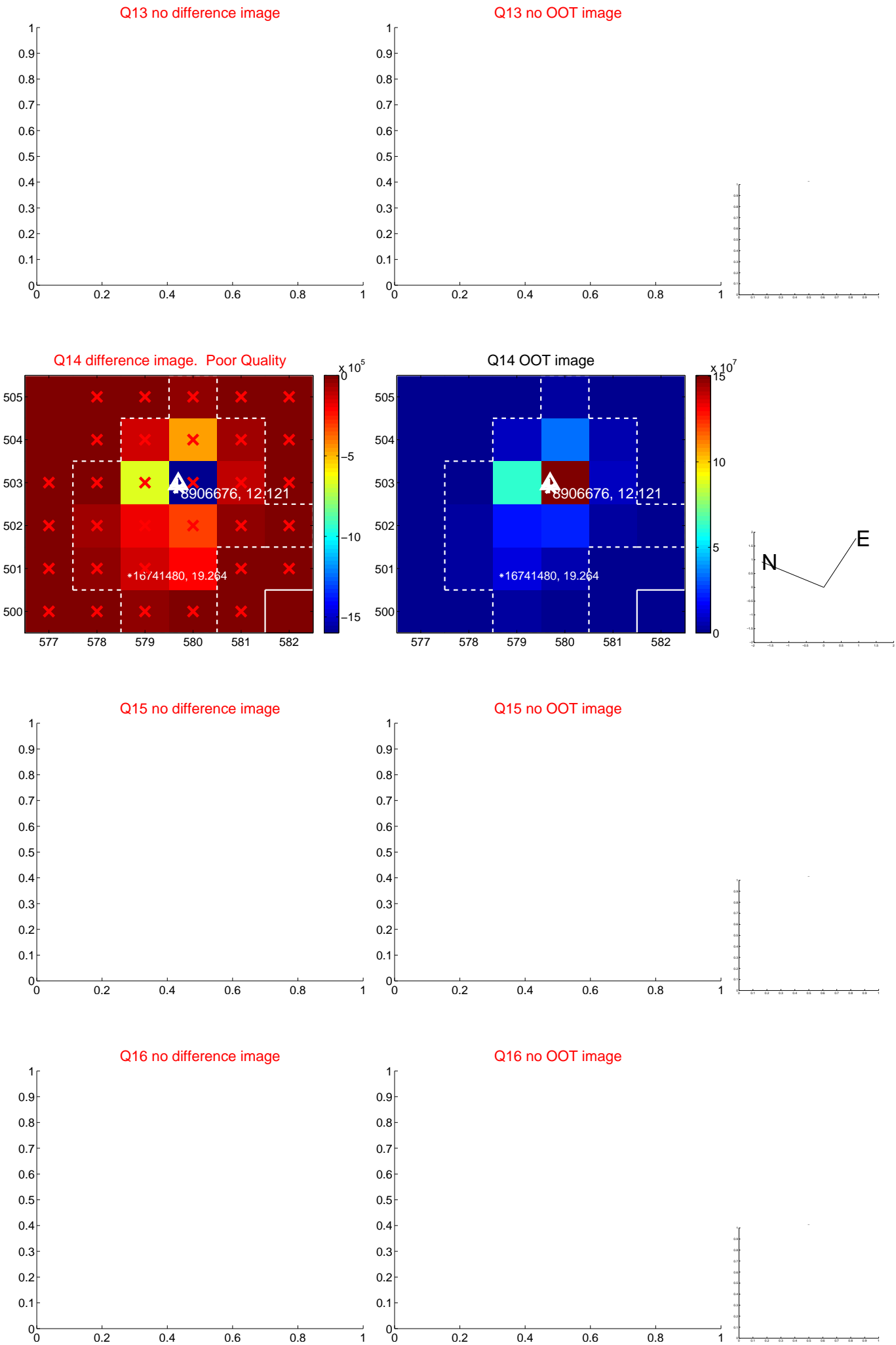
Q8 no OOT image



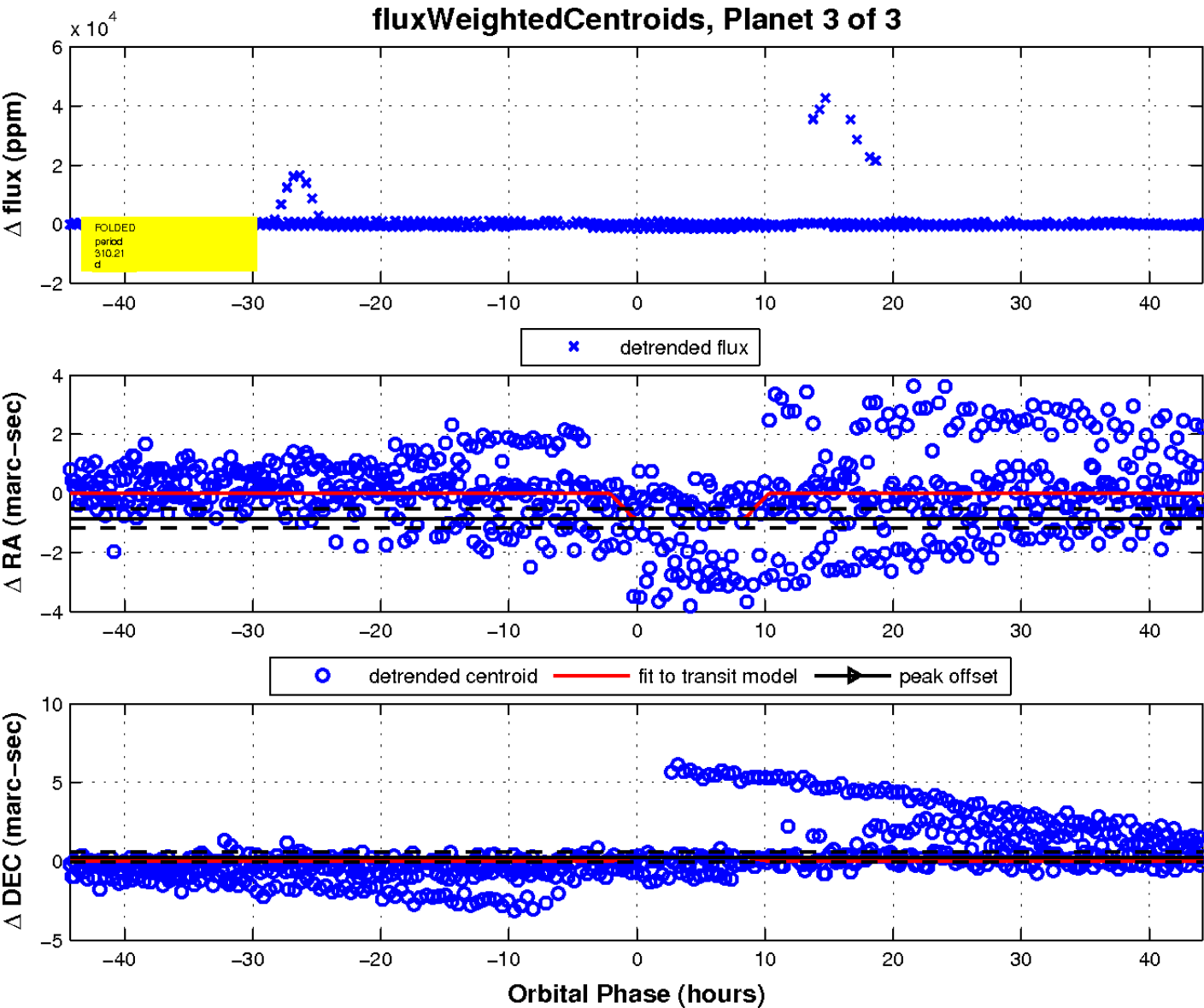
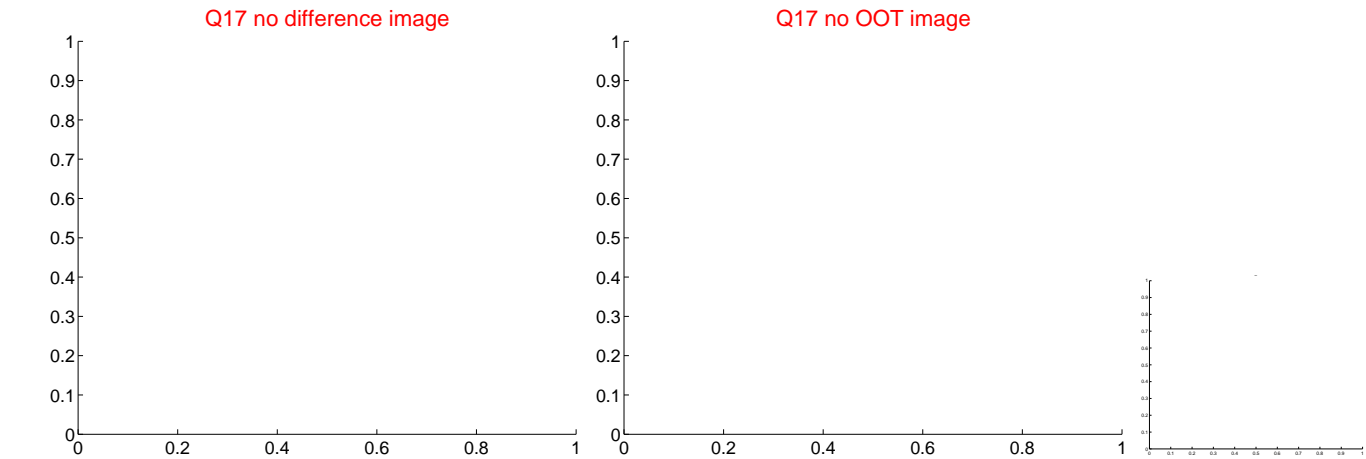
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

