

KIC 007008200

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})
007008200-01	OBS	No	1.767936	132.384220	13.6	5.920	8.0	6.6	1.57	7012	0.58	5653.96
007008200-02	OBS	No	176.152073	162.866590	35.1	8.755	11.4	1.7	1.57	7012	1.07	12.24
007008200-03	OBS	No	280.203243	380.924533	157.8	6.000	7.4	5.5	1.57	7012	2.23	6.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007008200-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV
007008200-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
007008200-03	OBS	FP	0.03	1	0	0	0	MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

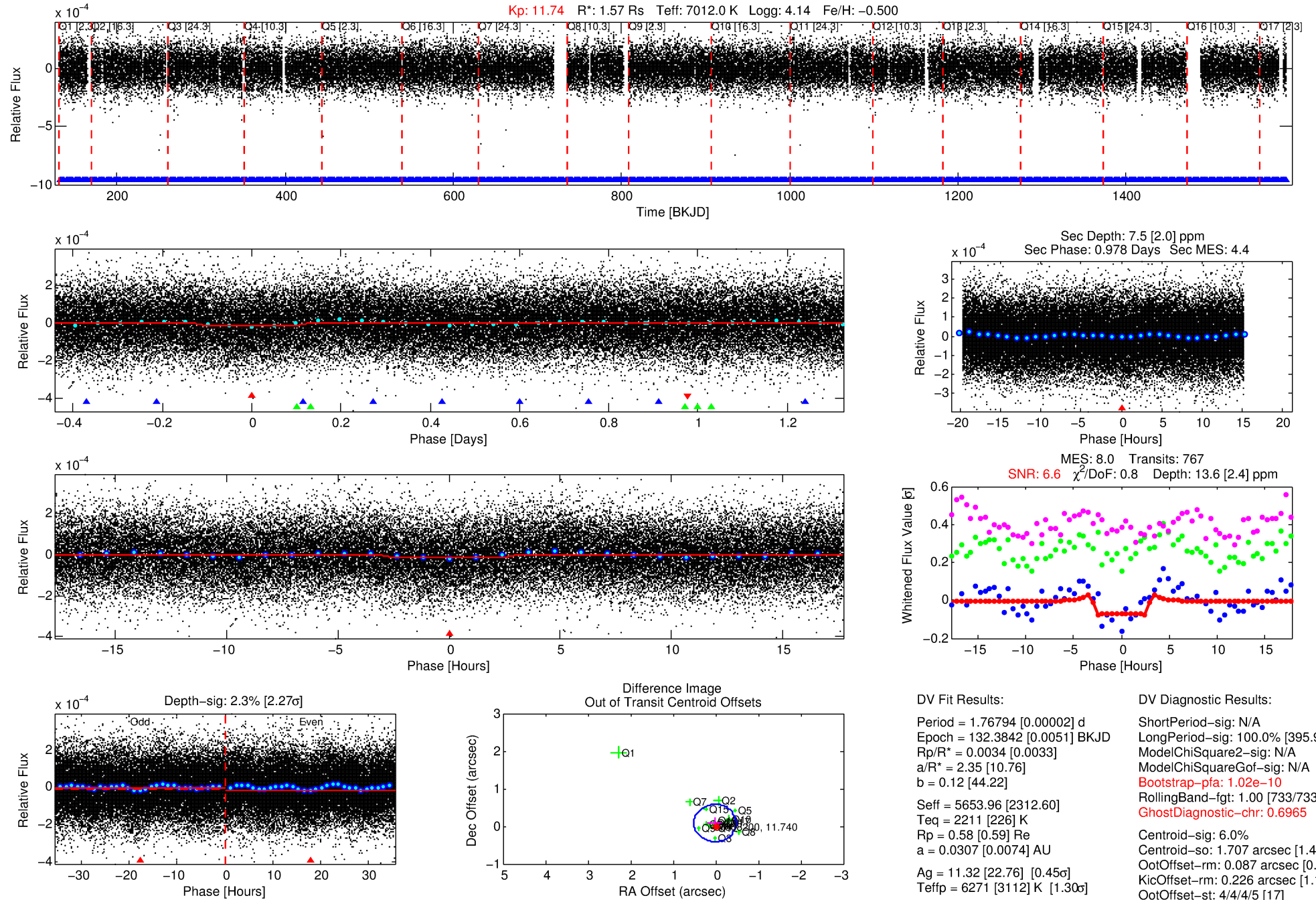
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007008200-01

No Significant Match Found

DV One-Page Summary

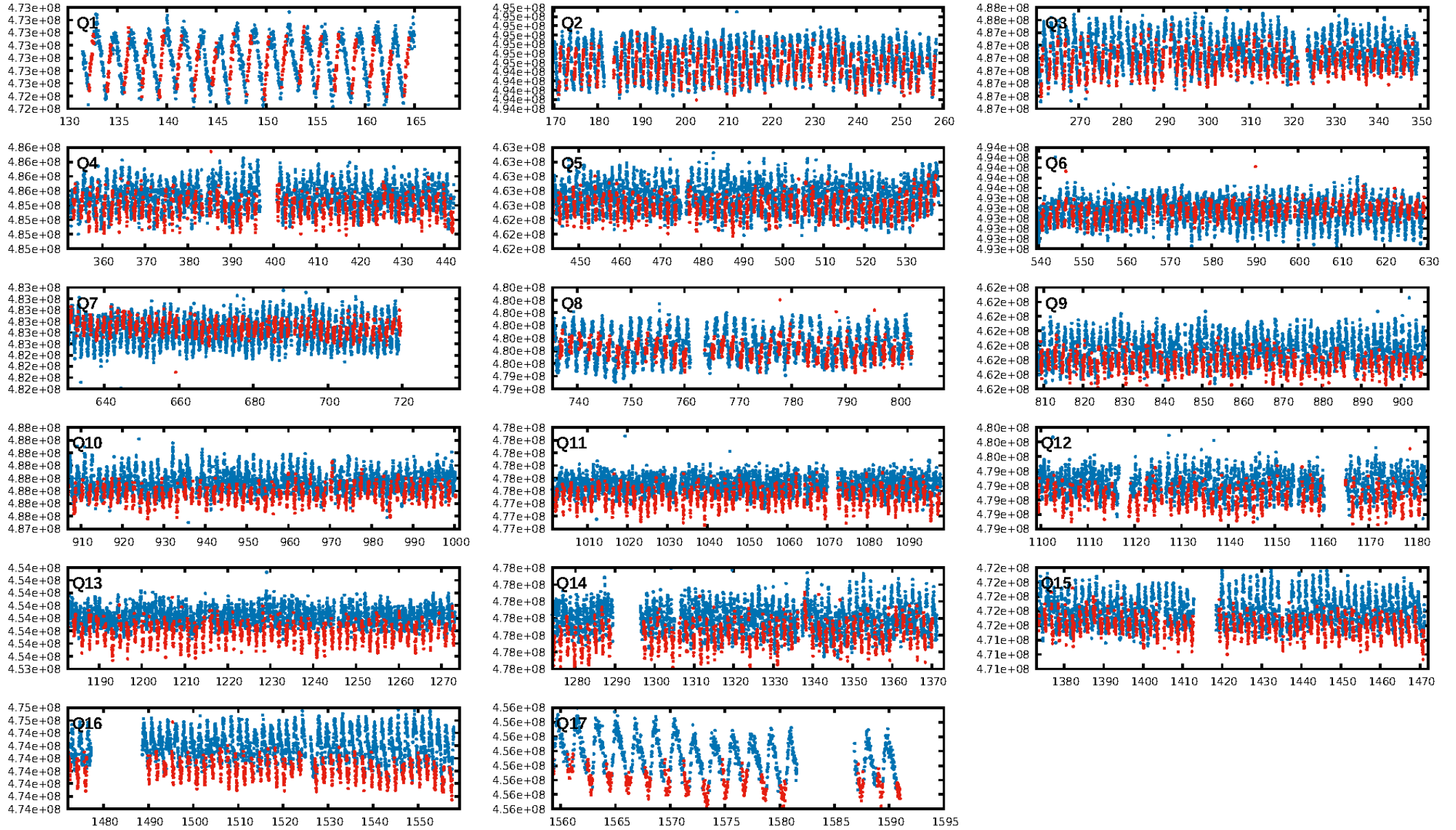
KIC: 7008200 Candidate: 1 of 3 Period: 1.768 d



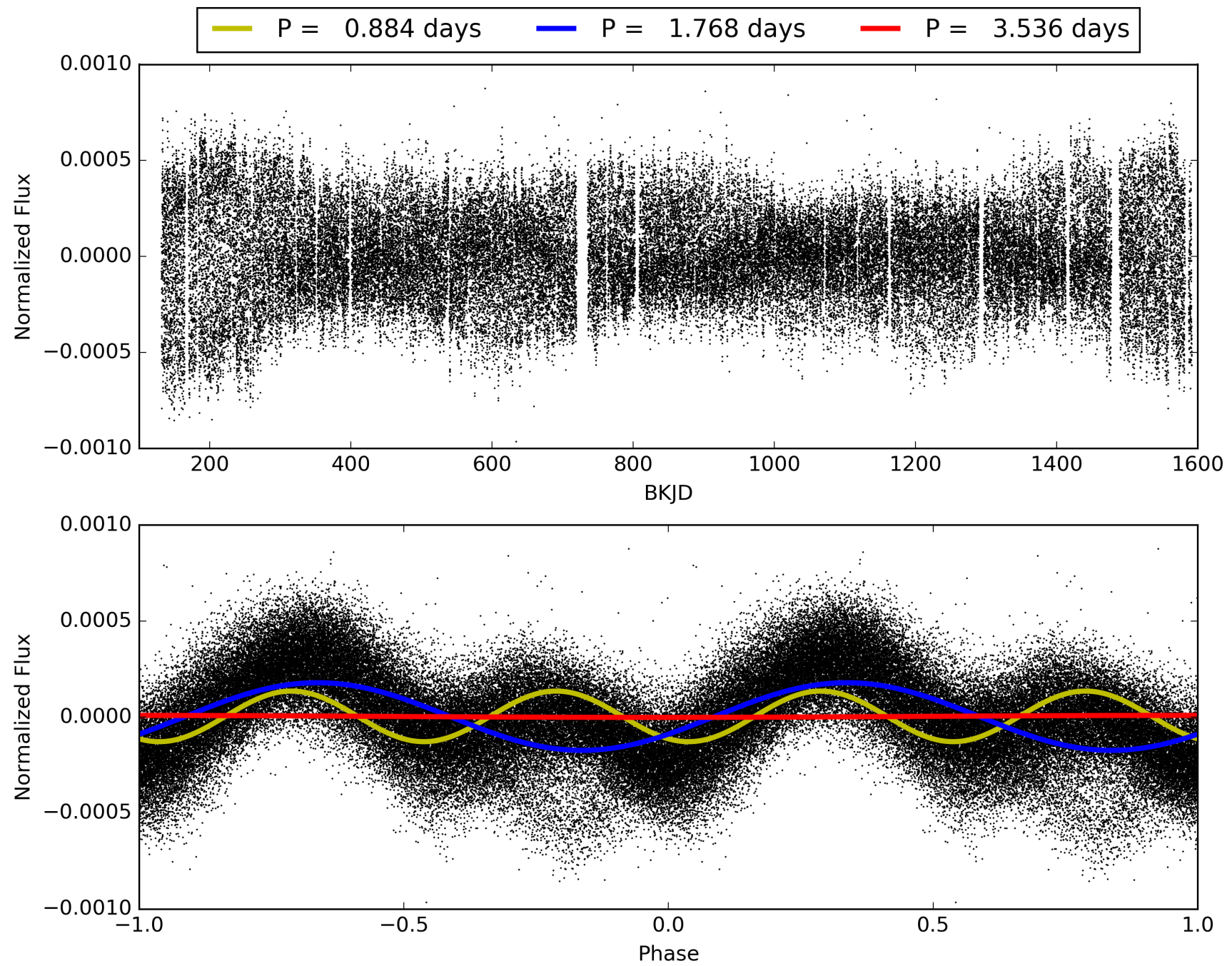
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 08:25:18 Z

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

TCE 007008200-01, PDC Light Curves

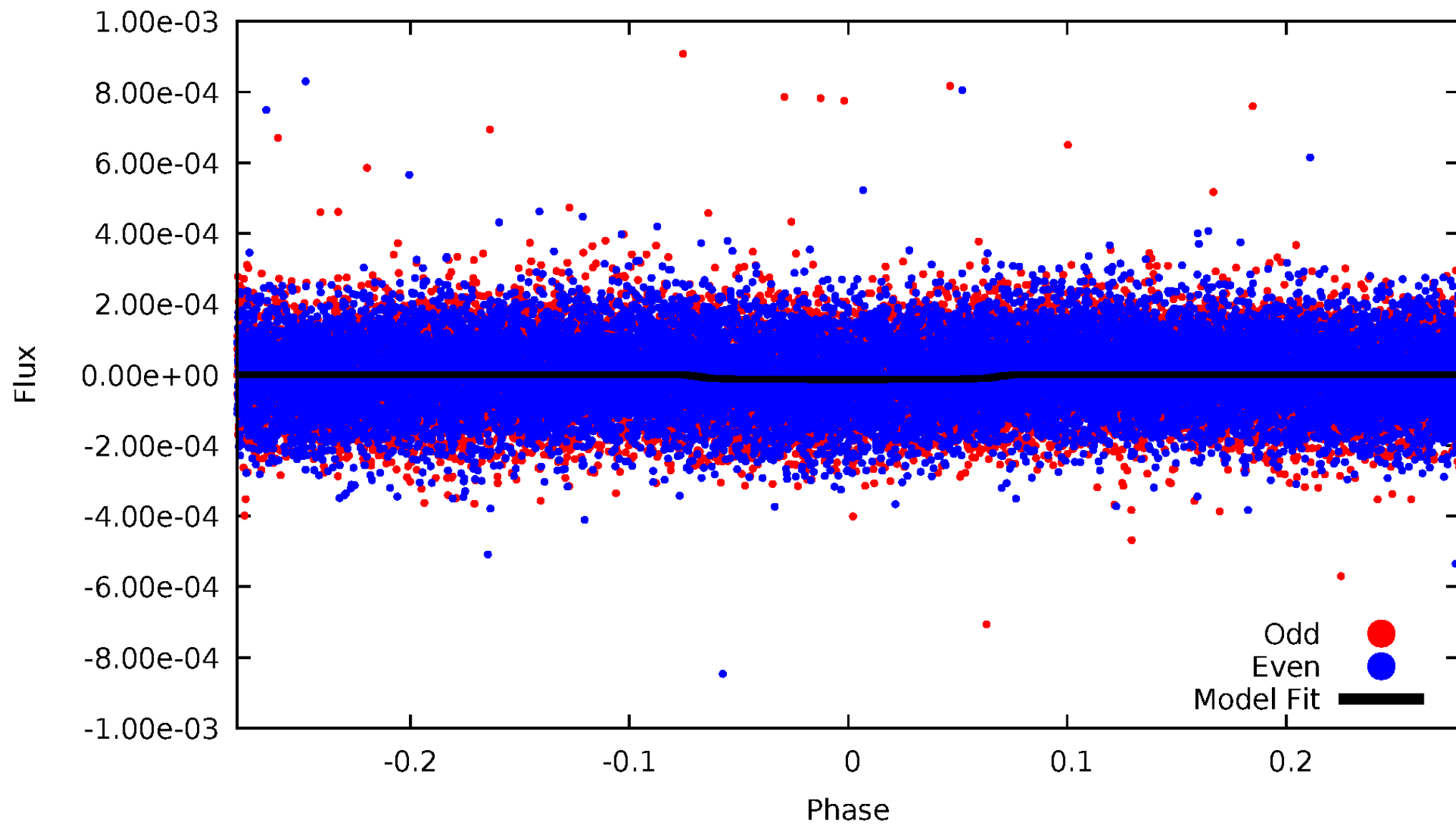


TCE 007008200-01



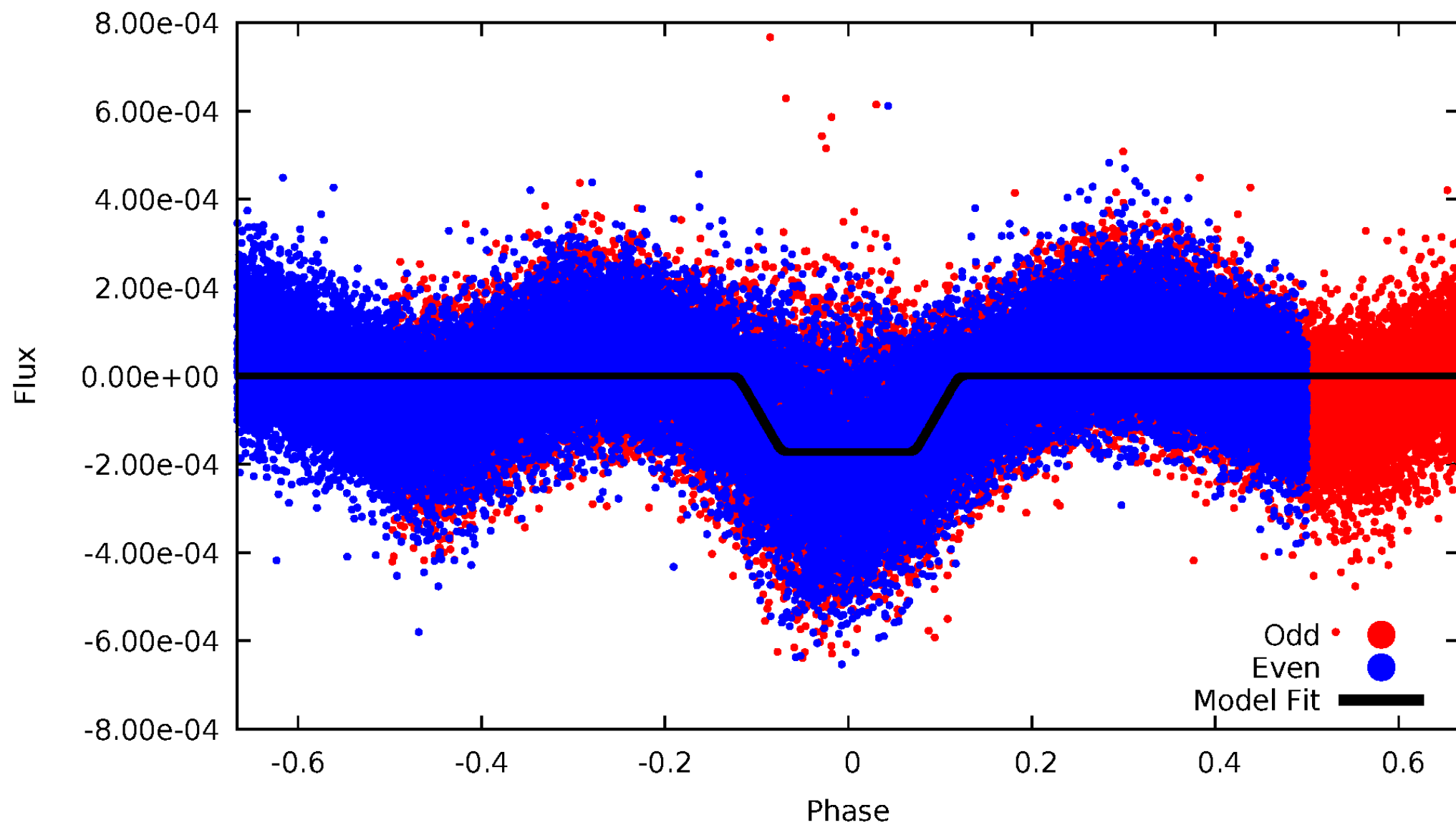
DV Odd/Even

TCE 007008200-01



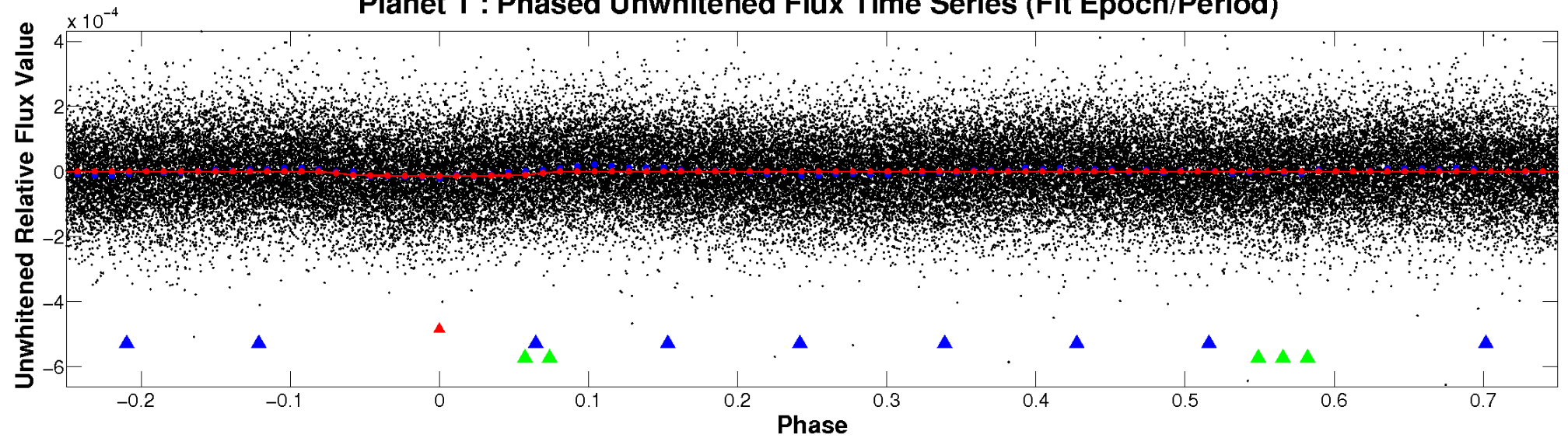
ALT Odd/Even

TCE 007008200-01

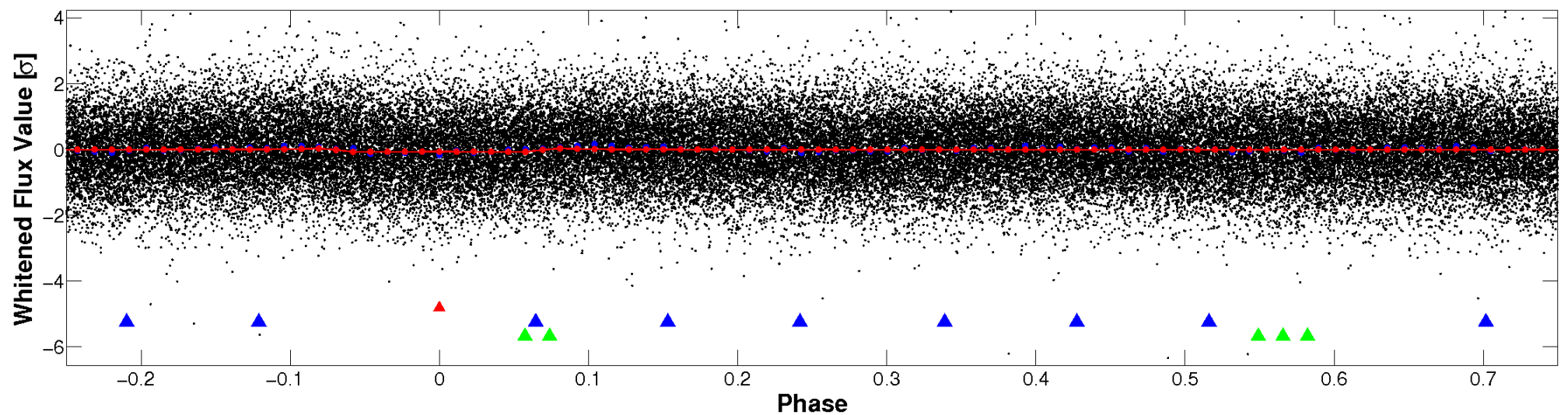


Non-Whitened Vs. Whitened Light Curve

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

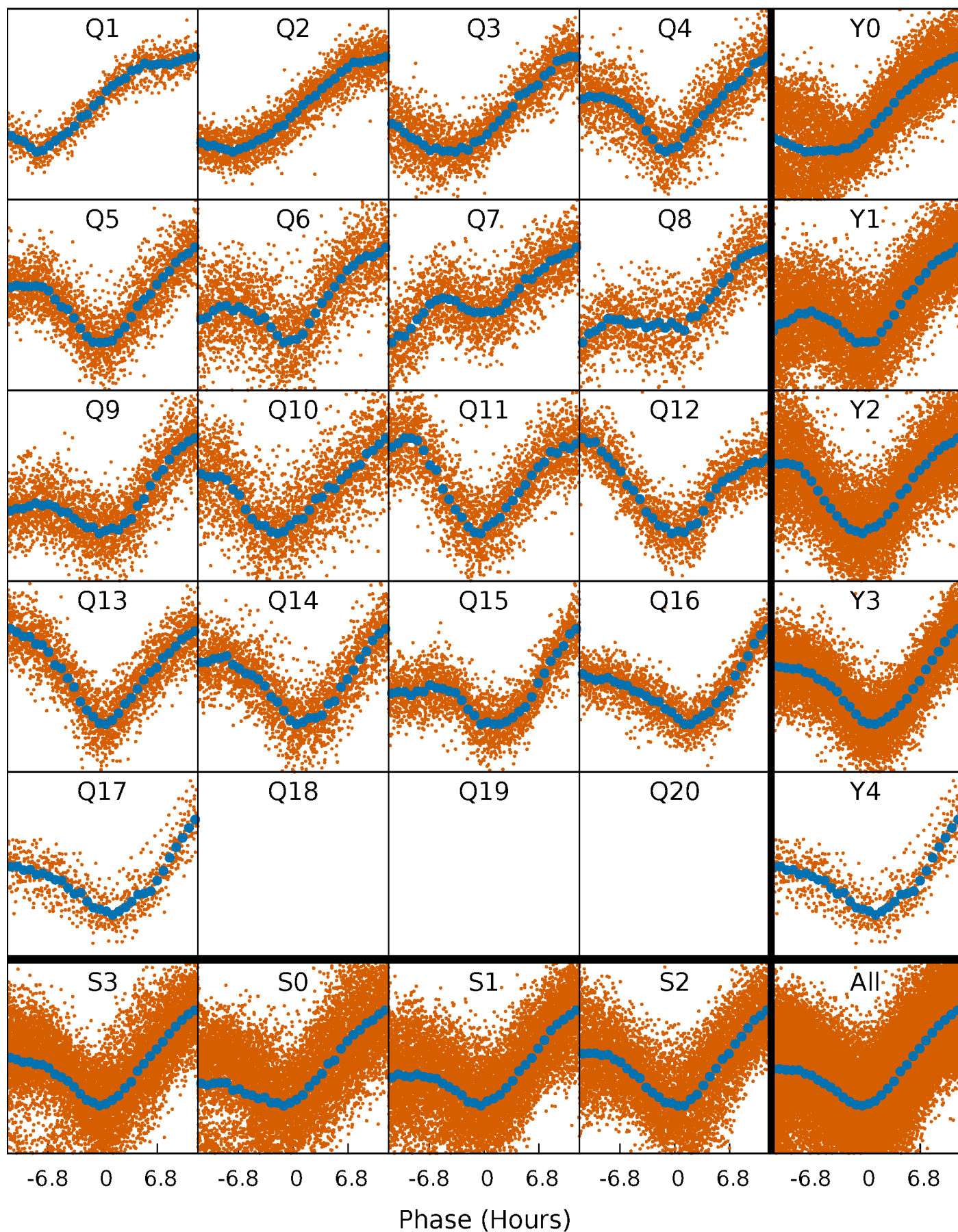


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



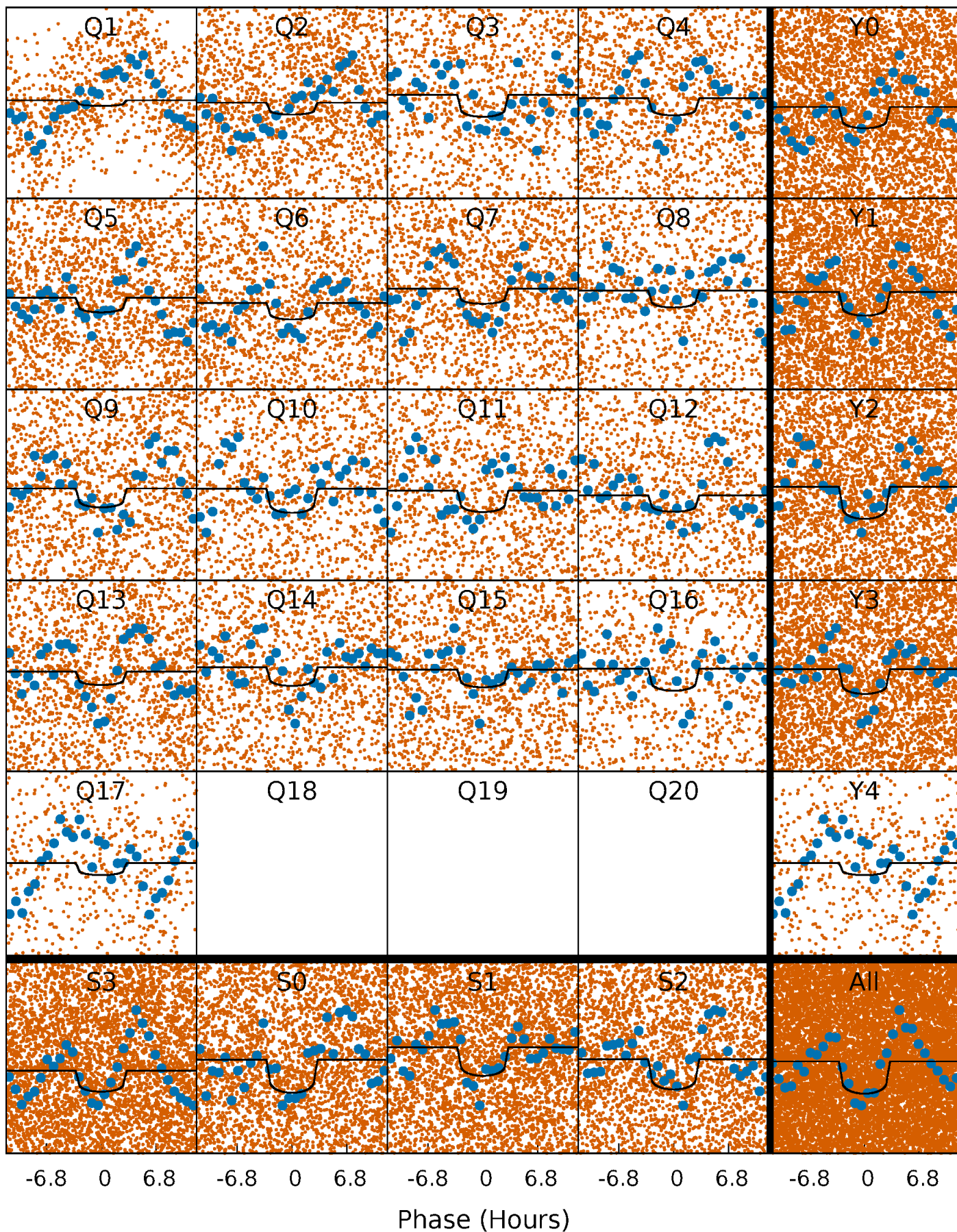
PDC Quarter-Phased Transit Curves

TCE 007008200-01 P= 1.767936 Days $T_0=132.384220$ (BKJD)



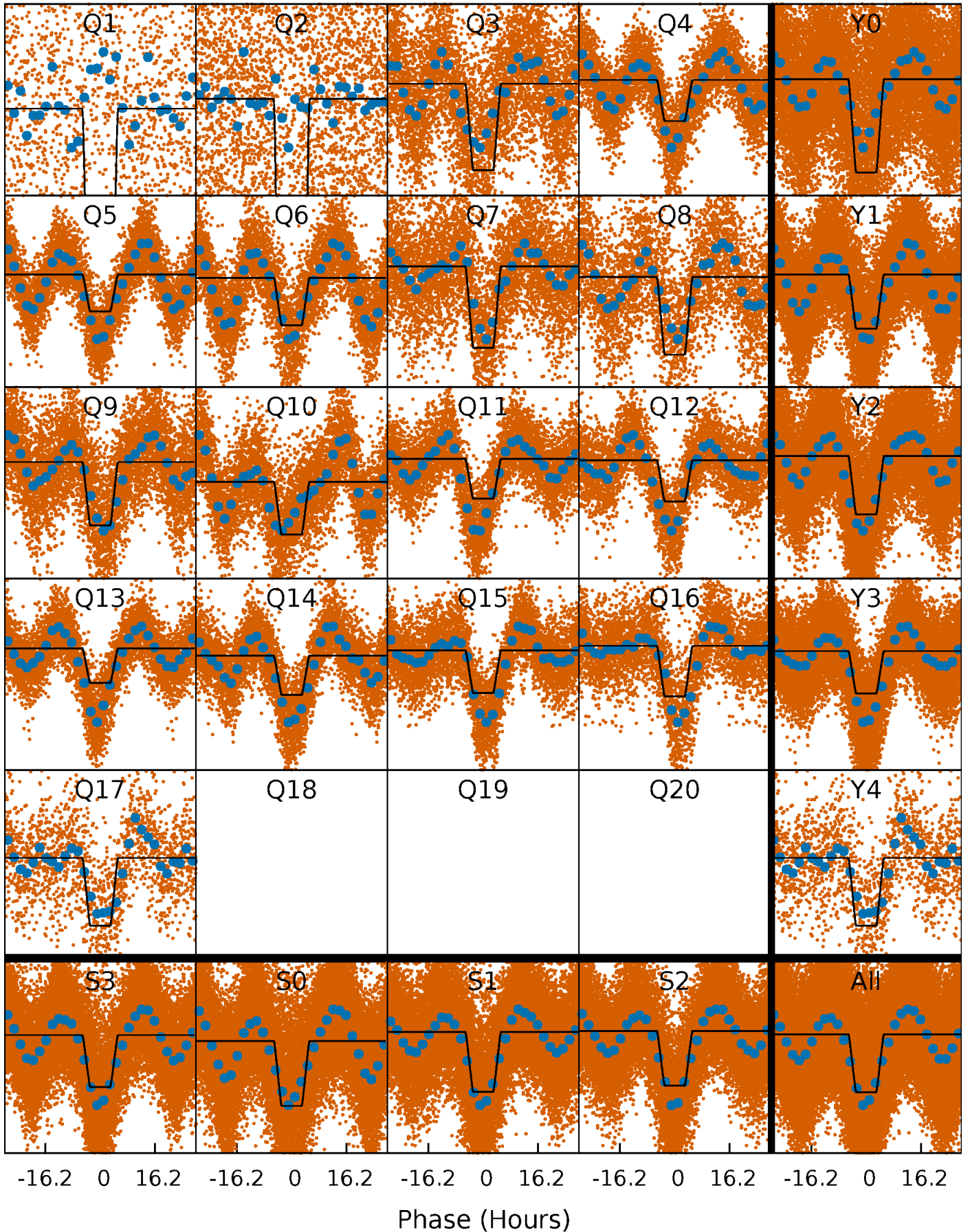
DV Quarter-Phased Transit Curves

TCE 007008200-01 P= 1.767936 Days $T_0=132.384220$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

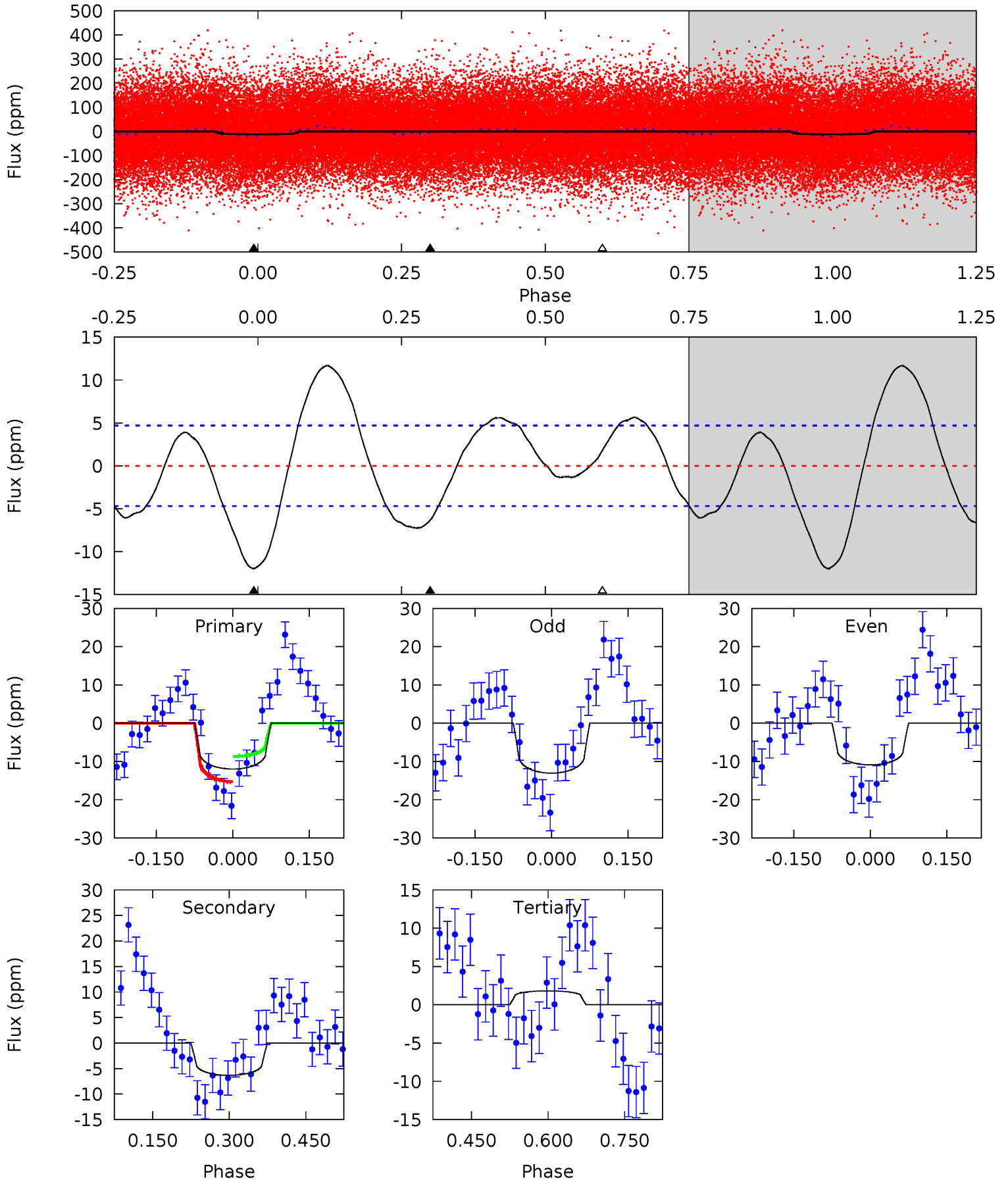
TCE 007008200-01 P= 1.768036 Days $T_0=132.375814$ (BKJD)



DV Model-Shift Uniqueness Test

007008200-01, P = 1.767936 Days, E = 130.616284 Days

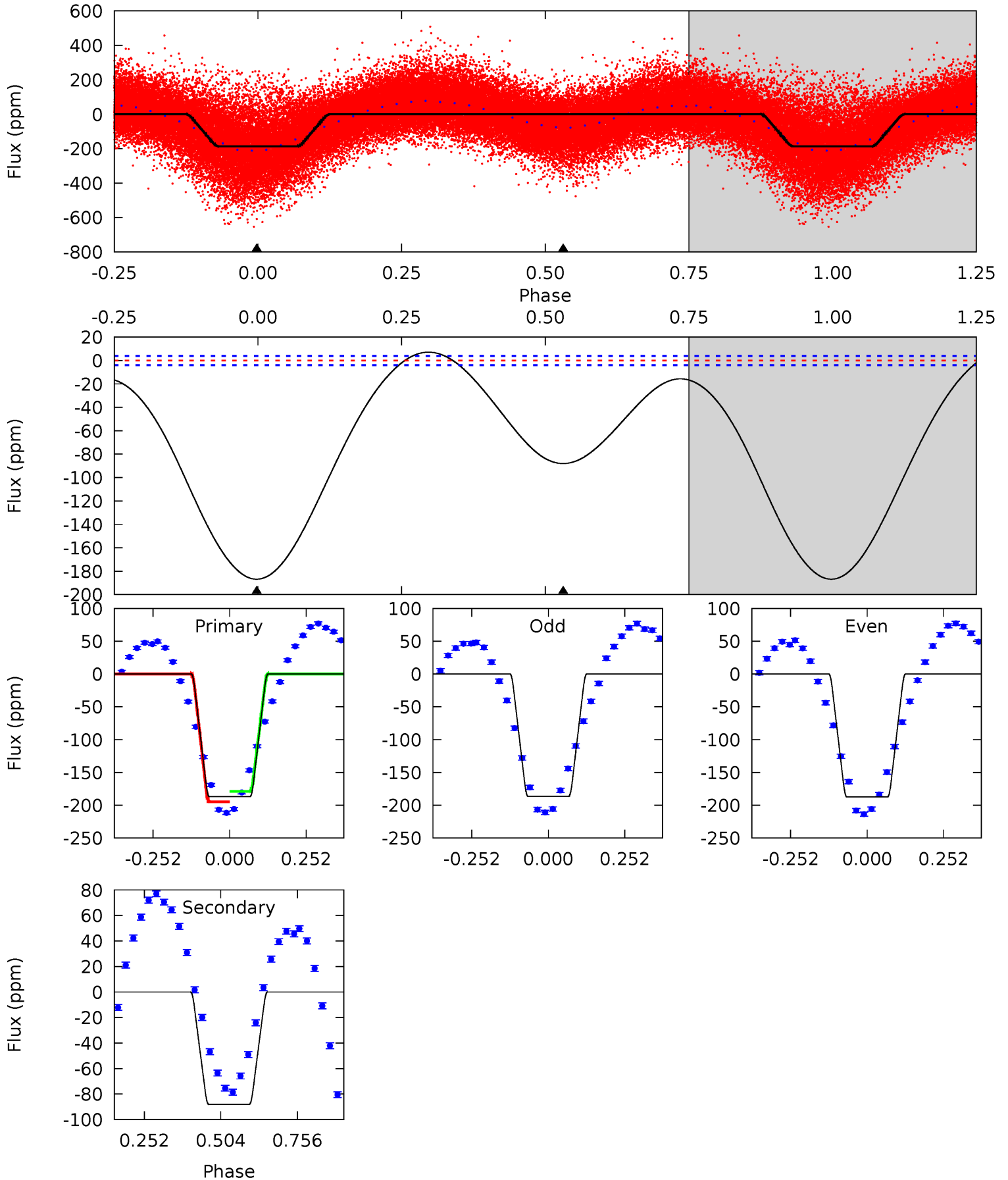
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.4	6.04	-1.73	0	4.48	1.44	3.55	13.2	11.4	7.77	6.04	1.04	0.99	0.49	3.17



Alt Model-Shift Uniqueness Test

007008200-01, P = 1.768036 Days, E = 130.607778 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
206.5	97.3	0	0	4.37	1.15	10.9	206.5	206.5	97.3	97.3	0.47	0.97	0.04	8.56



Stellar Parameters For KIC 007008200

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7012^{+216}_{-312}	$4.138^{+0.209}_{-0.171}$	$-0.500^{+0.250}_{-0.300}$	$1.567^{+0.425}_{-0.382}$	$1.229^{+0.185}_{-0.166}$	$0.450^{+0.514}_{-0.207}$
	+3%/-4%	+5%/-4%	+50%/-60%	+27%/-24%	+15%/-14%	+114%/-46%
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 007008200-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-6 ± 1	$0.69^{+0.49}_{-0.45}$	3075^{+239}_{-245}	5479^{+4559}_{-1187}	$7.010^{+54.192}_{-4.667}$
Alt.	-88 ± 1	$2.23^{+0.72}_{-0.62}$	3067^{+242}_{-233}	5814^{+1035}_{-652}	$9.280^{+8.022}_{-3.868}$

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 $A_{obs} \gg 1.0$

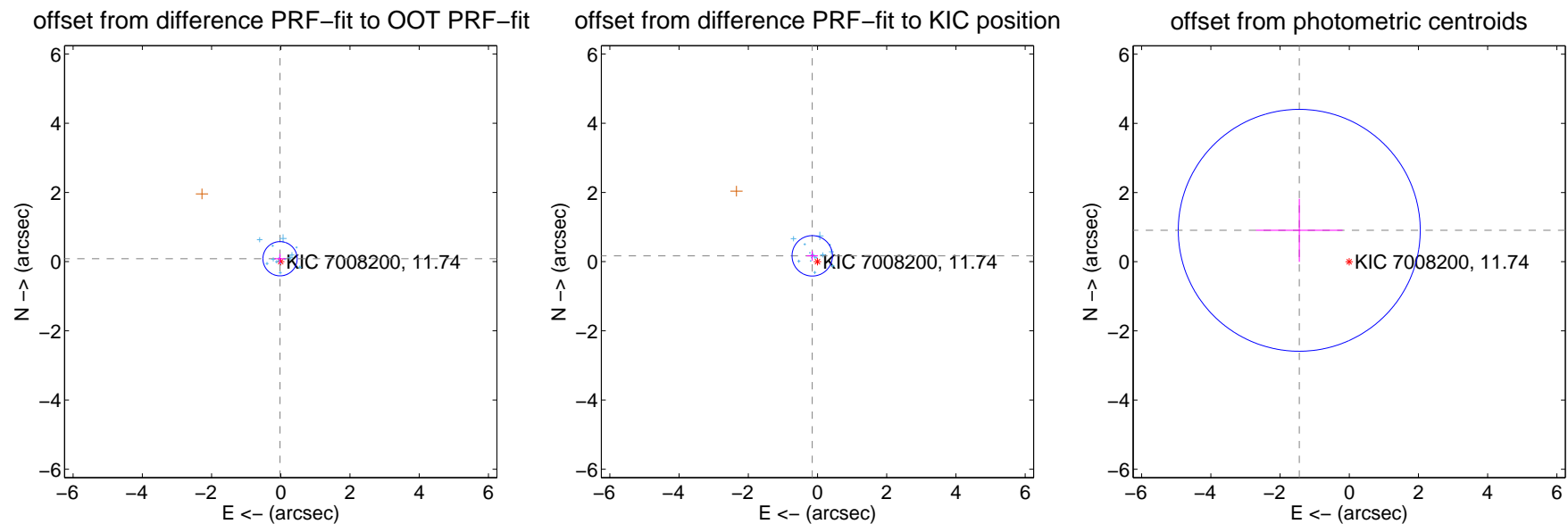
DV Centroid Data

Supplemental centroid analysis for 007008200-01. **Kepler magnitude: 11.74.** Transit SNR 6.58

There are 16 quarters with good PRF difference image offsets

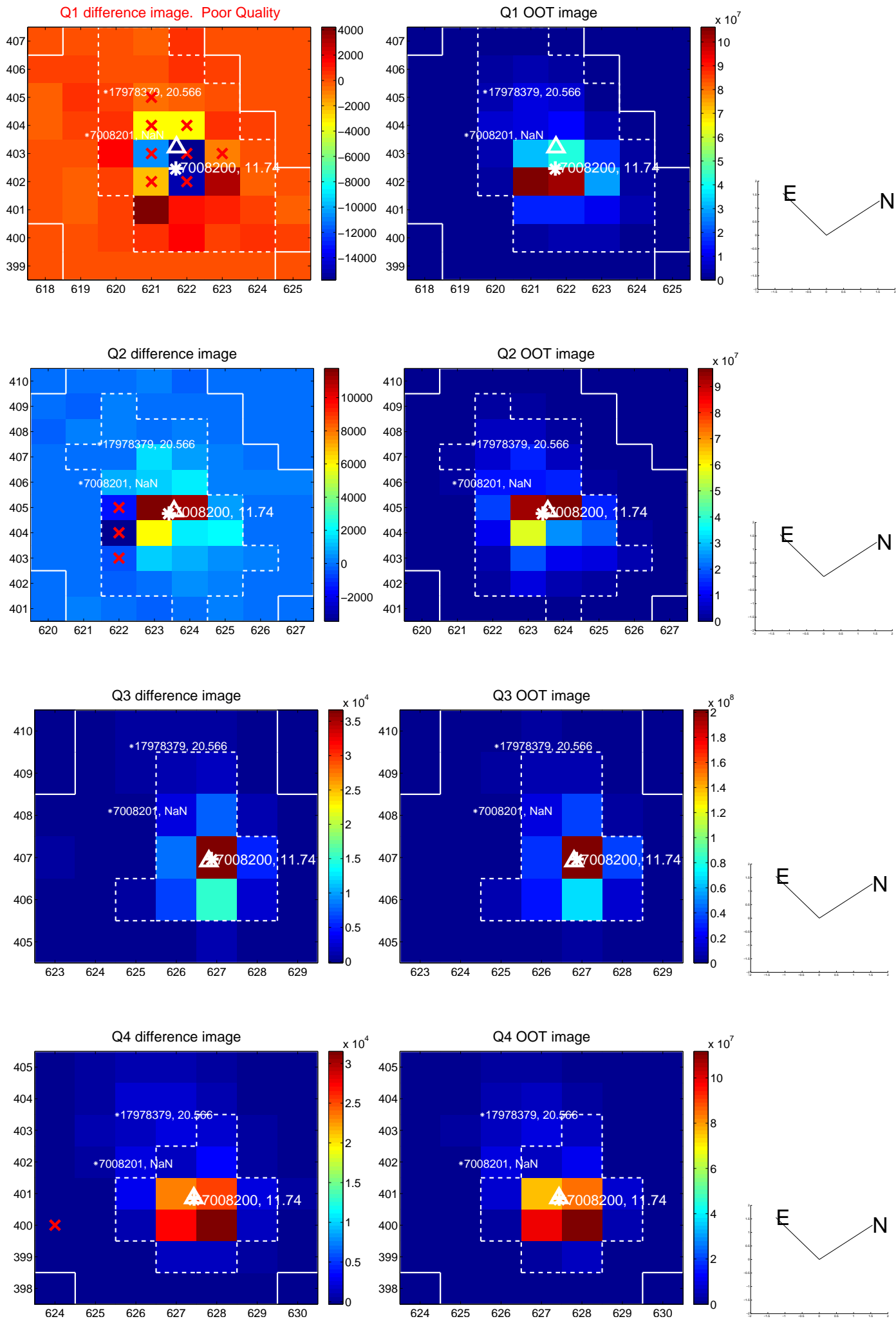
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.087 ± 0.165	0.53	0.021 ± 0.161	0.084 ± 0.142
PRF-fit source offset from KIC position	0.226 ± 0.195	1.16	0.152 ± 0.164	0.168 ± 0.142
photometric centroid source offset	1.71 ± 1.17	1.46	1.45 ± 1.25	0.91 ± 0.91

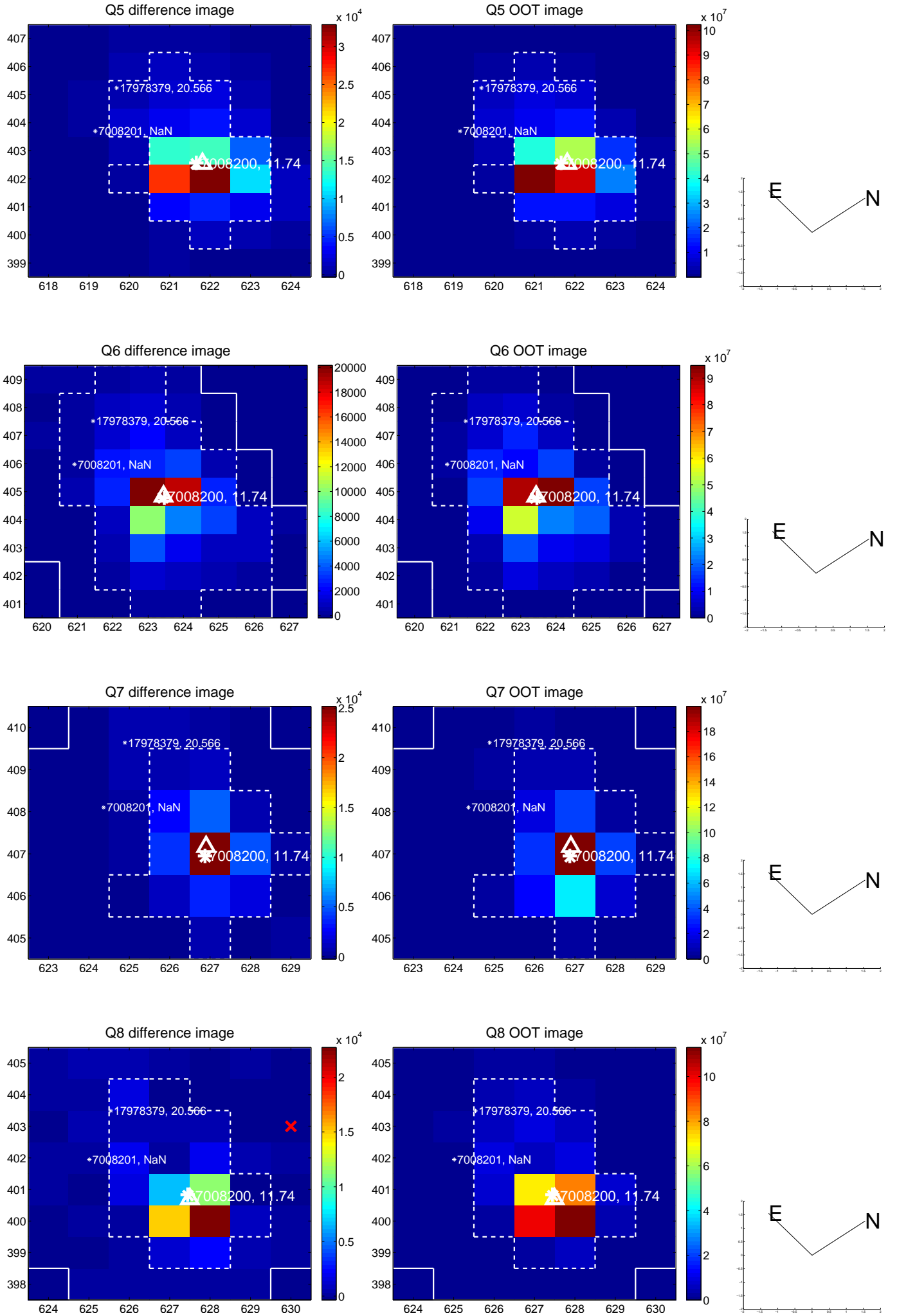


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

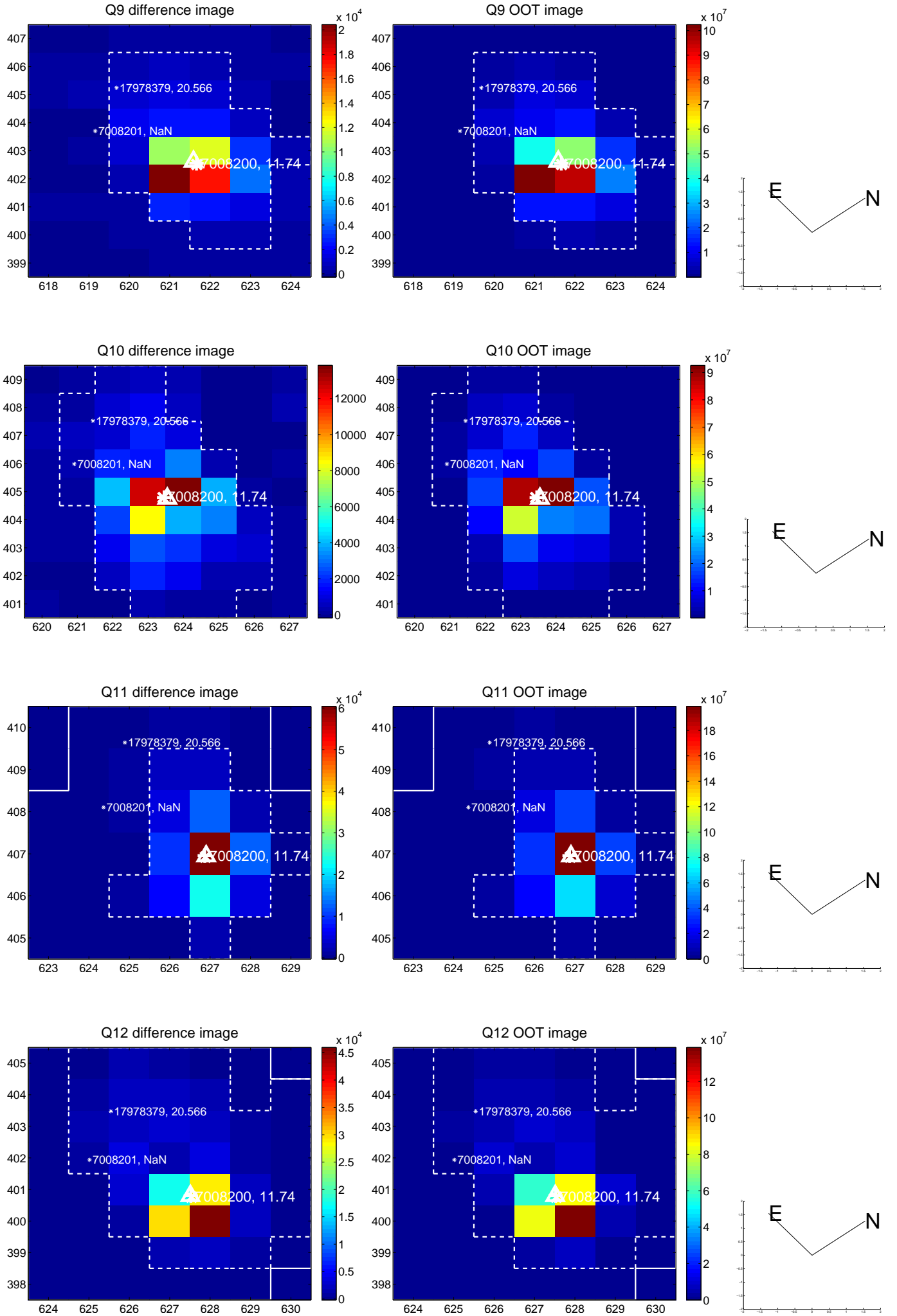
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



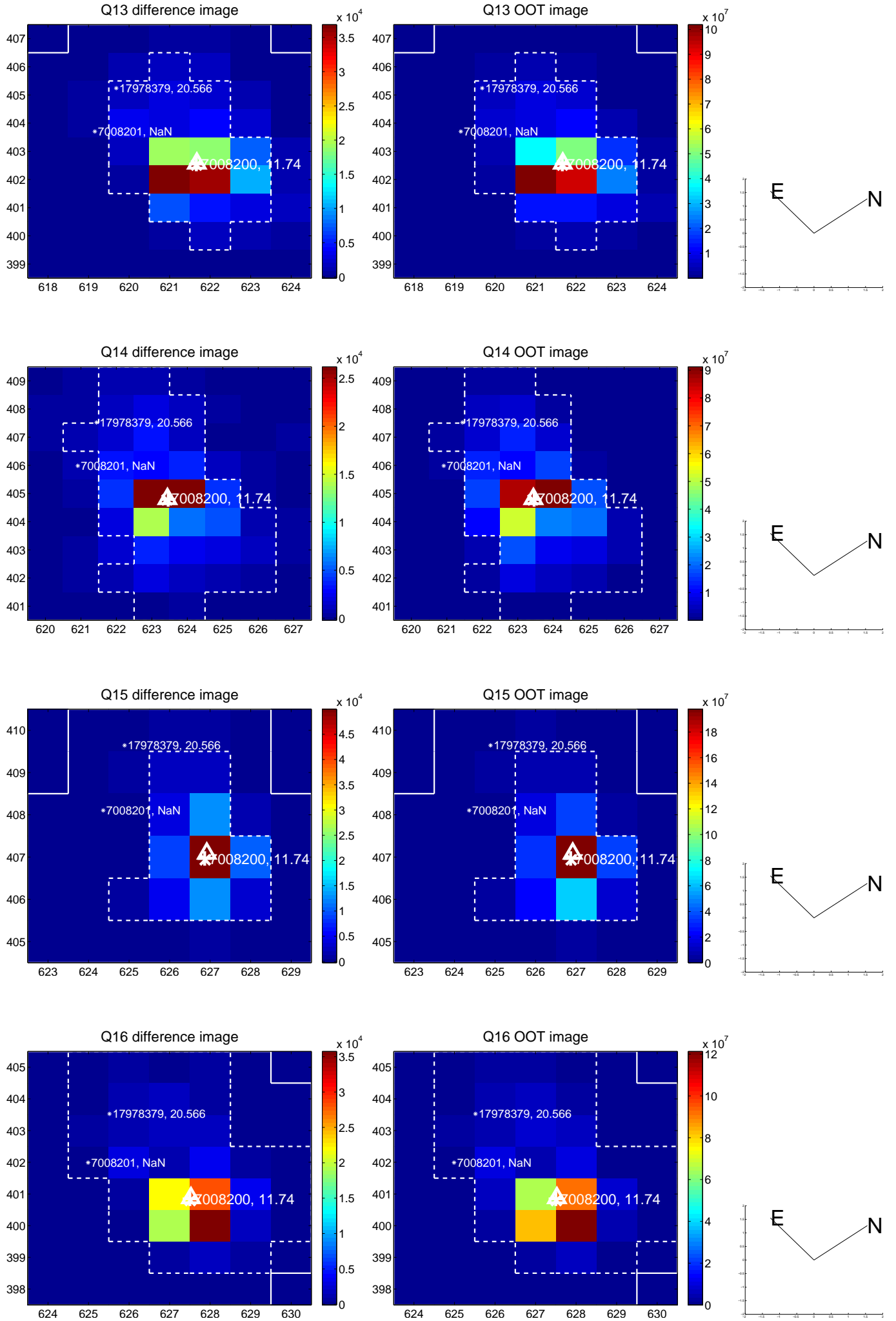
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



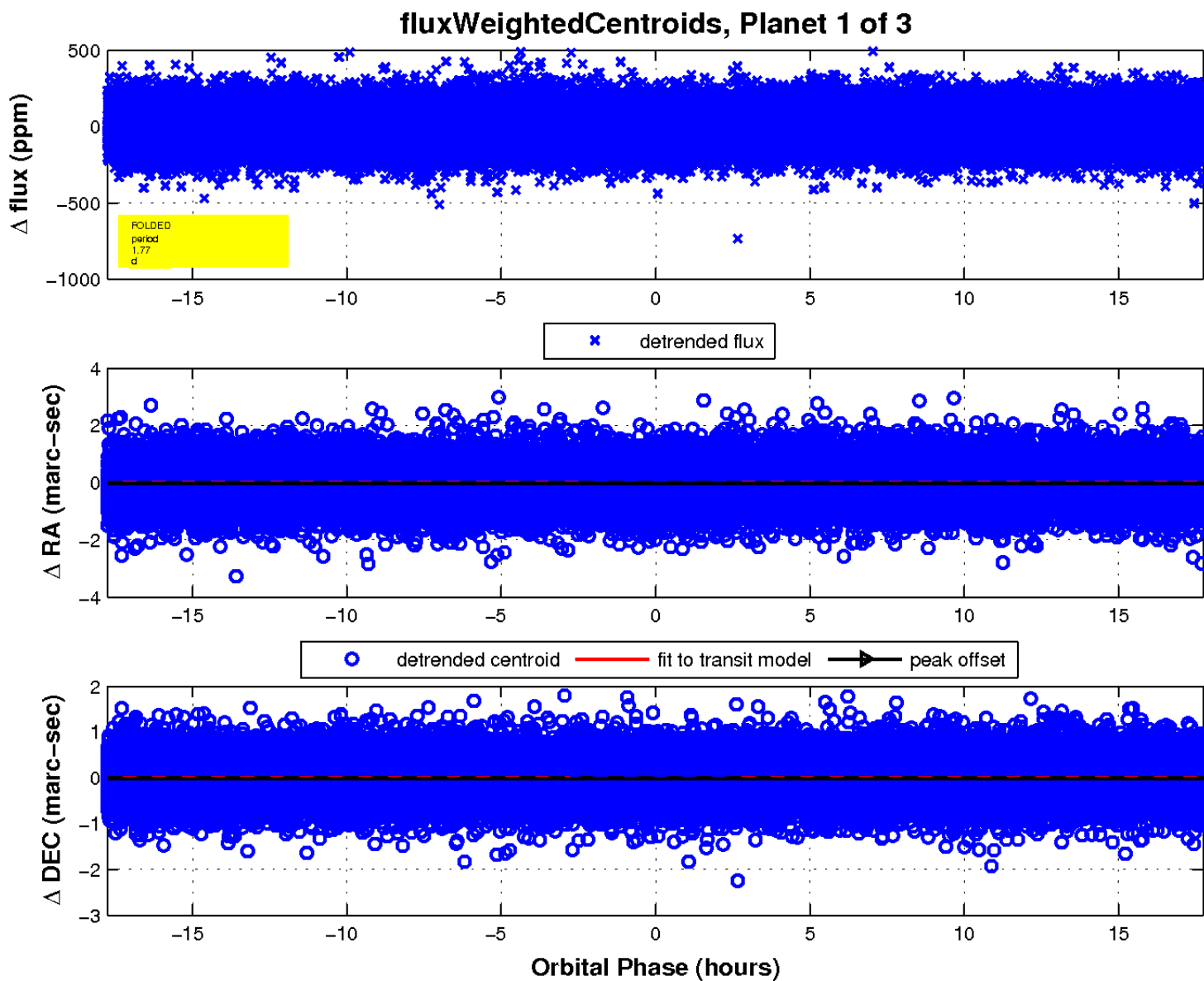
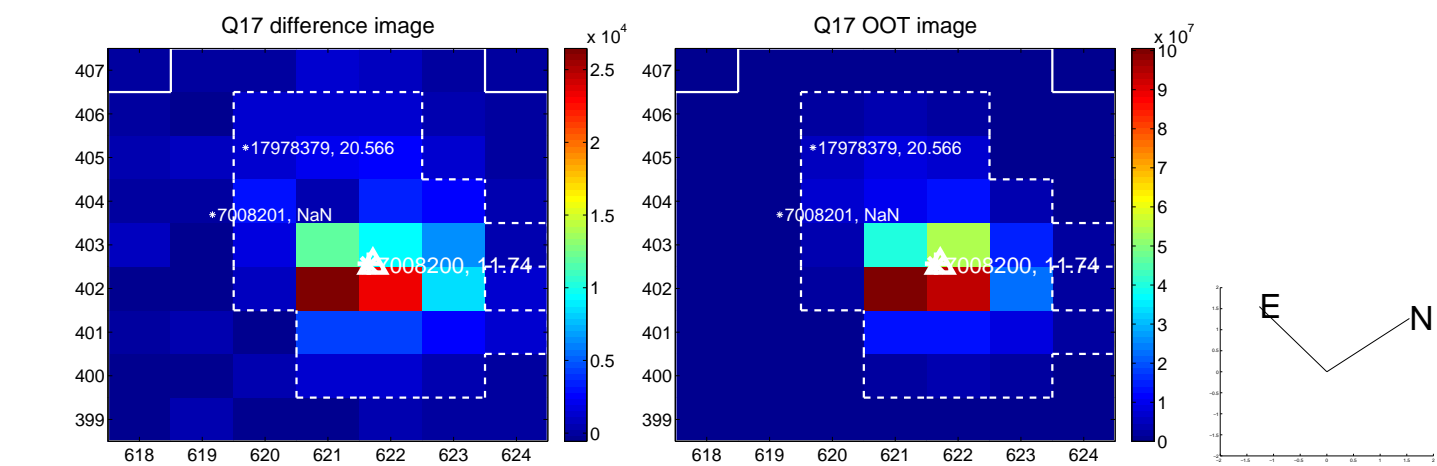
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

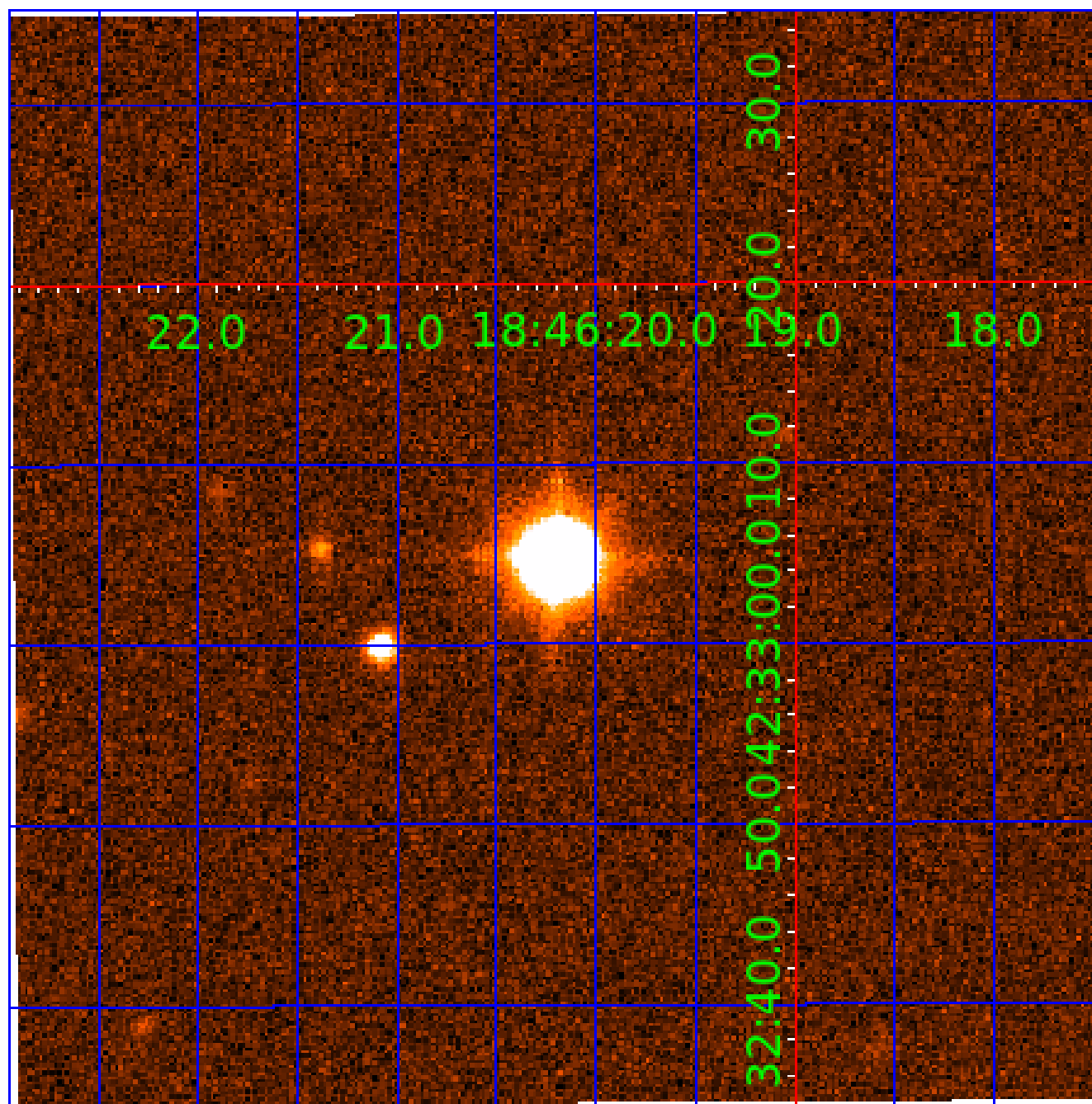


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007008200

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})
007008200-01	OBS	No	1.767936	132.384220	13.6	5.920	8.0	6.6	1.57	7012	0.58	5653.96
007008200-02	OBS	No	176.152073	162.866590	35.1	8.755	11.4	1.7	1.57	7012	1.07	12.24
007008200-03	OBS	No	280.203243	380.924533	157.8	6.000	7.4	5.5	1.57	7012	2.23	6.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007008200-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV
007008200-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
007008200-03	OBS	FP	0.03	1	0	0	0	MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

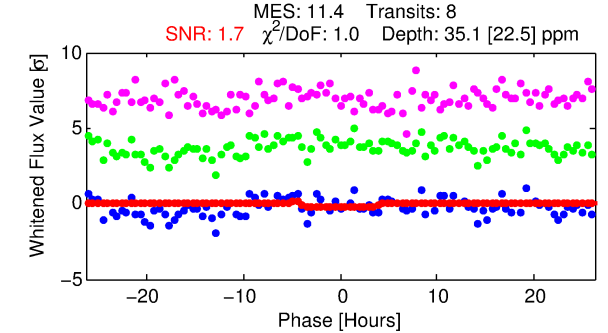
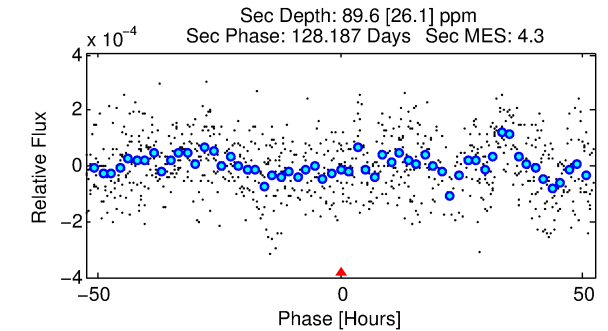
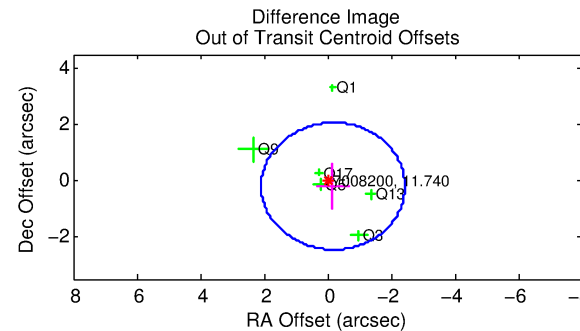
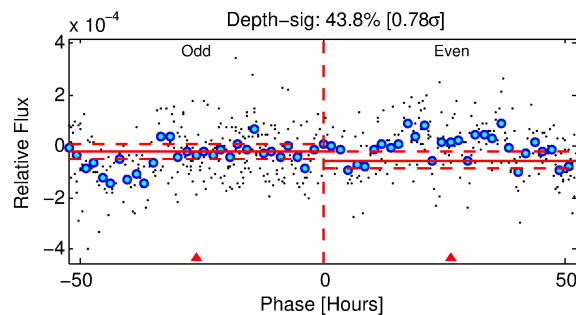
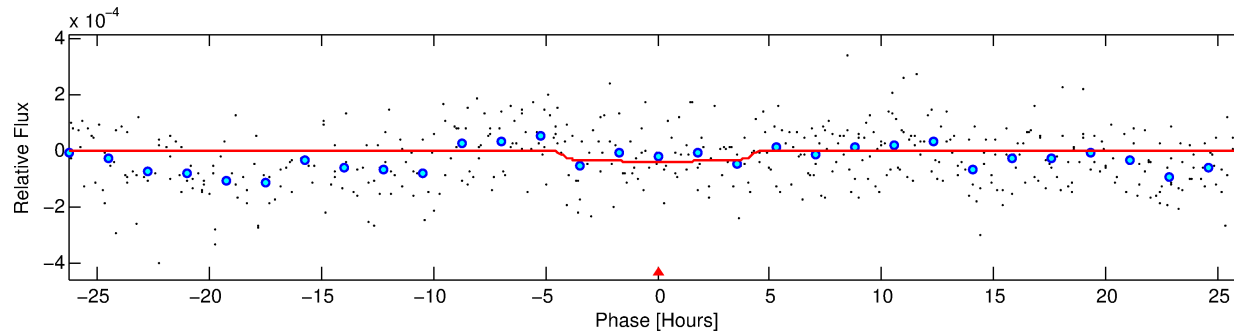
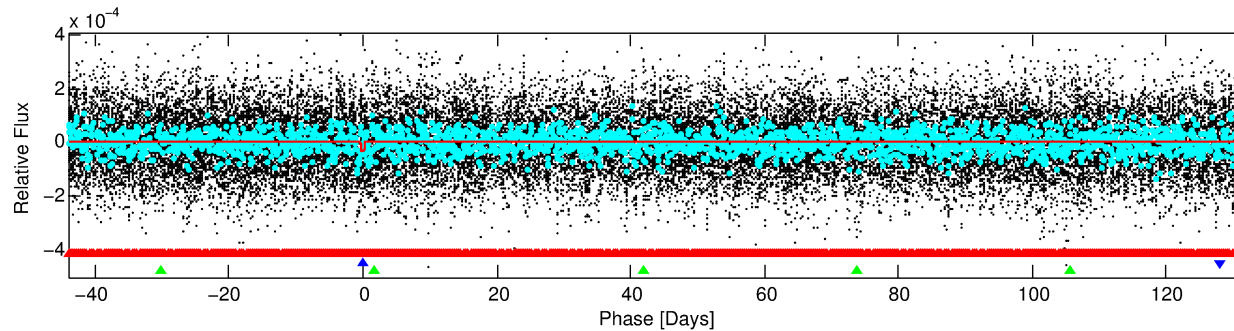
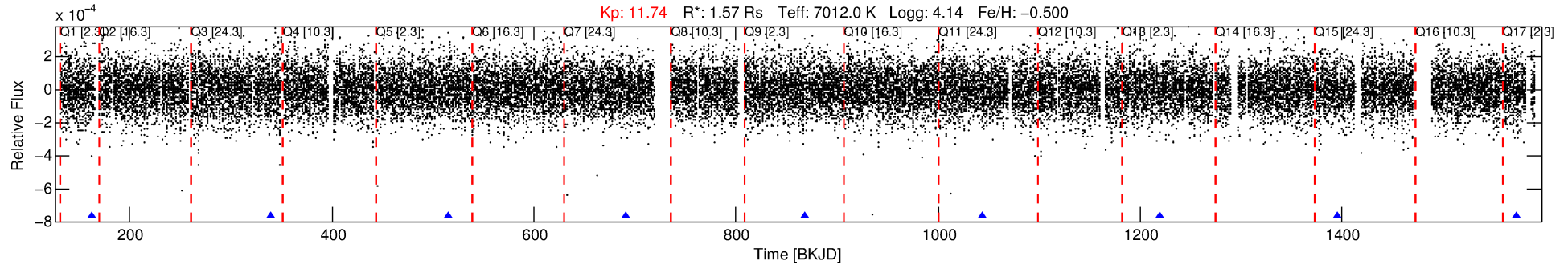
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007008200-02

No Significant Match Found

DV One-Page Summary

KIC: 7008200 Candidate: 2 of 3 Period: 176.152 d



DV Fit Results:

Period = 176.15207 [0.01047] d
Epoch = 162.8666 [0.0502] BKJD
Rp/R* = 0.0063 [0.0054]
a/R* = 70.59 [334.09]
b = 0.90 [1.05]
Seff = 12.24 [5.01]
Teq = 477 [49] K
Rp = 1.07 [0.97] Re
a = 0.6592 [0.1593] AU
Ag = 18588.14 [33109.34] [0.56σ]
Teffp = 8610 [3771] K [2.16σ]

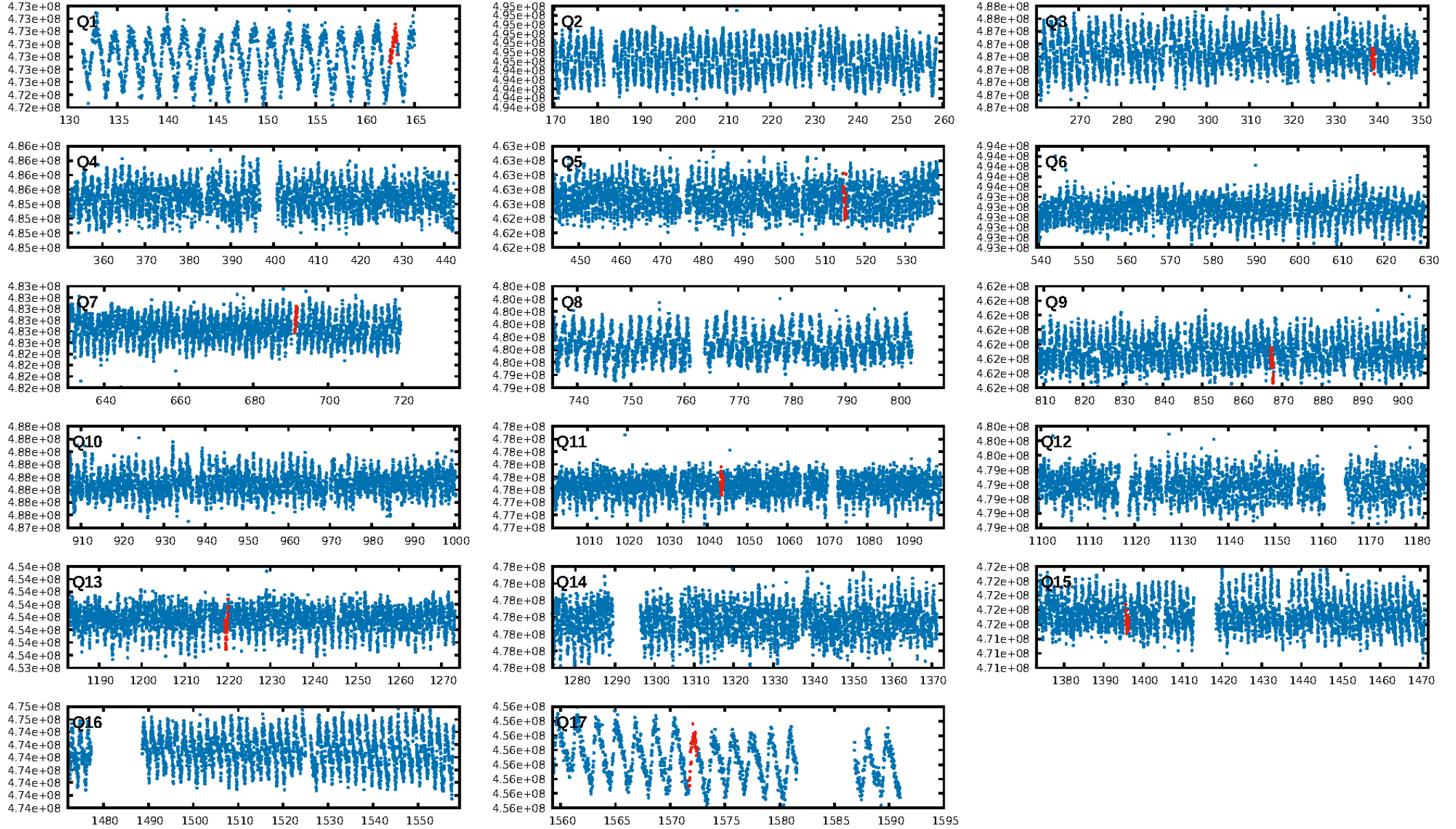
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [395.99σ]
LongPeriod-sig: 100.0% [235.28σ]
ModelChiSquare2-sig: 57.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.32e-18
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: -7.391
Centroid-sig: 3.4%
Centroid-so: 4.527 arcsec [1.35σ]
OotOffset-rm: 0.262 arcsec [0.35σ]
OotOffset-st: 0/1/0/5 [6]
KicOffset-rm: 0.158 arcsec [0.22σ]
KicOffset-st: 0/1/0/5 [6]
DiffImageQuality-fgm: 0.50 [3/6]
DiffImageOverlap-fno: 0.14 [1/7]

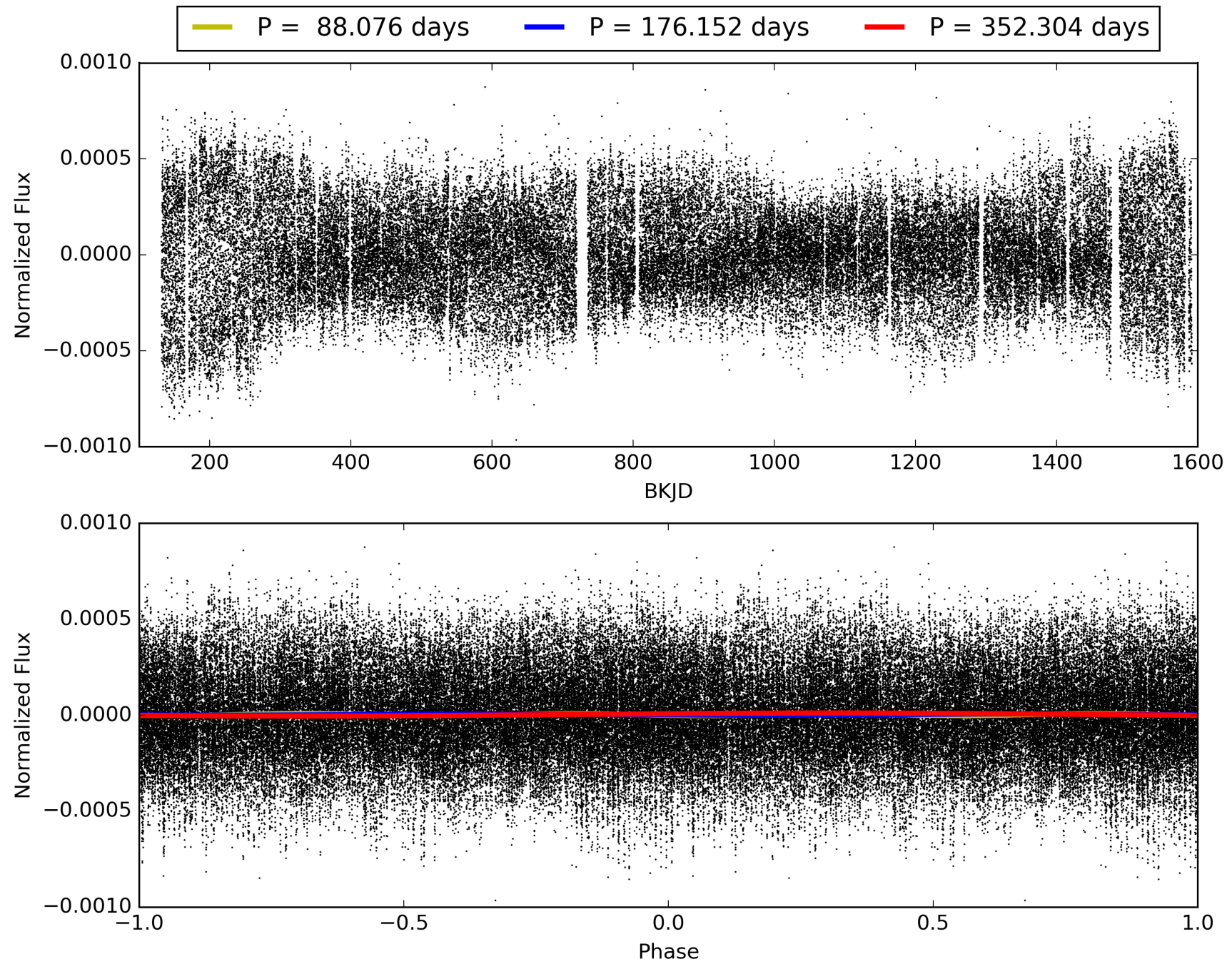
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 08:25:29 Z

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

TCE 007008200-02, PDC Light Curves

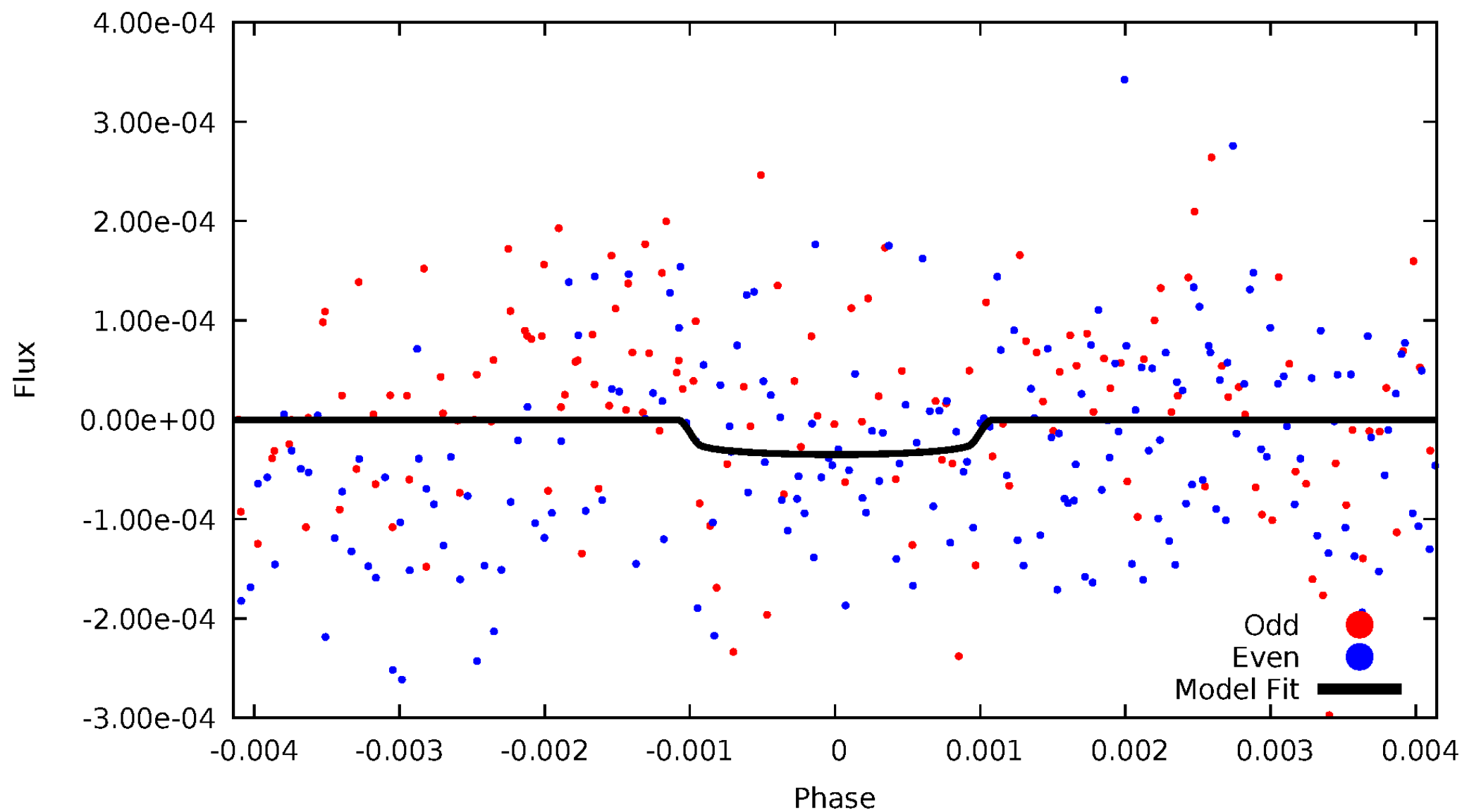


TCE 007008200-02



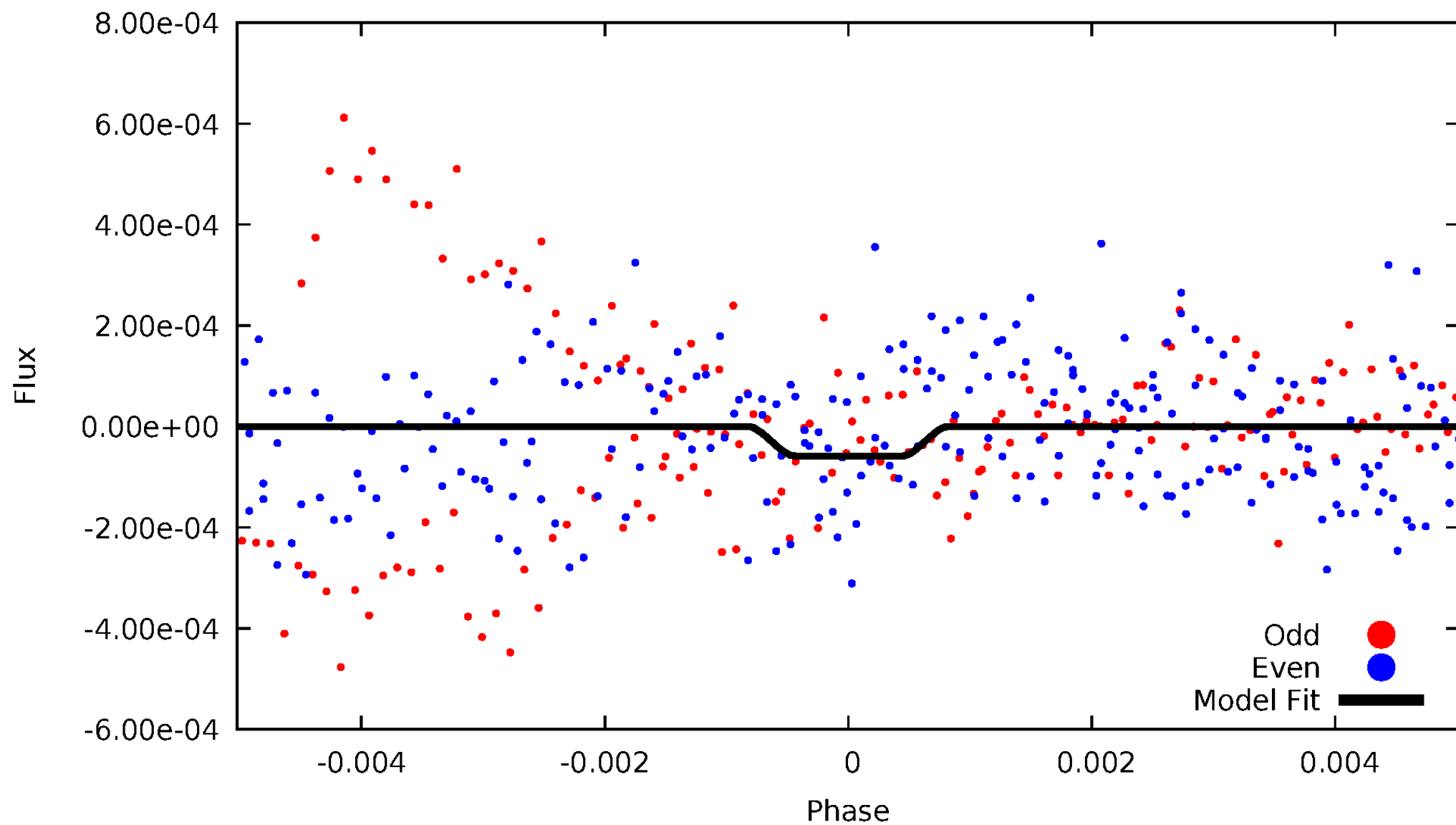
DV Odd/Even

TCE 007008200-02



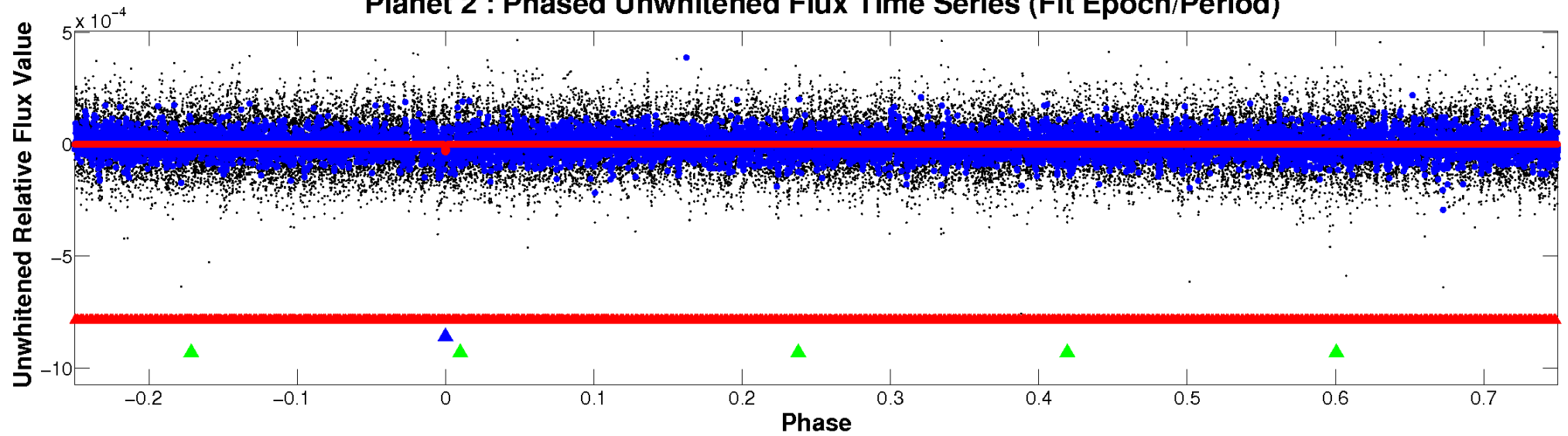
ALT Odd/Even

TCE 007008200-02

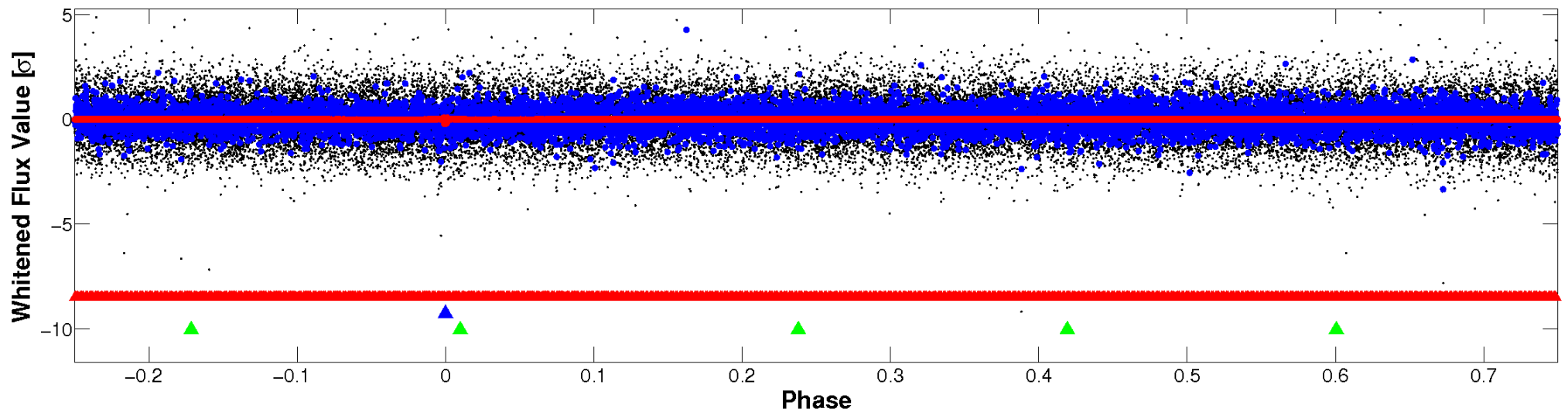


Non-Whitened Vs. Whitened Light Curve

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

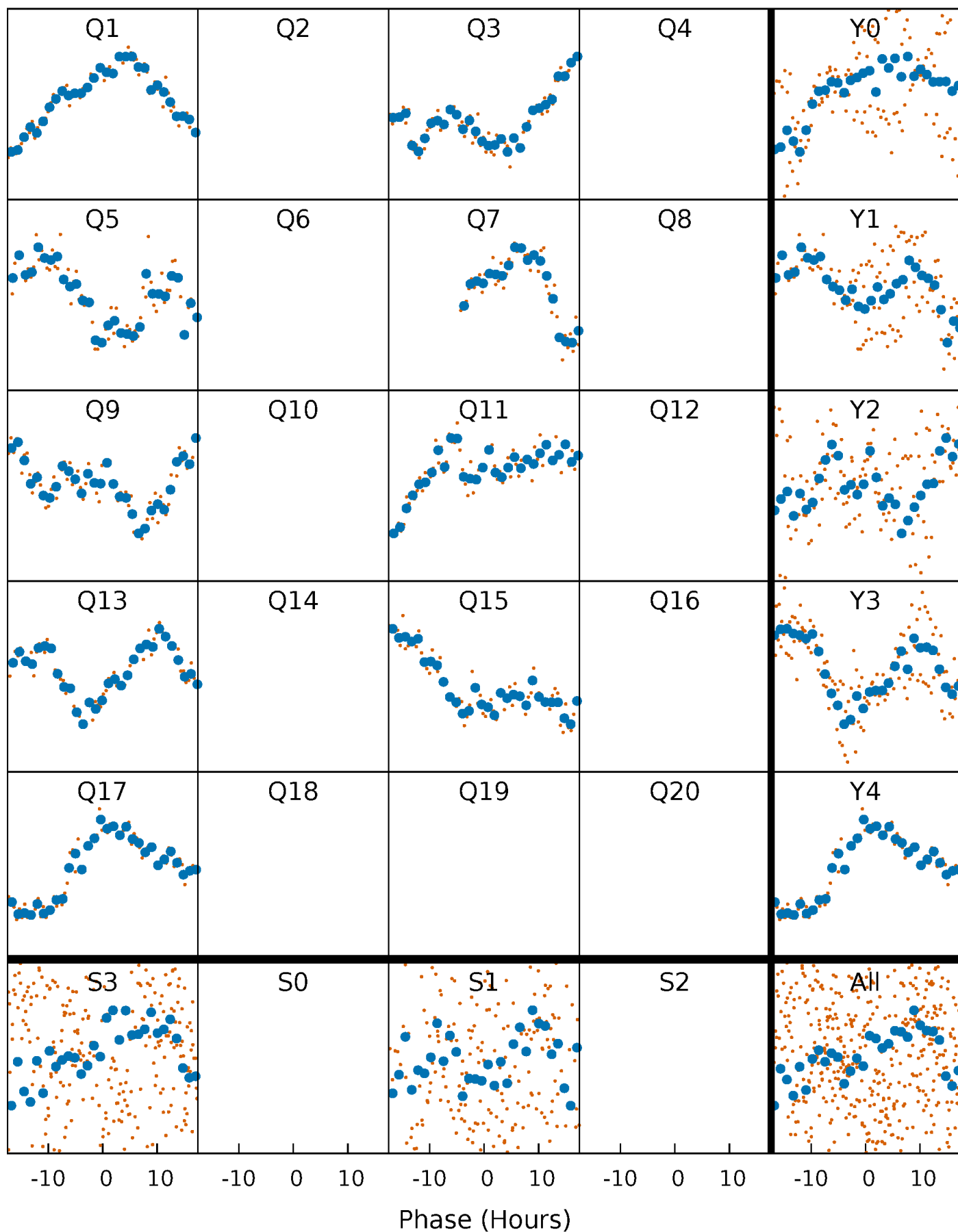


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



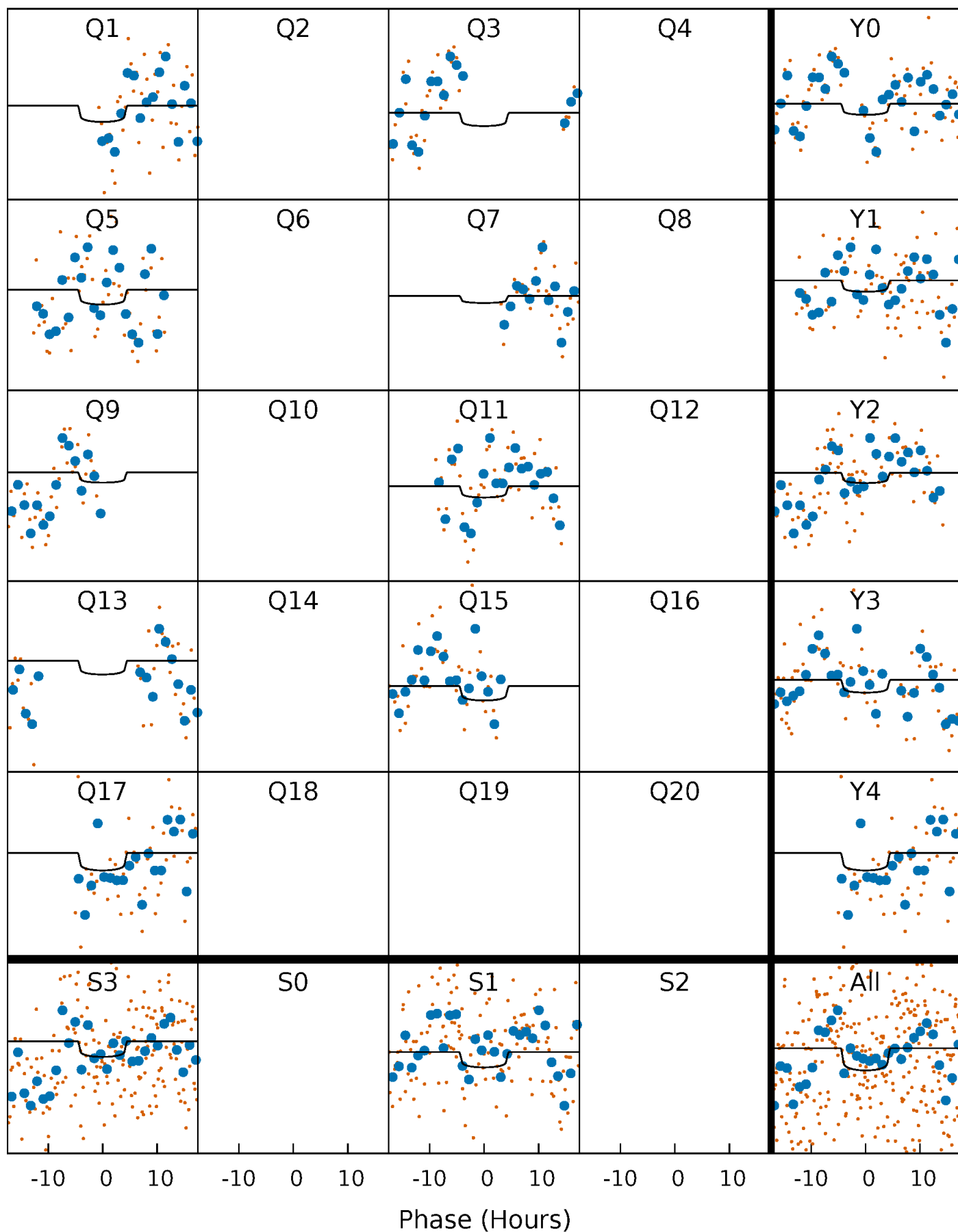
PDC Quarter-Phased Transit Curves

TCE 007008200-02 P=176.152073 Days $T_0=162.866590$ (BKJD)



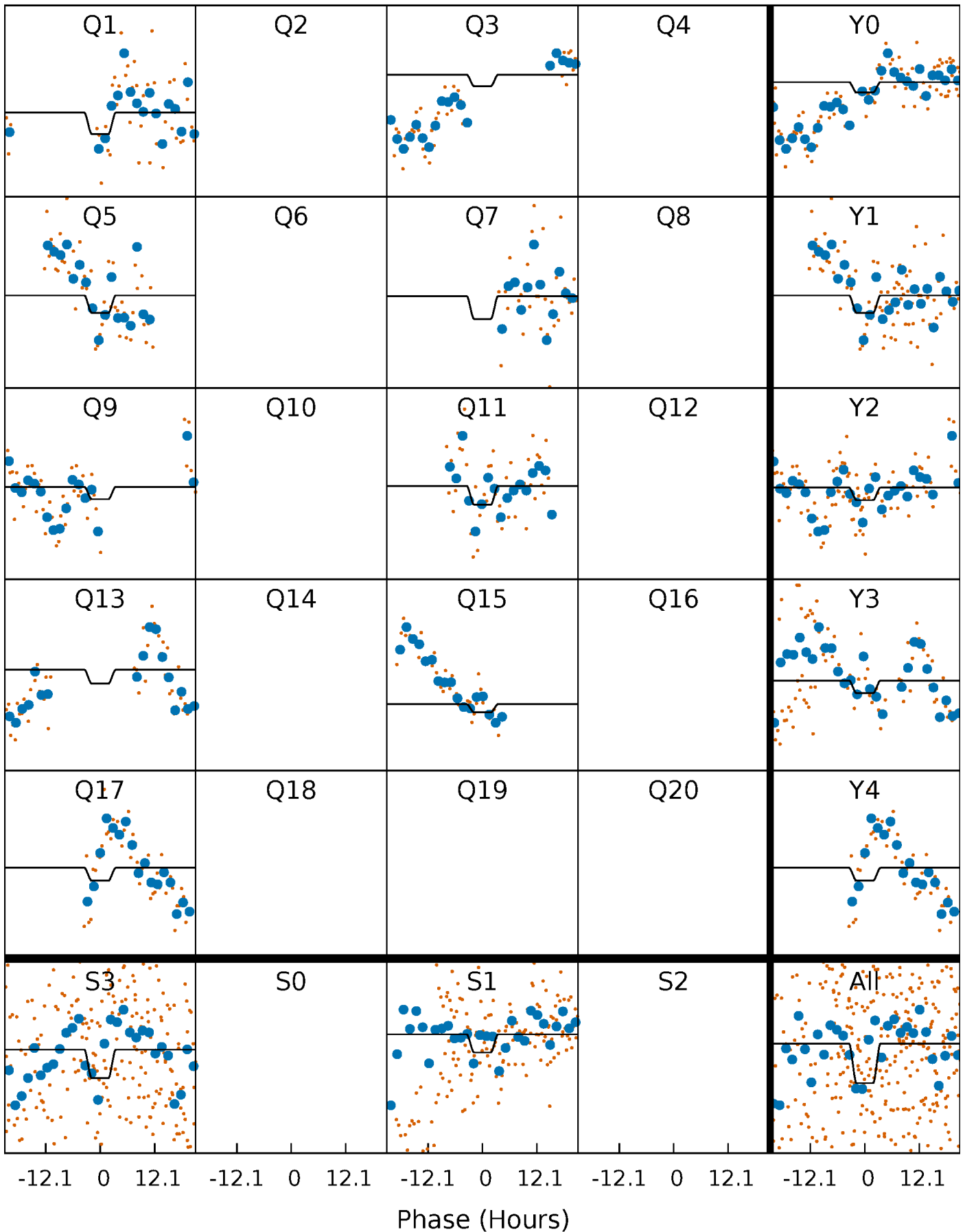
DV Quarter-Phased Transit Curves

TCE 007008200-02 $P=176.152073$ Days $T_0=162.866590$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

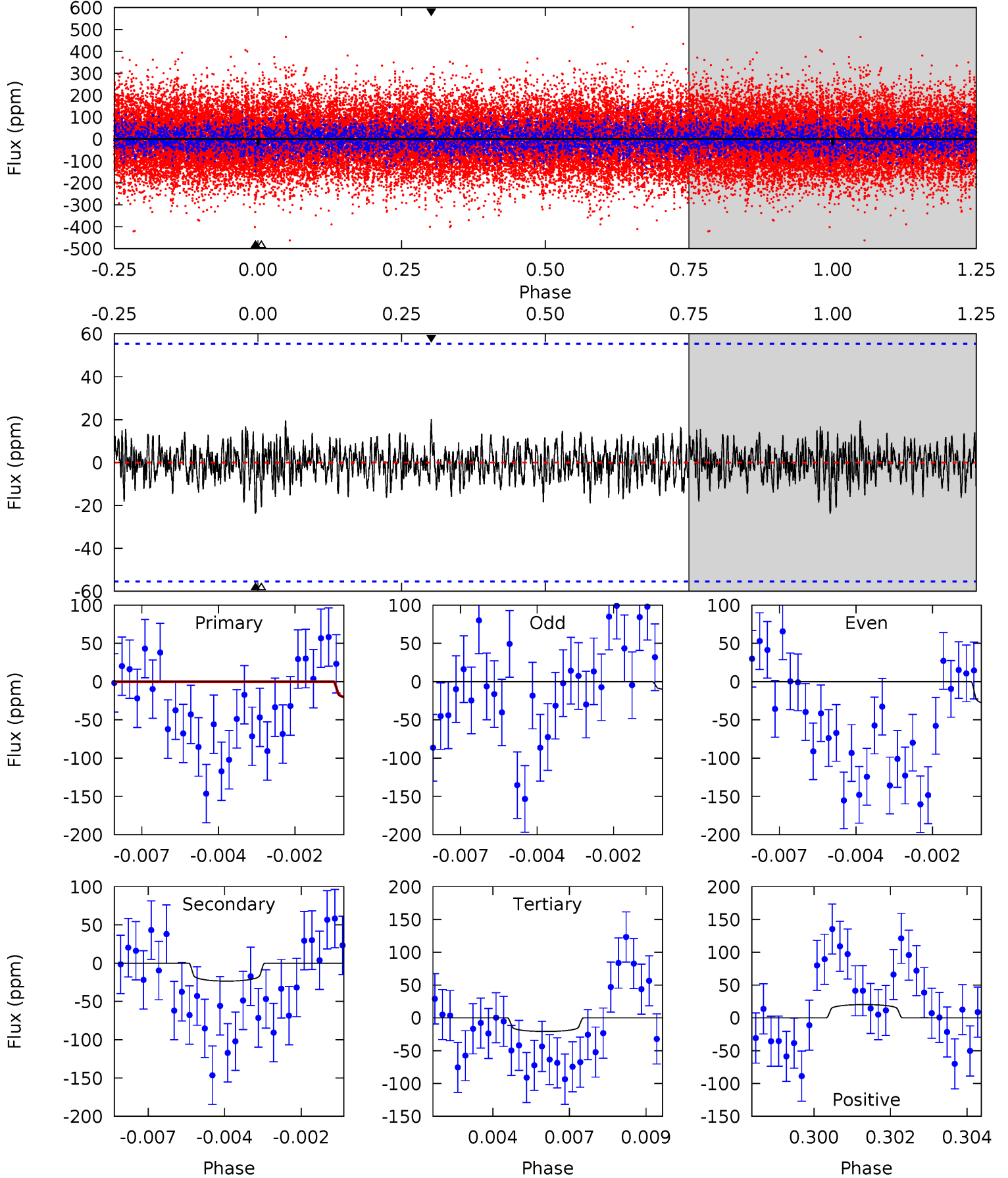
TCE 007008200-02 $P=176.144098$ Days $T_0=162.867846$ (BKJD)



DV Model-Shift Uniqueness Test

007008200-02, P = 176.152073 Days, E = 162.866590 Days

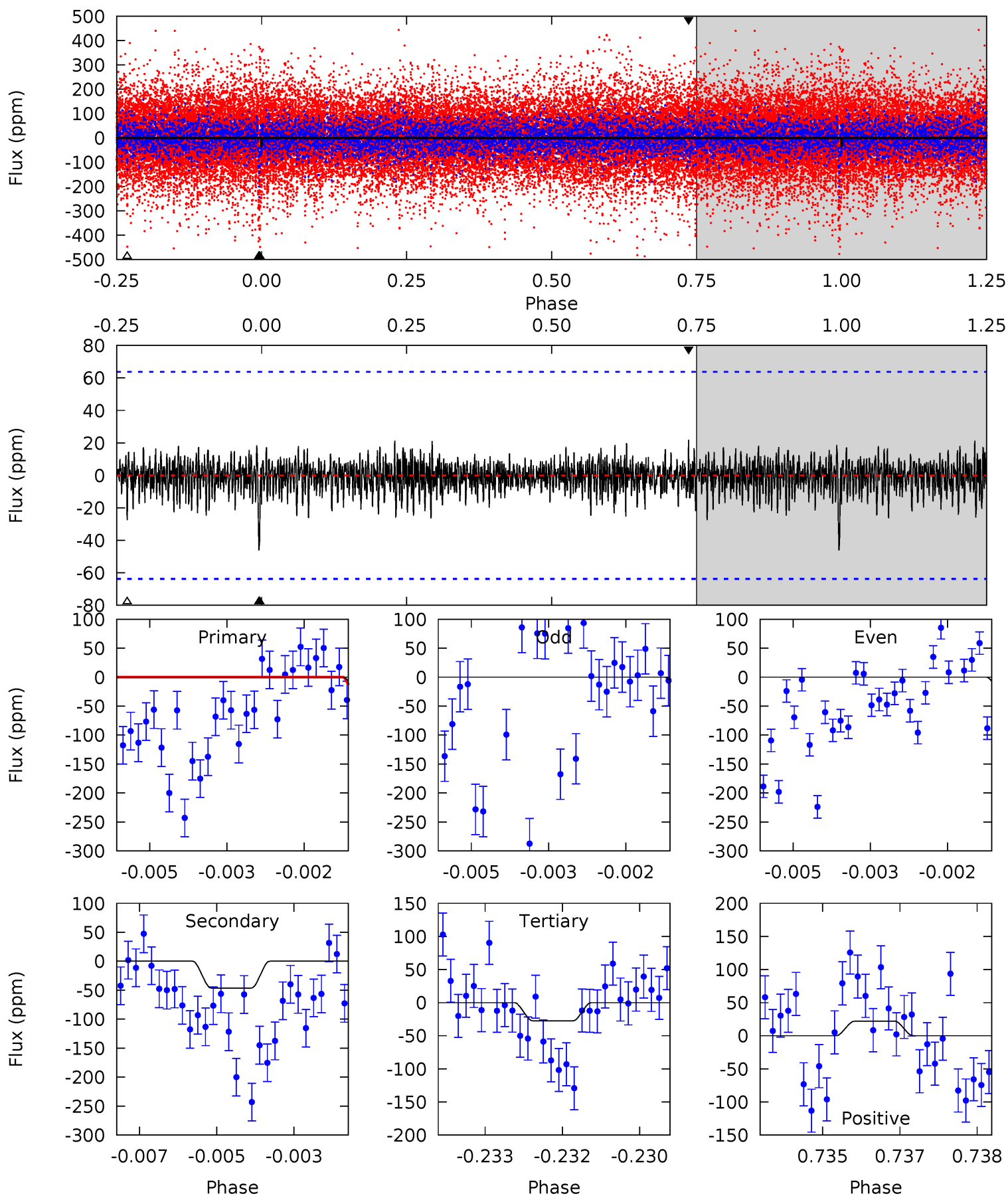
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.28	2.24	1.99	1.94	5.31	3.06	0.61	0.29	0.34	0.26	0.31	0.98	0.93	0.46	0.06



Alt Model-Shift Uniqueness Test

007008200-02, P = 176.144098 Days, E = 162.867846 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.71	3.89	2.30	1.84	5.36	3.14	0.66	0.41	0.87	1.58	2.05	0.20	0.81	0.32	1.97



Stellar Parameters For KIC 007008200

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7012^{+216}_{-312}	$4.138^{+0.209}_{-0.171}$	$-0.500^{+0.250}_{-0.300}$	$1.567^{+0.425}_{-0.382}$	$1.229^{+0.185}_{-0.166}$	$0.450^{+0.514}_{-0.207}$
	+3%/-4%	+5%/-4%	+50%/-60%	+27%/-24%	+15%/-14%	+114%/-46%
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 007008200-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-23 ± 10	$1.19^{+0.88}_{-0.68}$	662^{+48}_{-49}	5551^{+3901}_{-1156}	3498^{+17635}_{-2412}
Alt.	-46 ± 12	$1.43^{+0.95}_{-0.78}$	663^{+51}_{-50}	6255^{+3596}_{-1340}	5509^{+20062}_{-3675}

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

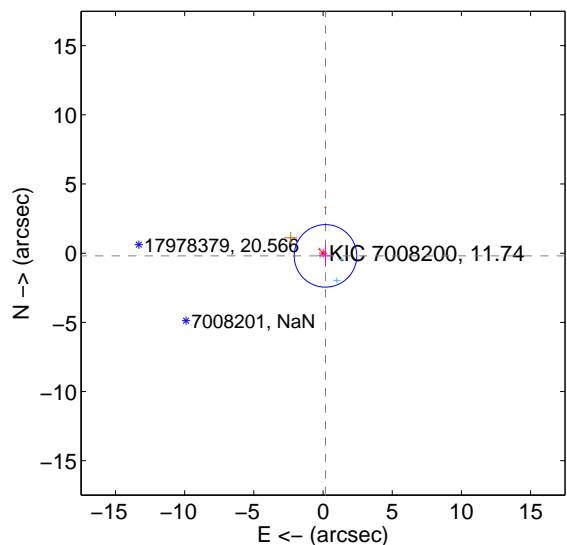
Supplemental centroid analysis for 007008200-02. **Kepler magnitude: 11.74.** Transit SNR 1.73

There are 3 quarters with good PRF difference image offsets

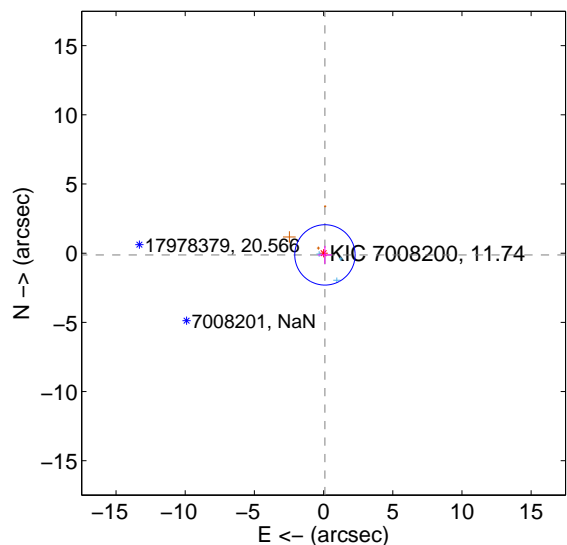
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.262 ± 0.753	0.35	-0.175 ± 0.475	-0.195 ± 0.784
PRF-fit source offset from KIC position	0.158 ± 0.727	0.22	-0.097 ± 0.506	-0.125 ± 0.646
photometric centroid source offset	4.53 ± 3.35	1.35	-2.65 ± 3.82	-3.67 ± 3.07

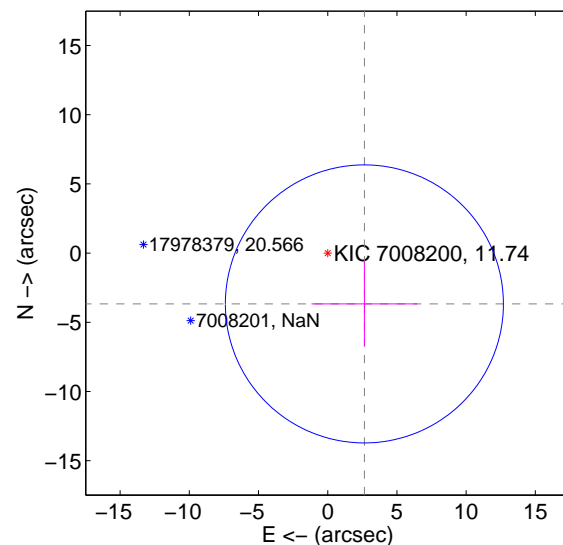
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

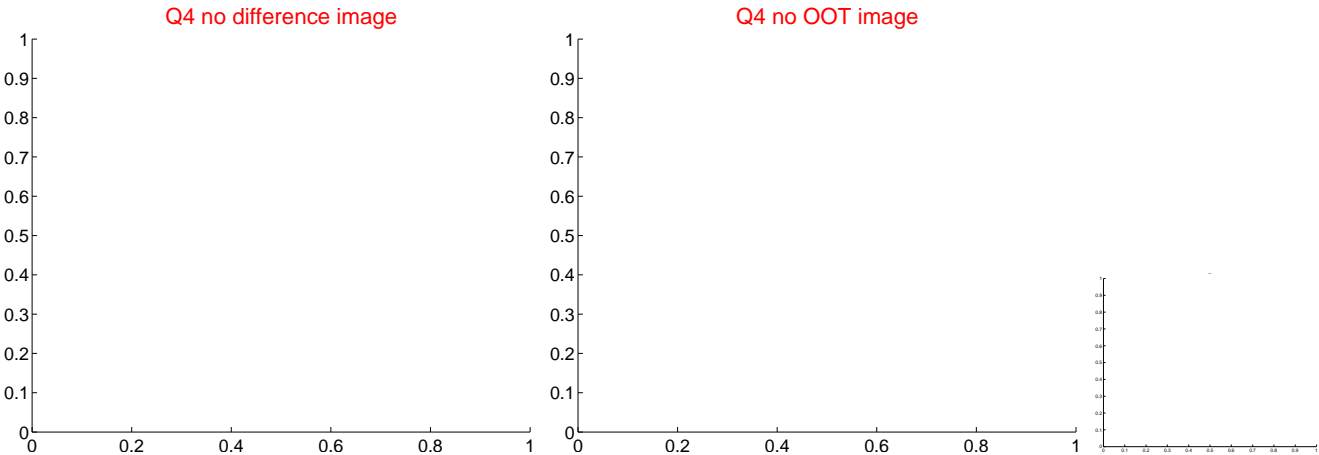
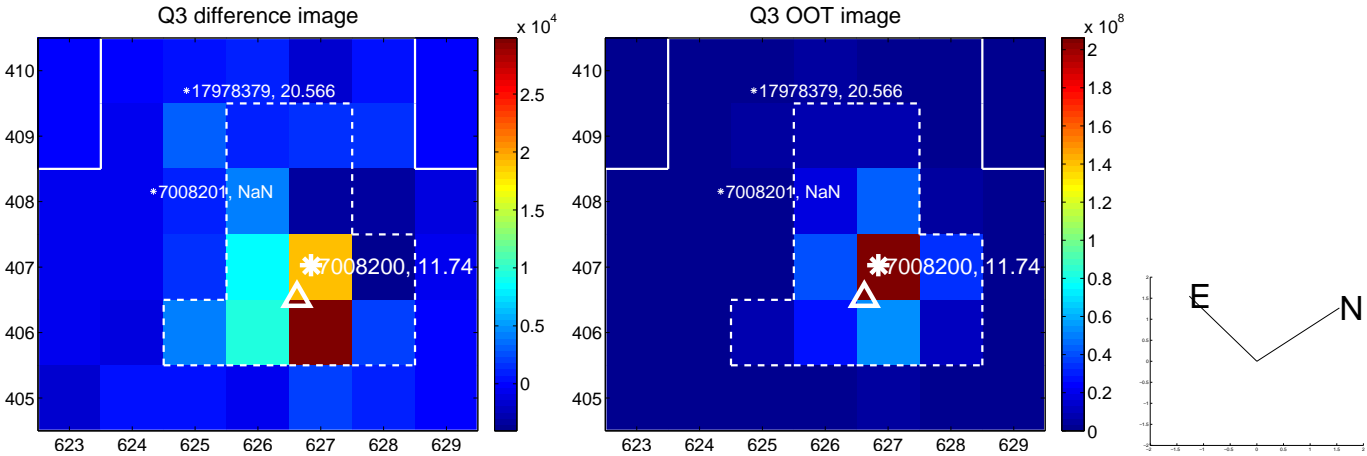
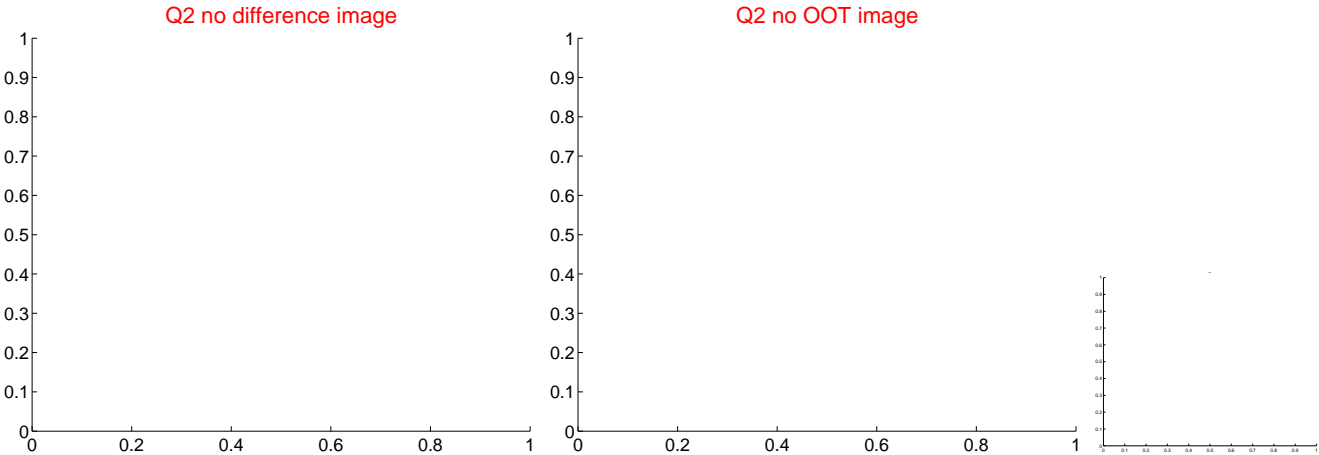
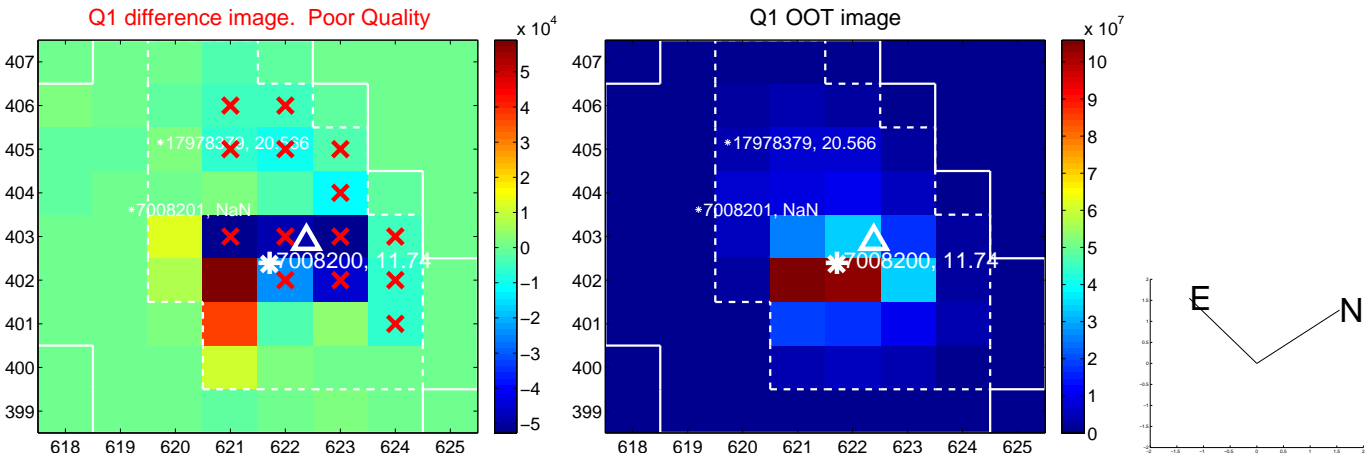


offset from photometric centroids

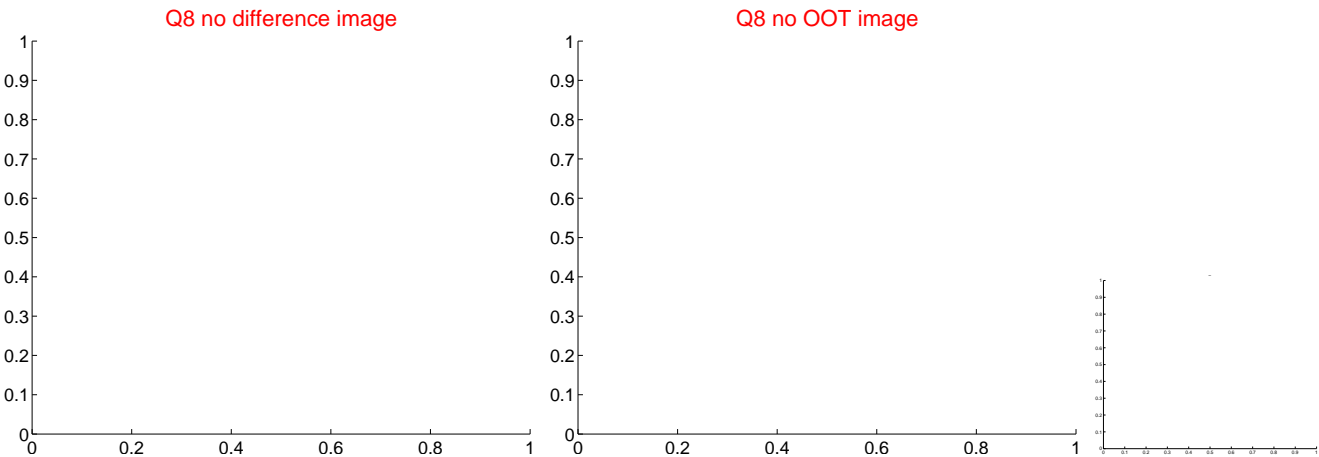
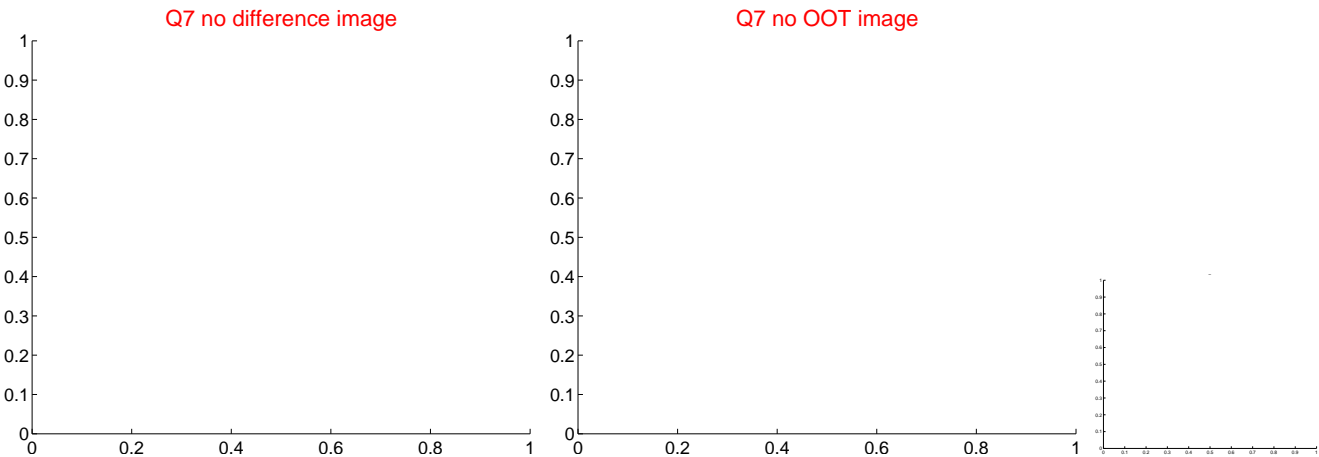
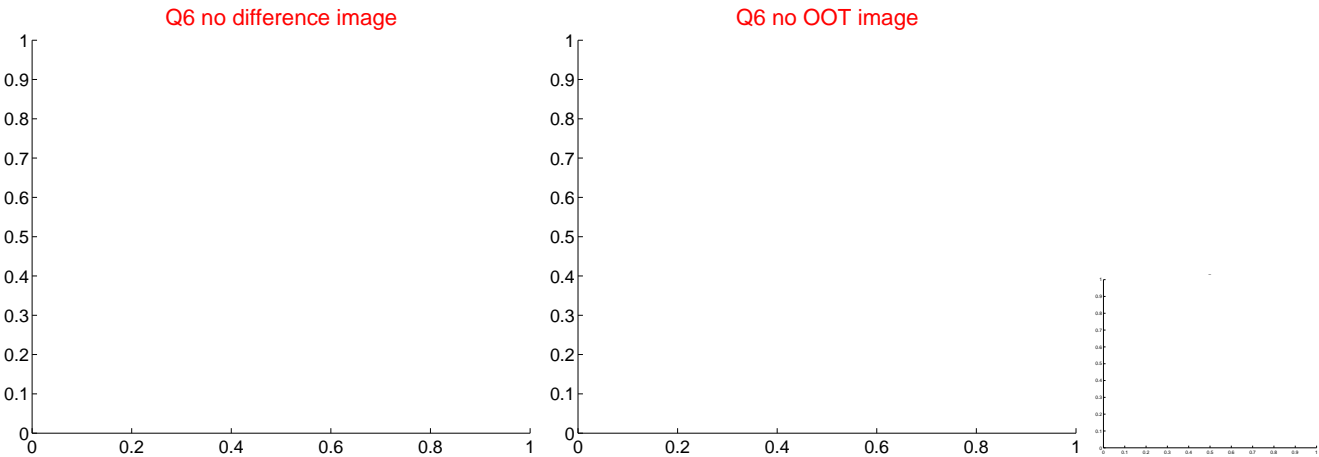
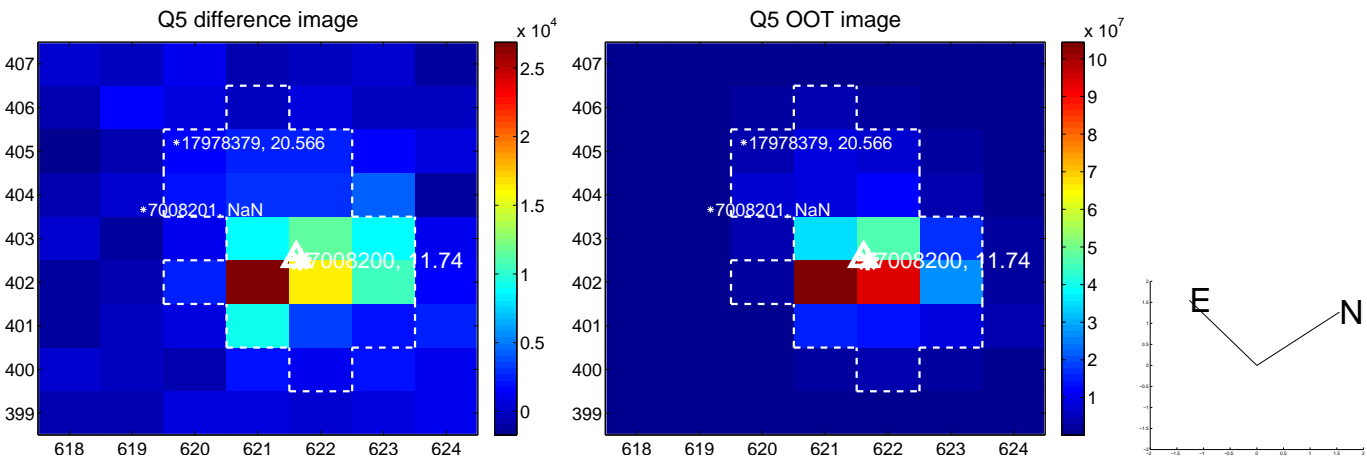


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

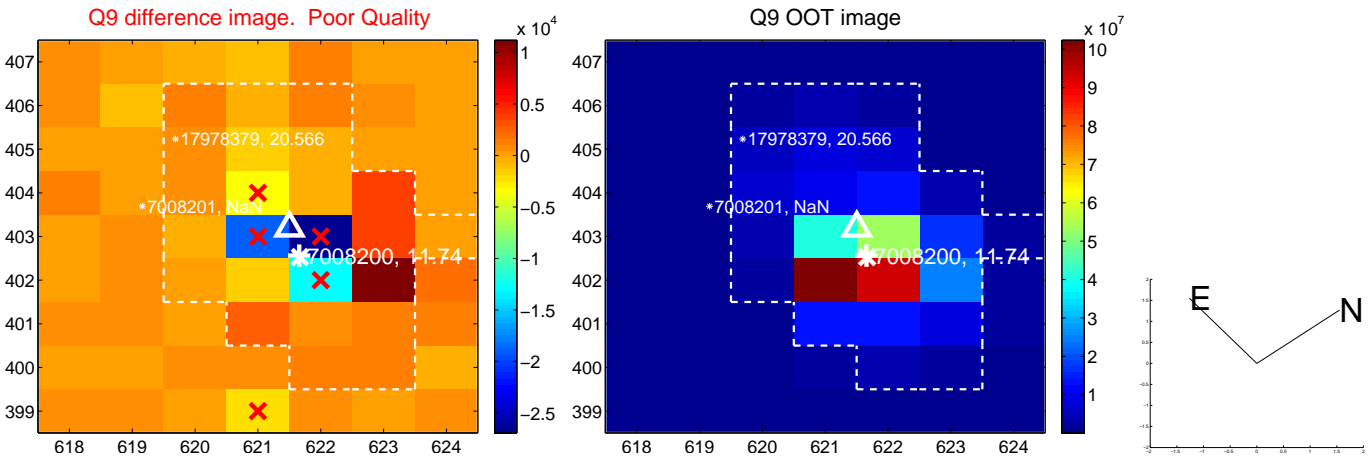
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



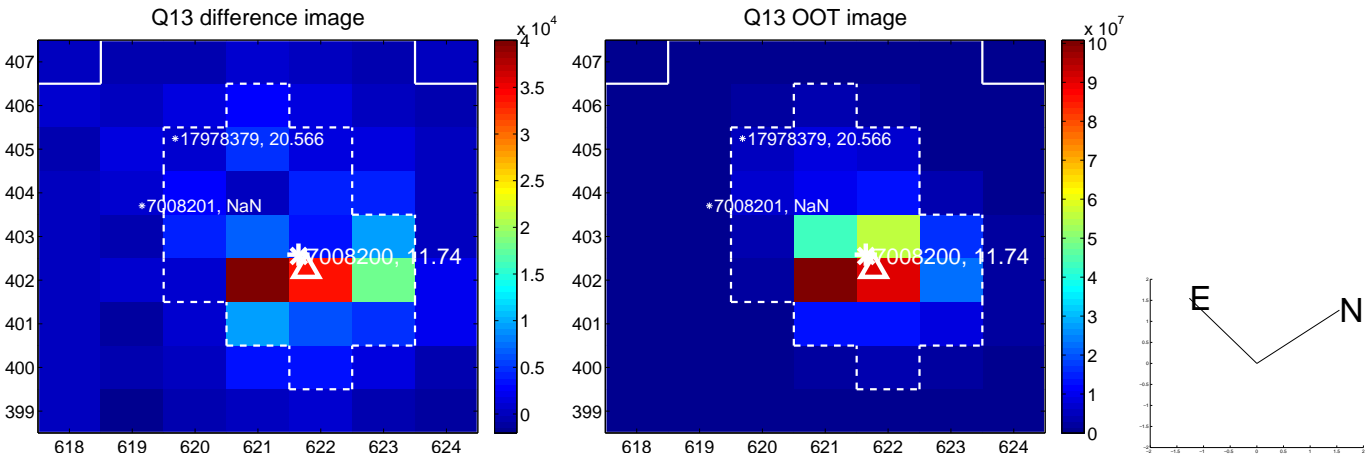
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



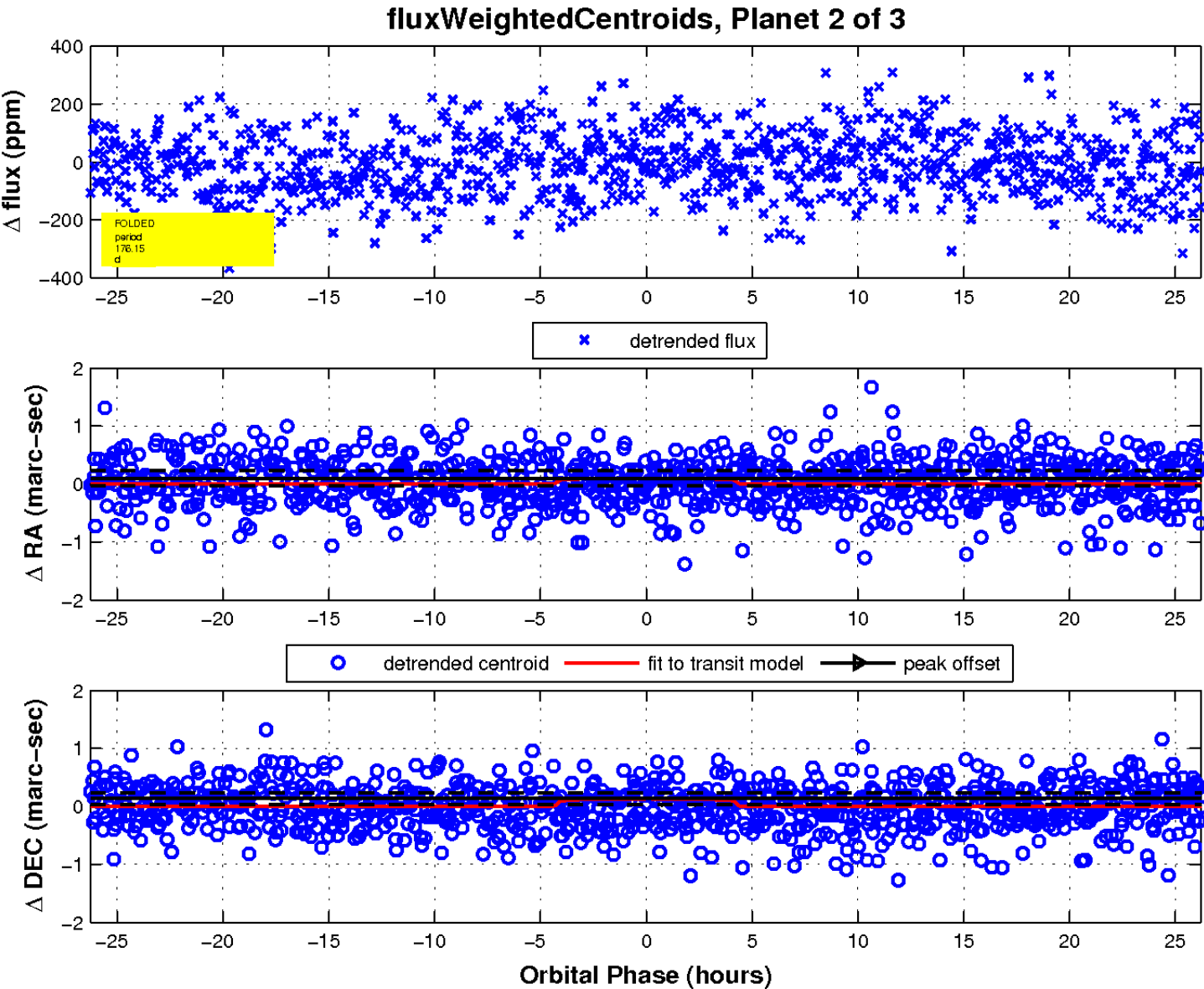
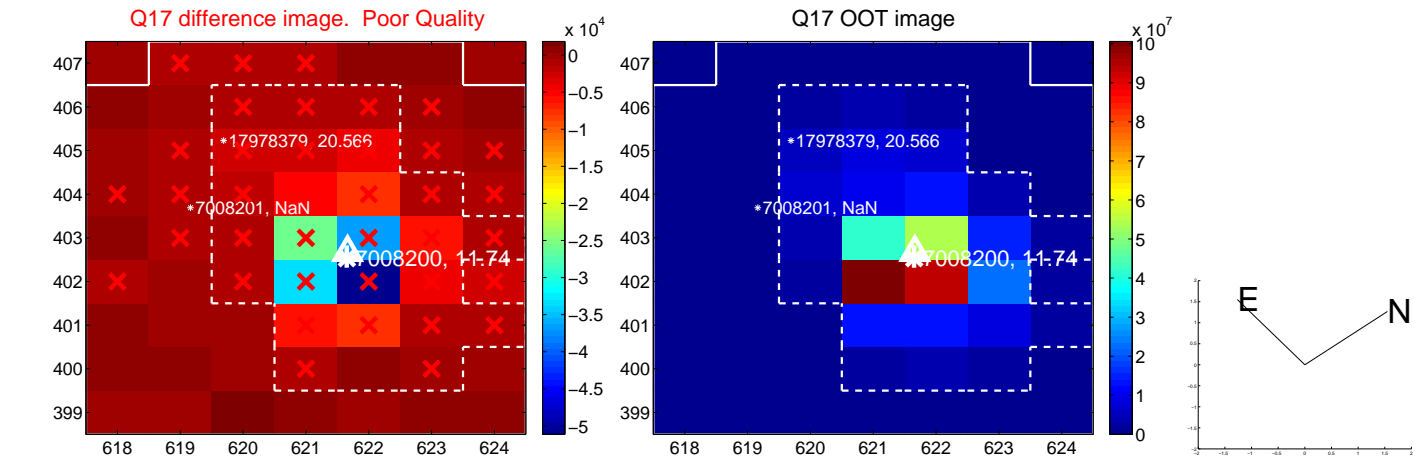
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

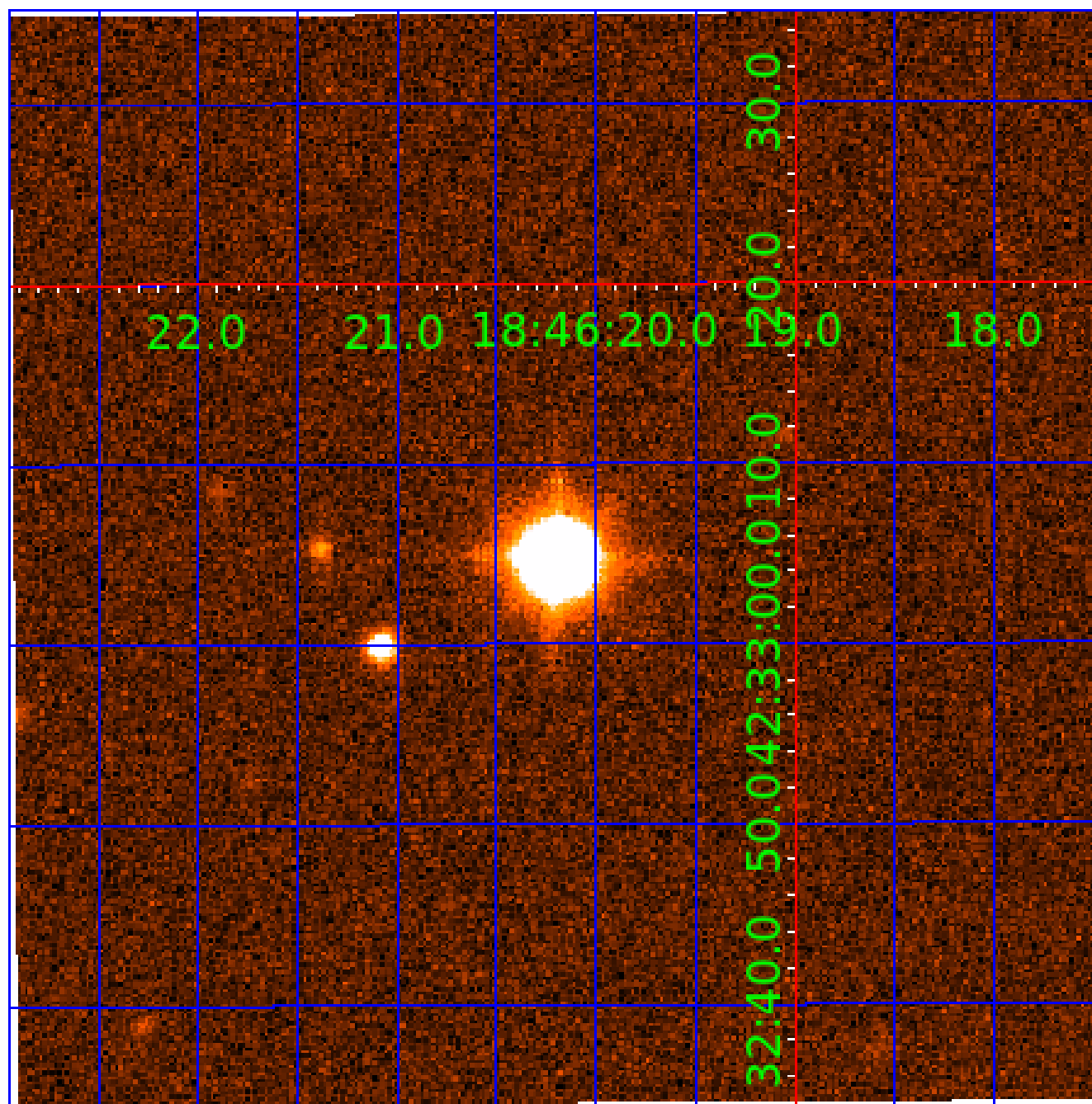


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007008200

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})
007008200-01	OBS	No	1.767936	132.384220	13.6	5.920	8.0	6.6	1.57	7012	0.58	5653.96
007008200-02	OBS	No	176.152073	162.866590	35.1	8.755	11.4	1.7	1.57	7012	1.07	12.24
007008200-03	OBS	No	280.203243	380.924533	157.8	6.000	7.4	5.5	1.57	7012	2.23	6.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007008200-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV
007008200-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_TRACKER—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
007008200-03	OBS	FP	0.03	1	0	0	0	MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

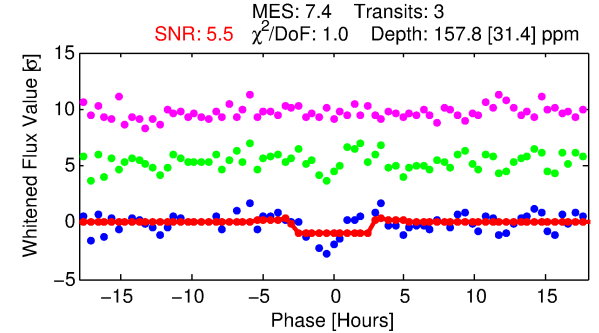
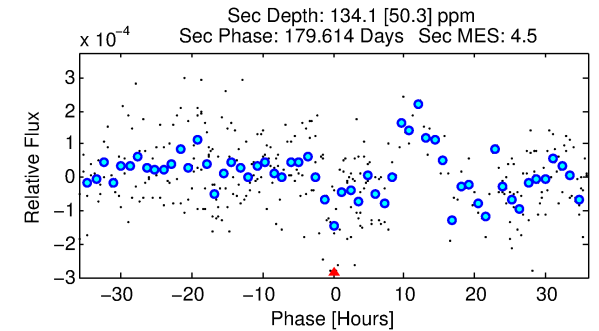
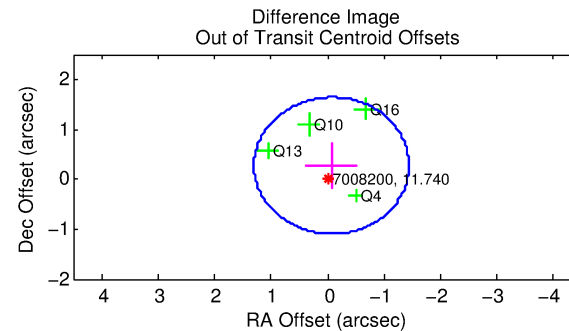
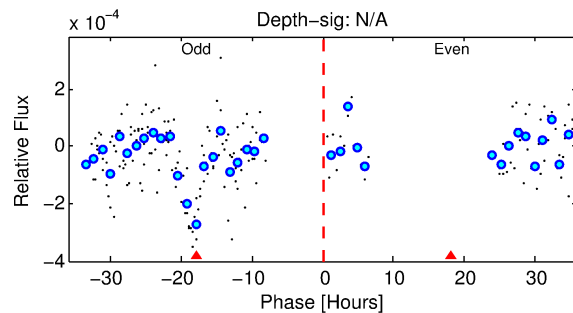
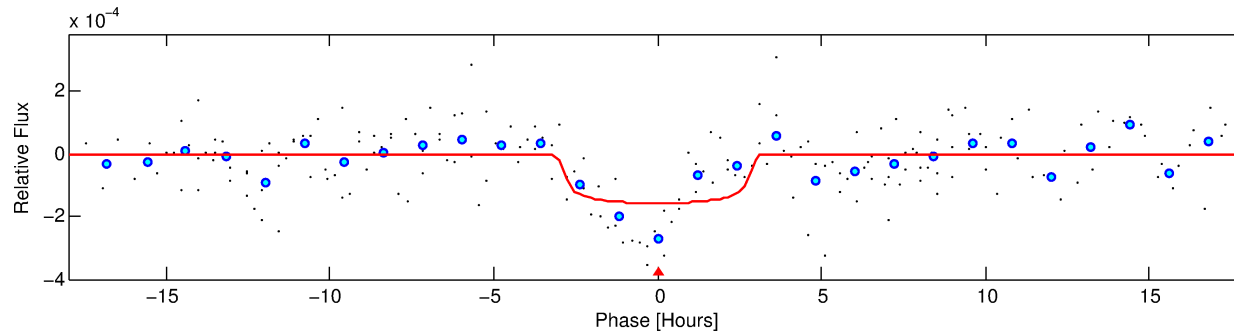
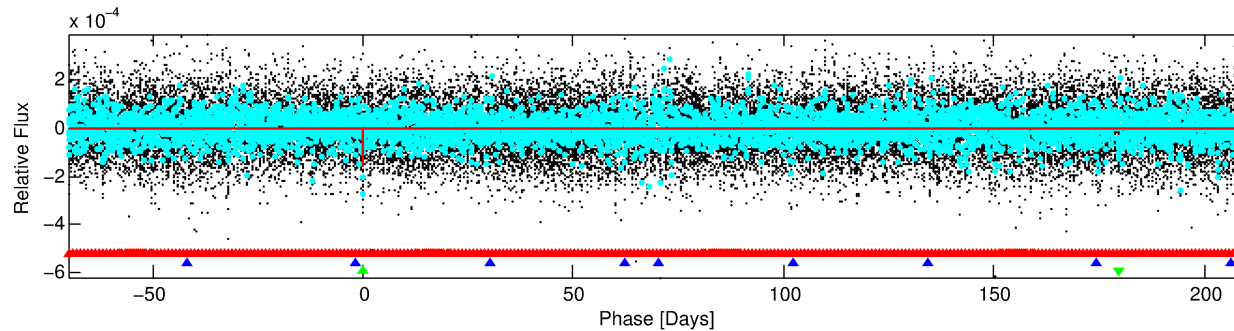
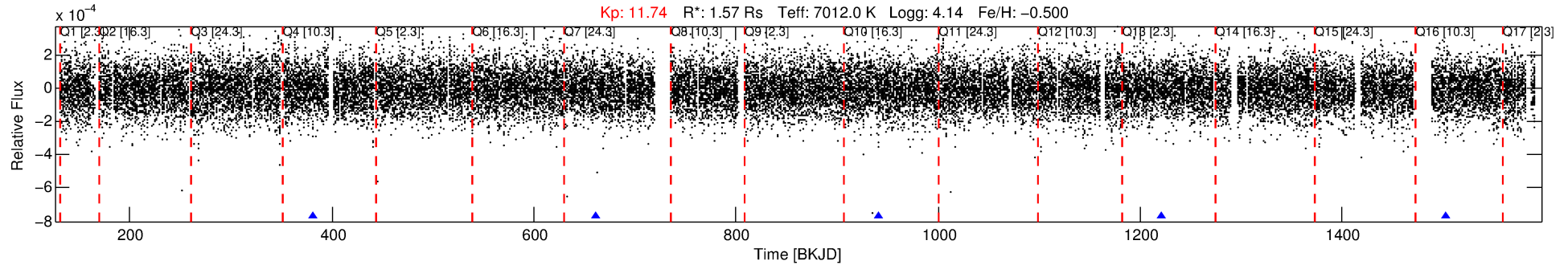
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007008200-03

No Significant Match Found

DV One-Page Summary

KIC: 7008200 Candidate: 3 of 3 Period: 280.203 d



DV Fit Results:

Period = 280.20324 [0.00412] d
Epoch = 380.9245 [0.0104] BKJD
Rp/R* = 0.0131 [0.0055]
a/R* = 188.14 [459.58]
b = 0.86 [0.71]
Seff = 6.59 [2.70]
Teq = 409 [42] K
Rp = 2.23 [1.12] Re
a = 0.8982 [0.2171] AU
Ag = 11917.25 [11794.80] [1.01σ]
Teffp = 6600 [1544] K [4.01σ]

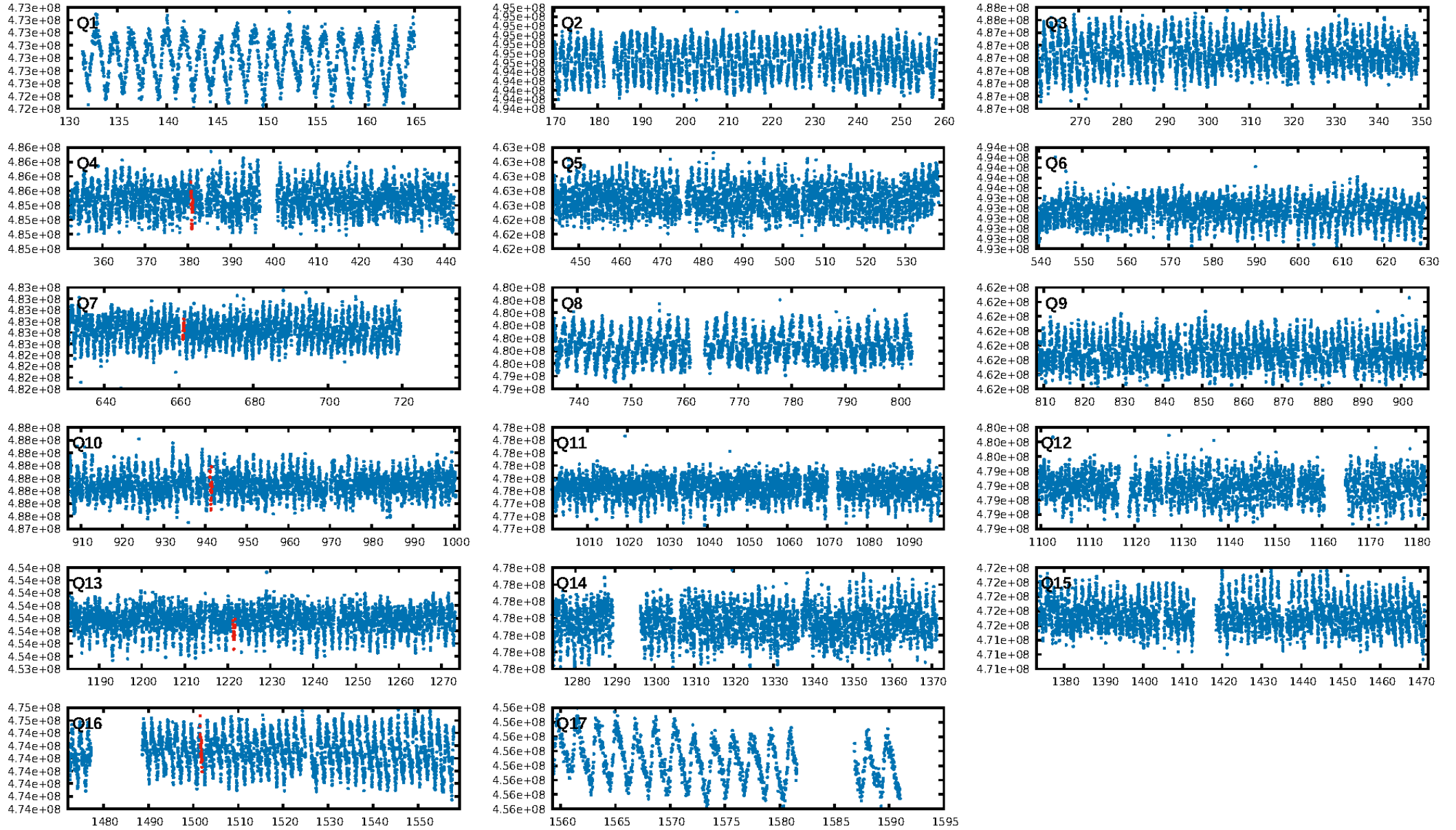
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [235.28σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 83.7%
ModelChiSquareGof-sig: 76.1%
Bootstrap-pfa: 5.20e-09
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.706
Centroid-sig: 76.0%
Centroid-so: 0.280 arcsec [0.28σ]
OotOffset-rm: 0.280 arcsec [0.61σ]
OotOffset-st: 1/0/2/1 [4]
KicOffset-rm: 0.341 arcsec [0.75σ]
KicOffset-st: 1/0/2/1 [4]
DiffImageQuality-fgm: 1.00 [4/4]
DiffImageOverlap-fno: 0.75 [3/4]

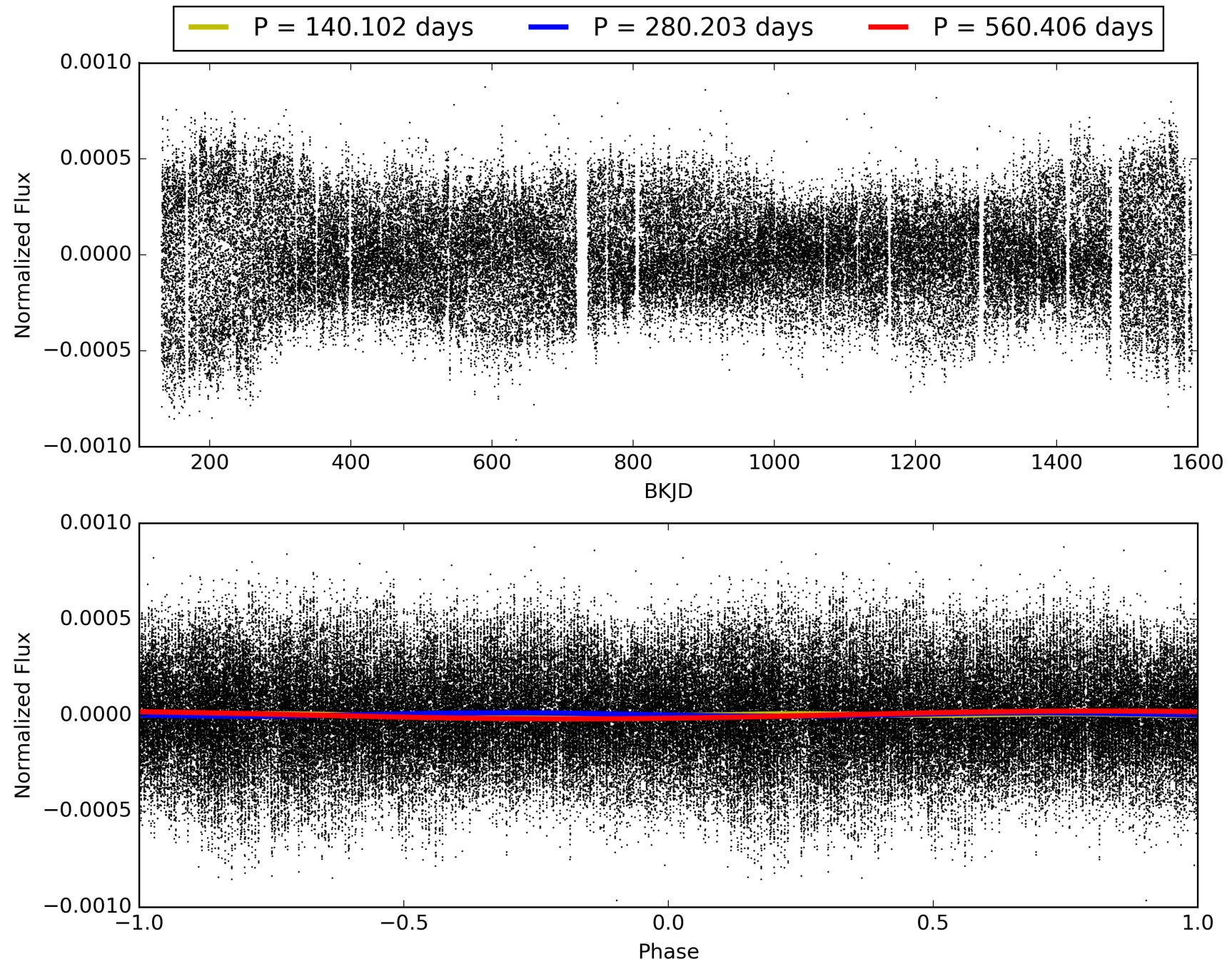
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 08:25:37 Z

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

TCE 007008200-03, PDC Light Curves

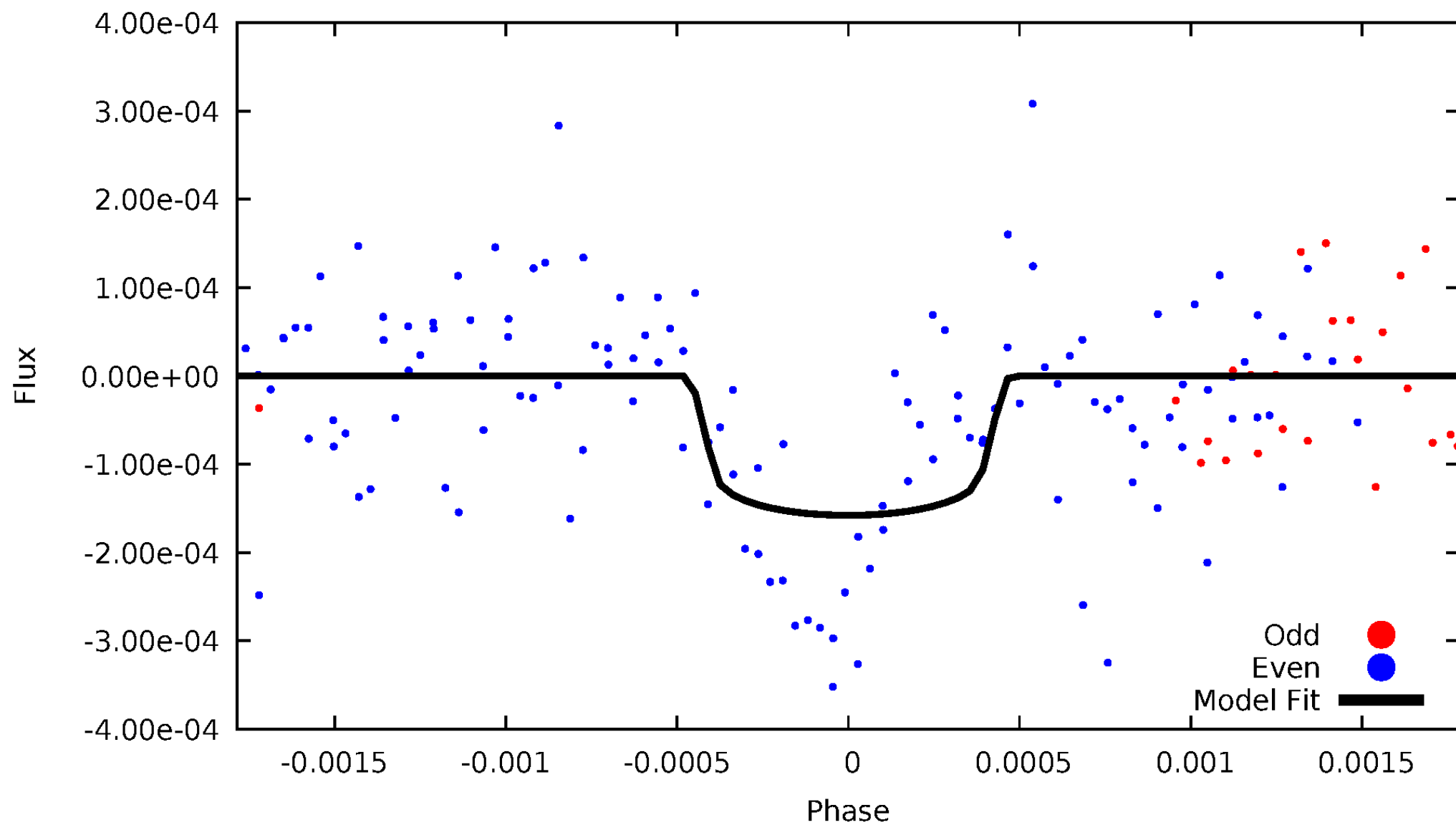


TCE 007008200-03



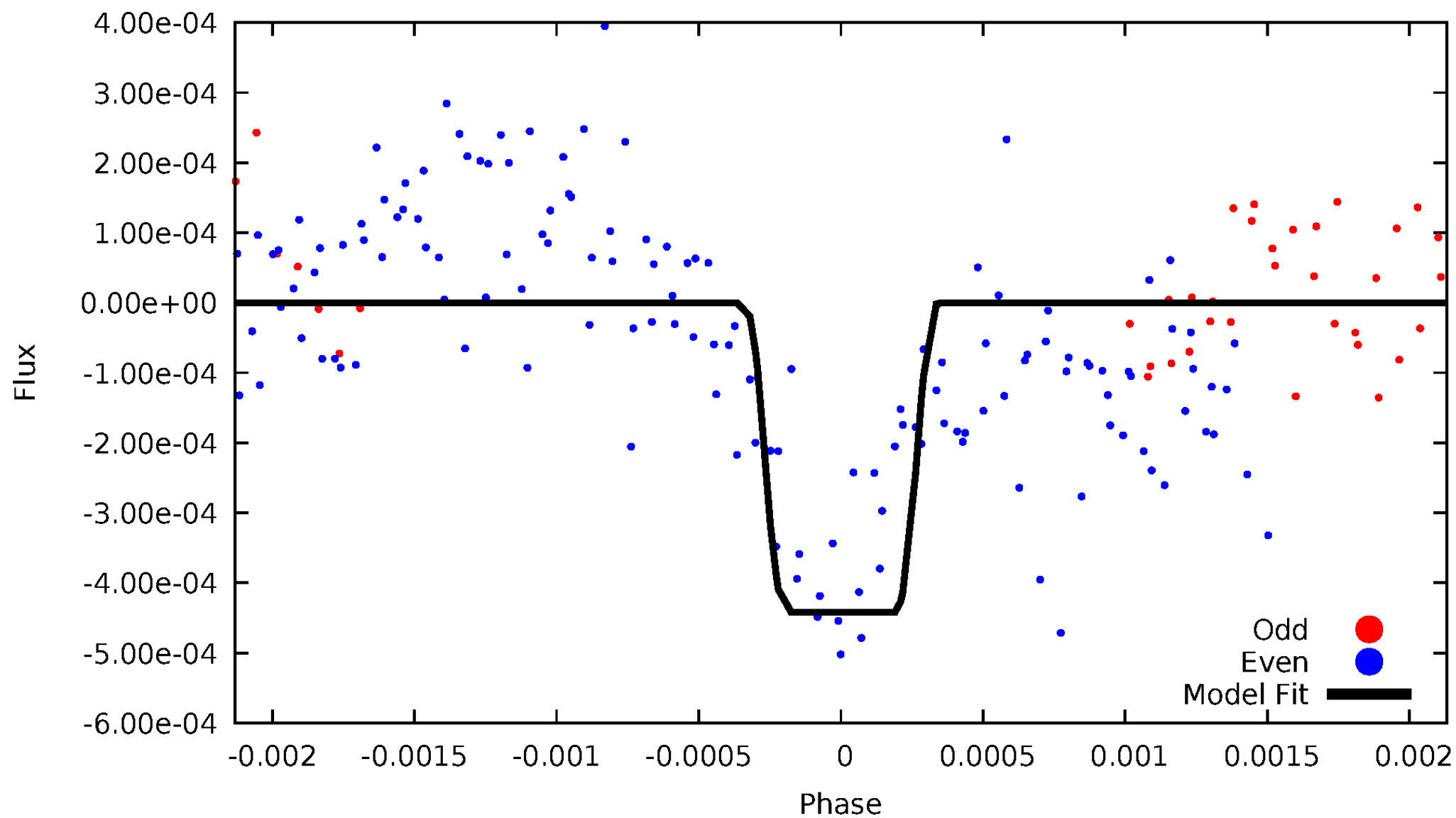
DV Odd/Even

TCE 007008200-03



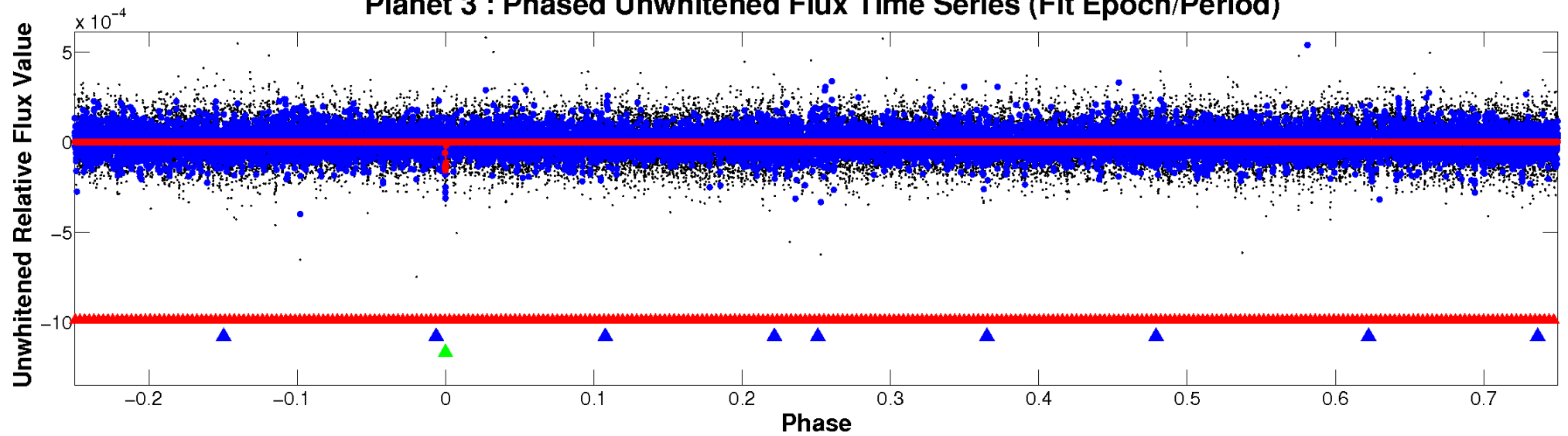
ALT Odd/Even

TCE 007008200-03

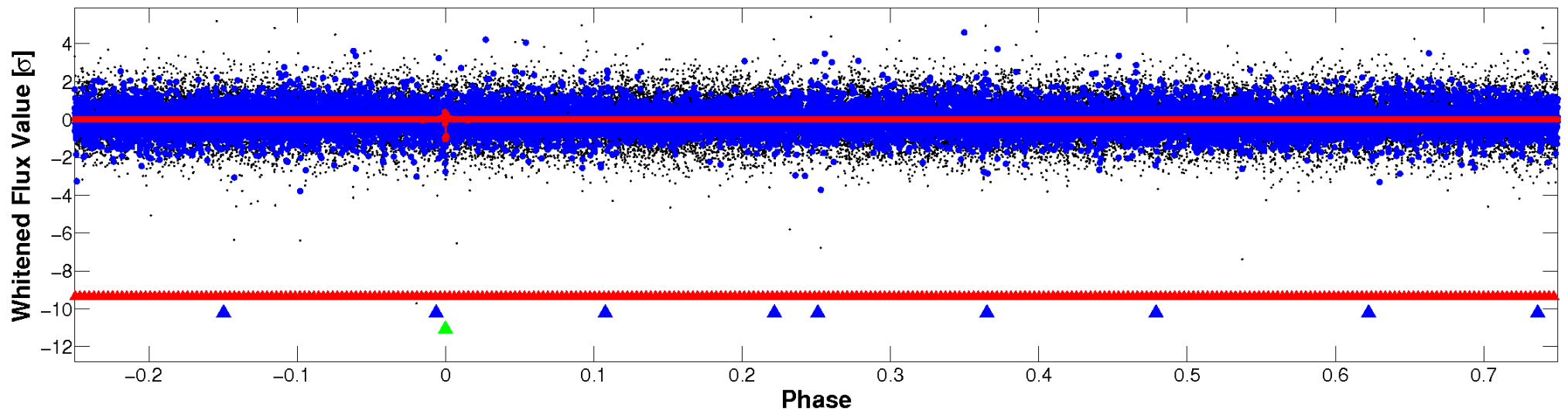


Non-Whitened Vs. Whitened Light Curve

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

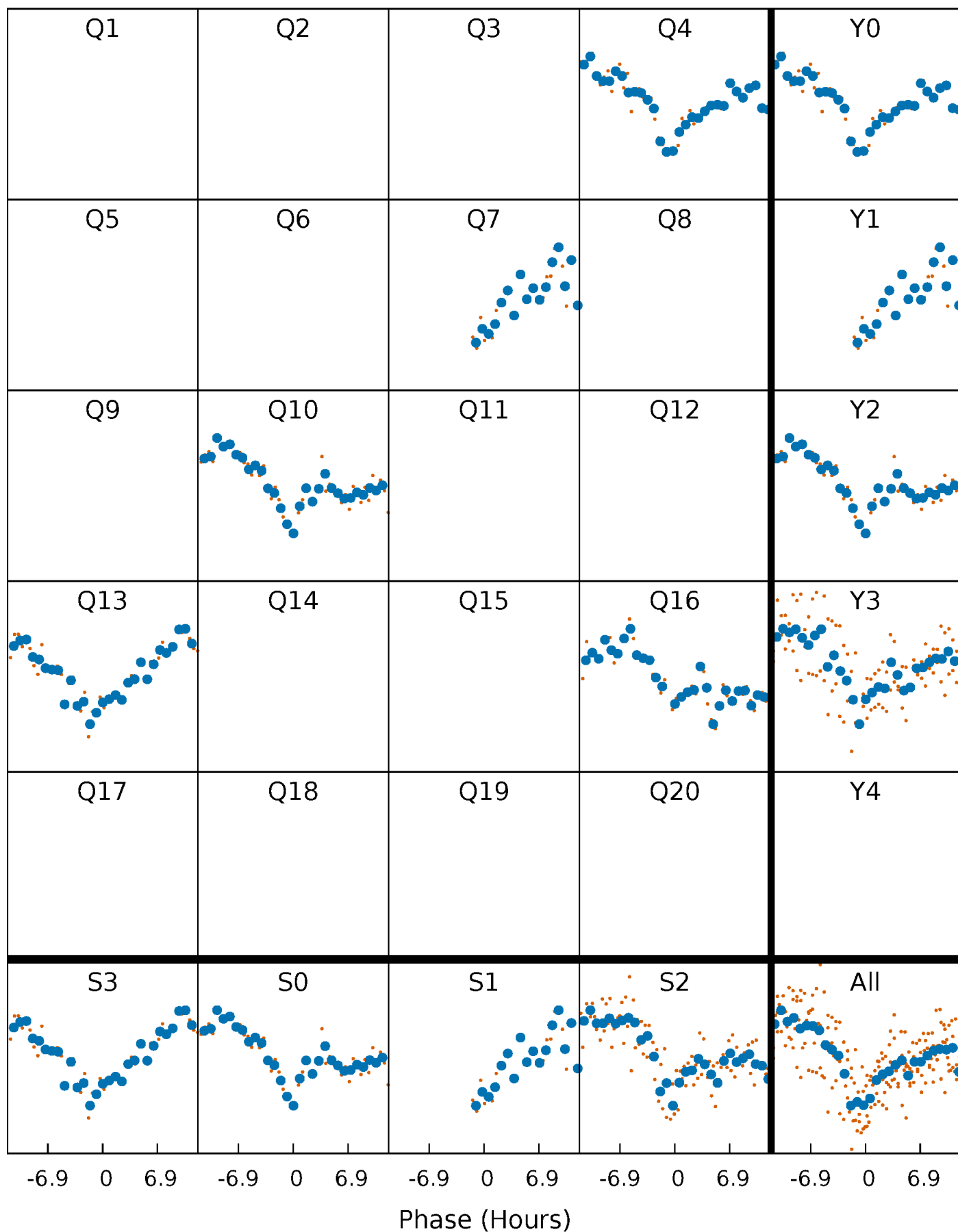


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



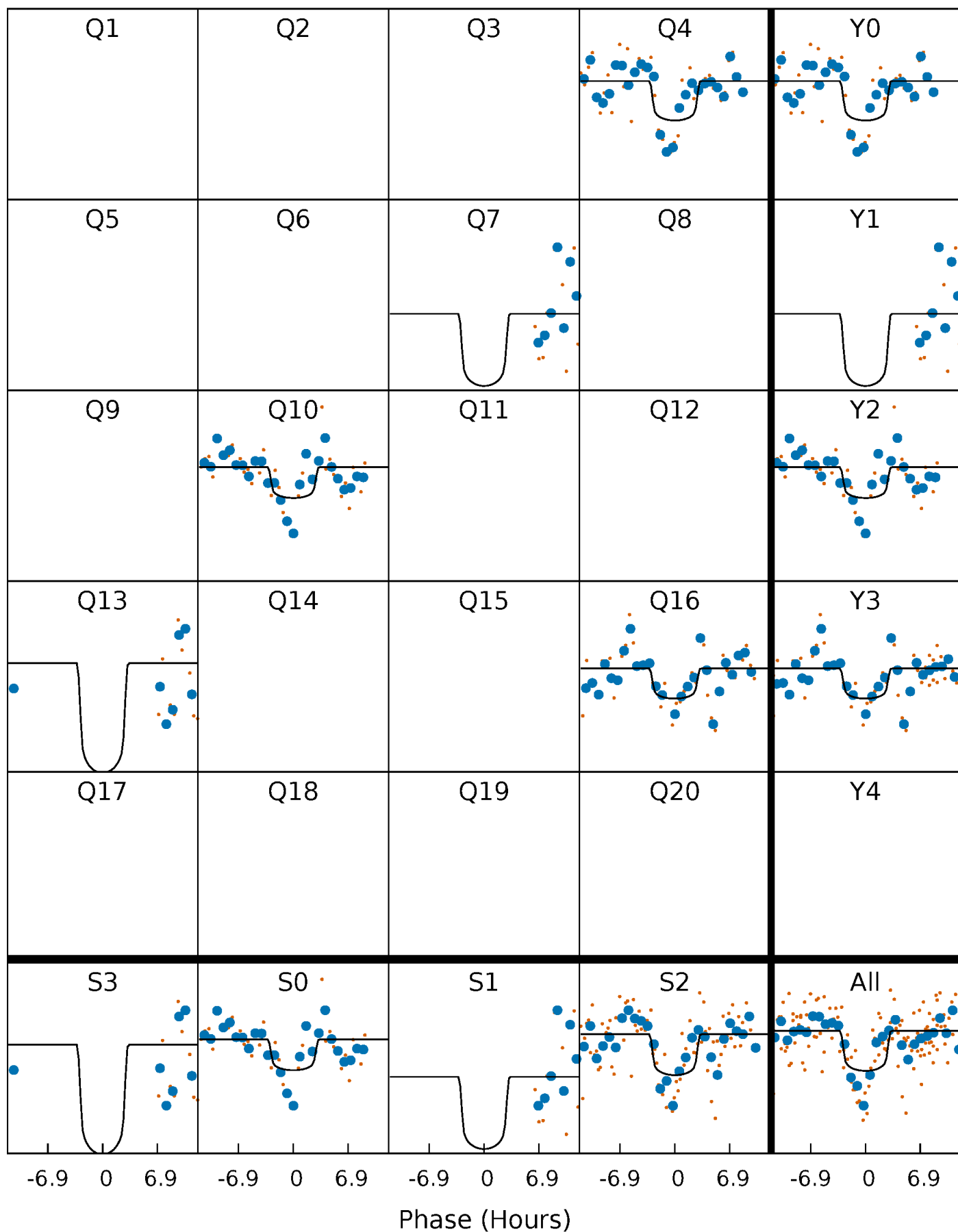
PDC Quarter-Phased Transit Curves

TCE 007008200-03 $P=280.203243$ Days $T_0=380.924533$ (BKJD)



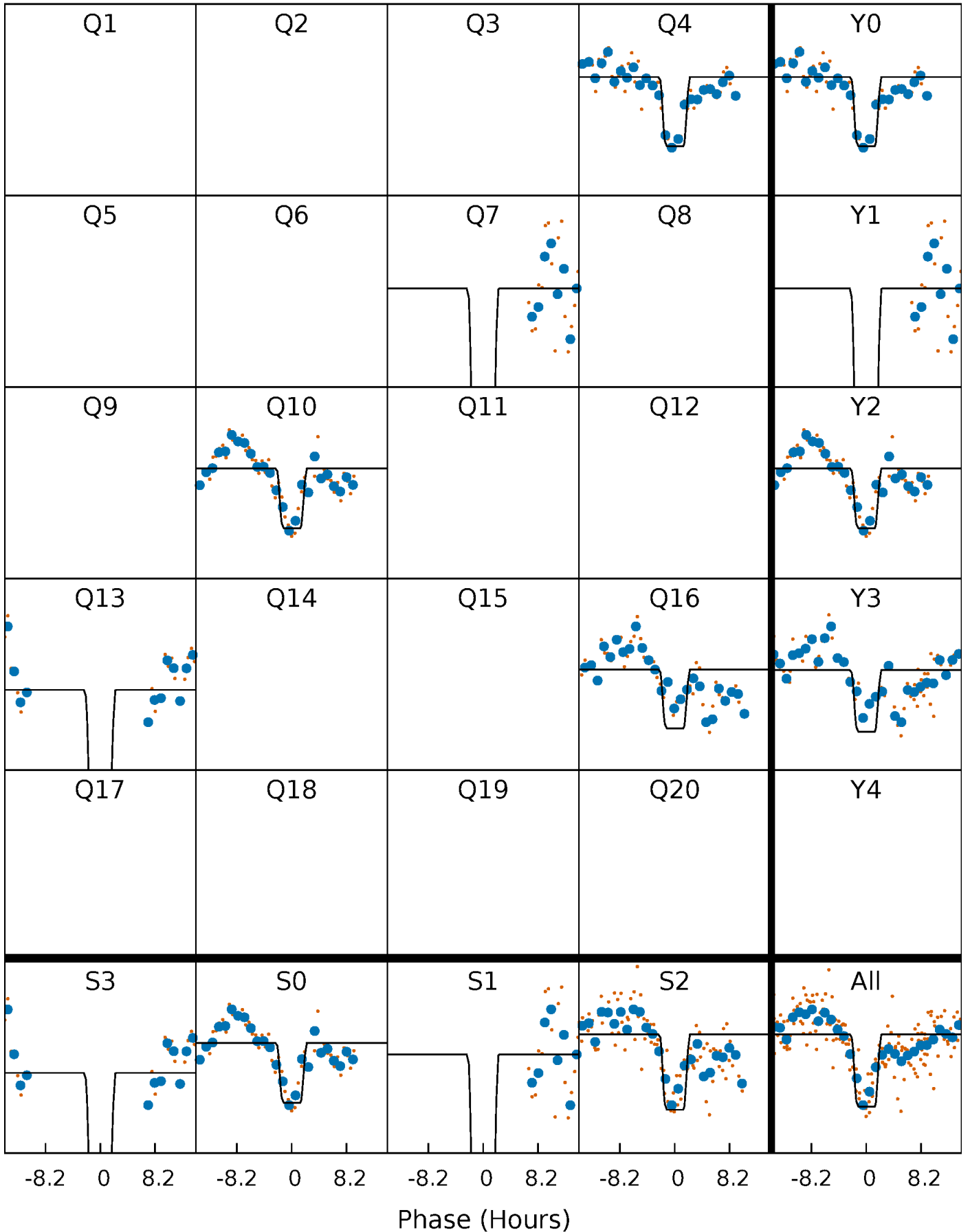
DV Quarter-Phased Transit Curves

TCE 007008200-03 $P=280.203243$ Days $T_0=380.924533$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

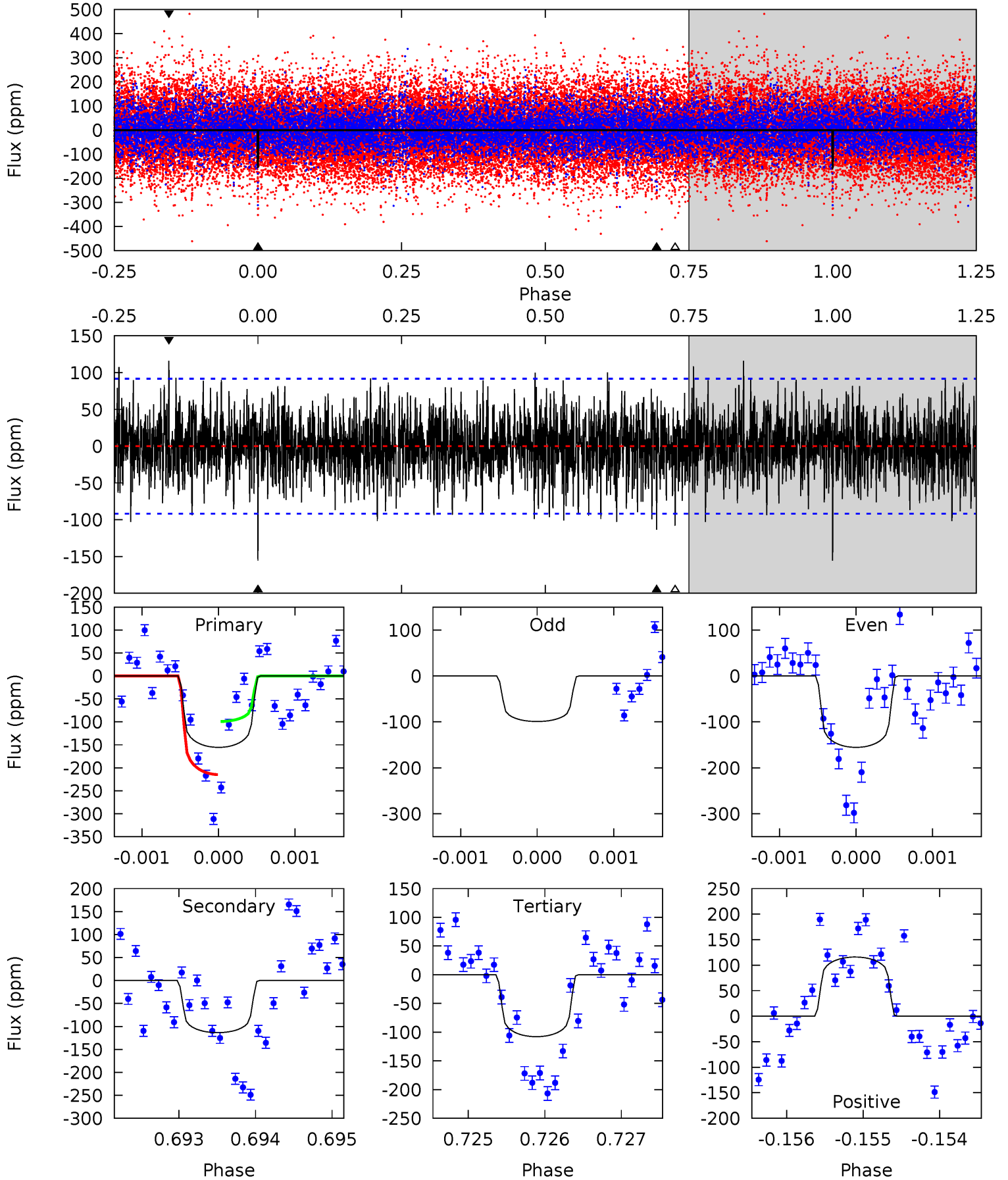
TCE 007008200-03 $P=280.207333$ Days $T_0=380.903837$ (BKJD)



DV Model-Shift Uniqueness Test

007008200-03, P = 280.203243 Days, E = 100.721290 Days

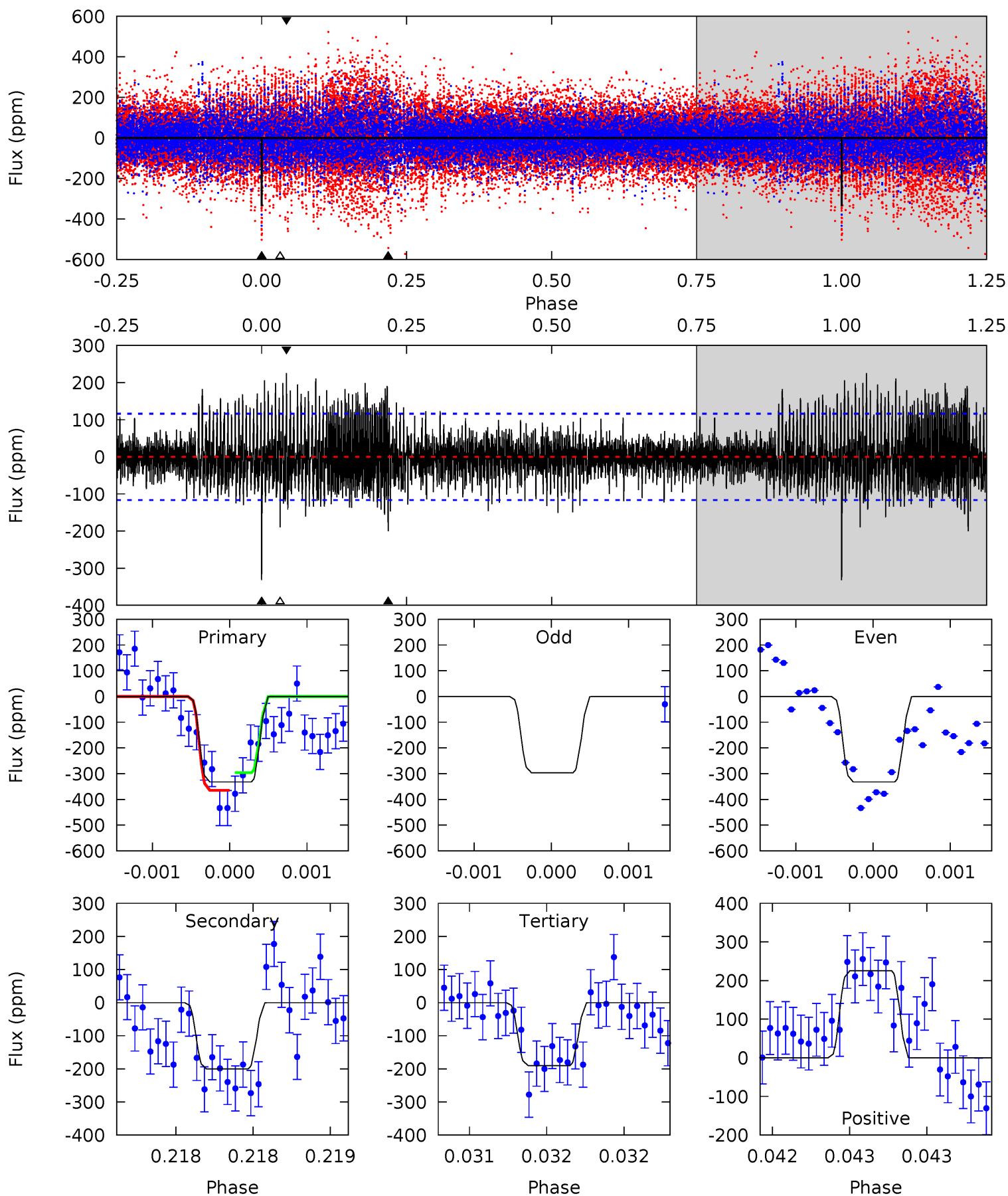
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.26	6.77	6.43	6.91	5.47	3.32	1.94	2.84	2.35	0.34	-0.14	2.02	0.99	0.43	3.41



Alt Model-Shift Uniqueness Test

007008200-03, P = 280.207333 Days, E = 100.696504 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.7	9.49	9.02	10.7	5.52	3.40	2.54	6.73	5.05	0.48	-1.21	0.91	0.91	0.40	1.62



Stellar Parameters For KIC 007008200

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7012^{+216}_{-312}	$4.138^{+0.209}_{-0.171}$	$-0.500^{+0.250}_{-0.300}$	$1.567^{+0.425}_{-0.382}$	$1.229^{+0.185}_{-0.166}$	$0.450^{+0.514}_{-0.207}$
	+3%/-4%	+5%/-4%	+50%/-60%	+27%/-24%	+15%/-14%	+114%/-46%
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 007008200-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-114 ± 17	$2.14^{+1.03}_{-0.88}$	563^{+47}_{-44}	6325^{+2018}_{-1051}	11254^{+19909}_{-6383}
Alt.	-200 ± 21	$3.53^{+1.25}_{-1.00}$	567^{+42}_{-46}	5694^{+971}_{-640}	7061^{+6760}_{-3190}

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

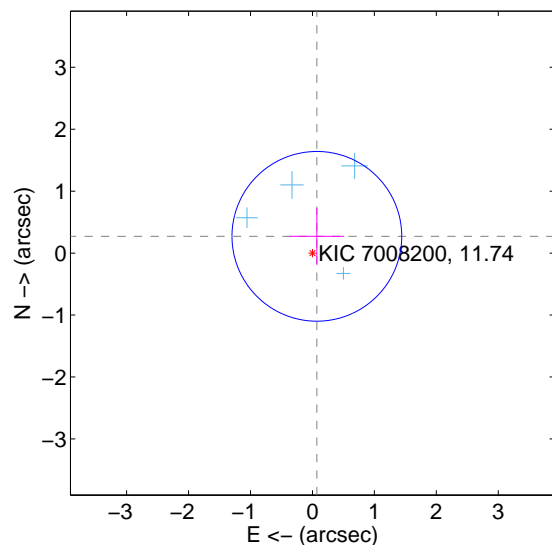
Supplemental centroid analysis for 007008200-03. **Kepler magnitude: 11.74.** Transit SNR 5.52

There are 4 quarters with good PRF difference image offsets

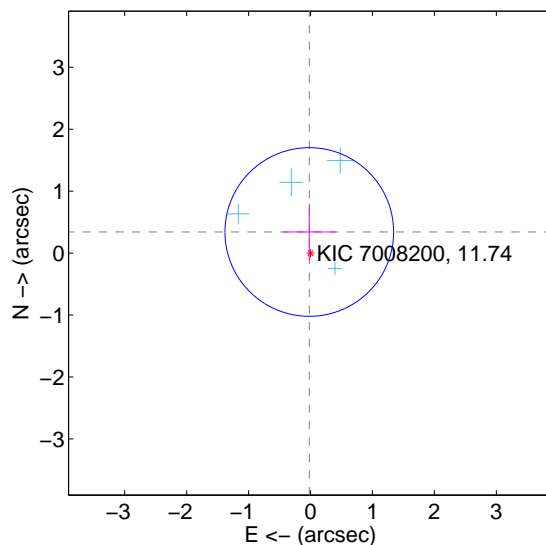
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.280 ± 0.457	0.61	-0.071 ± 0.439	0.271 ± 0.458
PRF-fit source offset from KIC position	0.341 ± 0.454	0.75	0.020 ± 0.425	0.341 ± 0.454
photometric centroid source offset	0.28 ± 0.99	0.28	0.03 ± 1.31	-0.28 ± 0.99

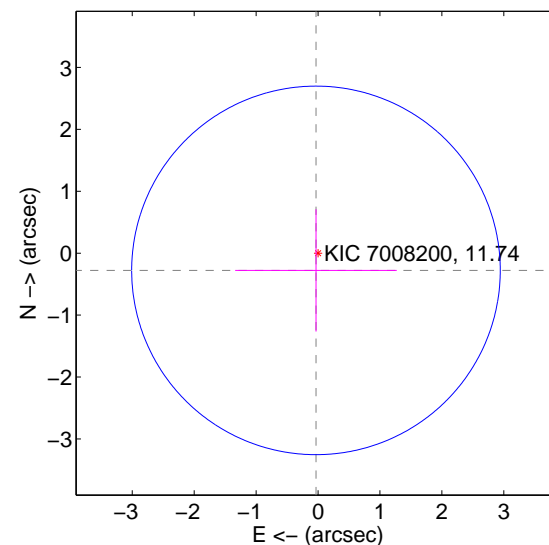
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

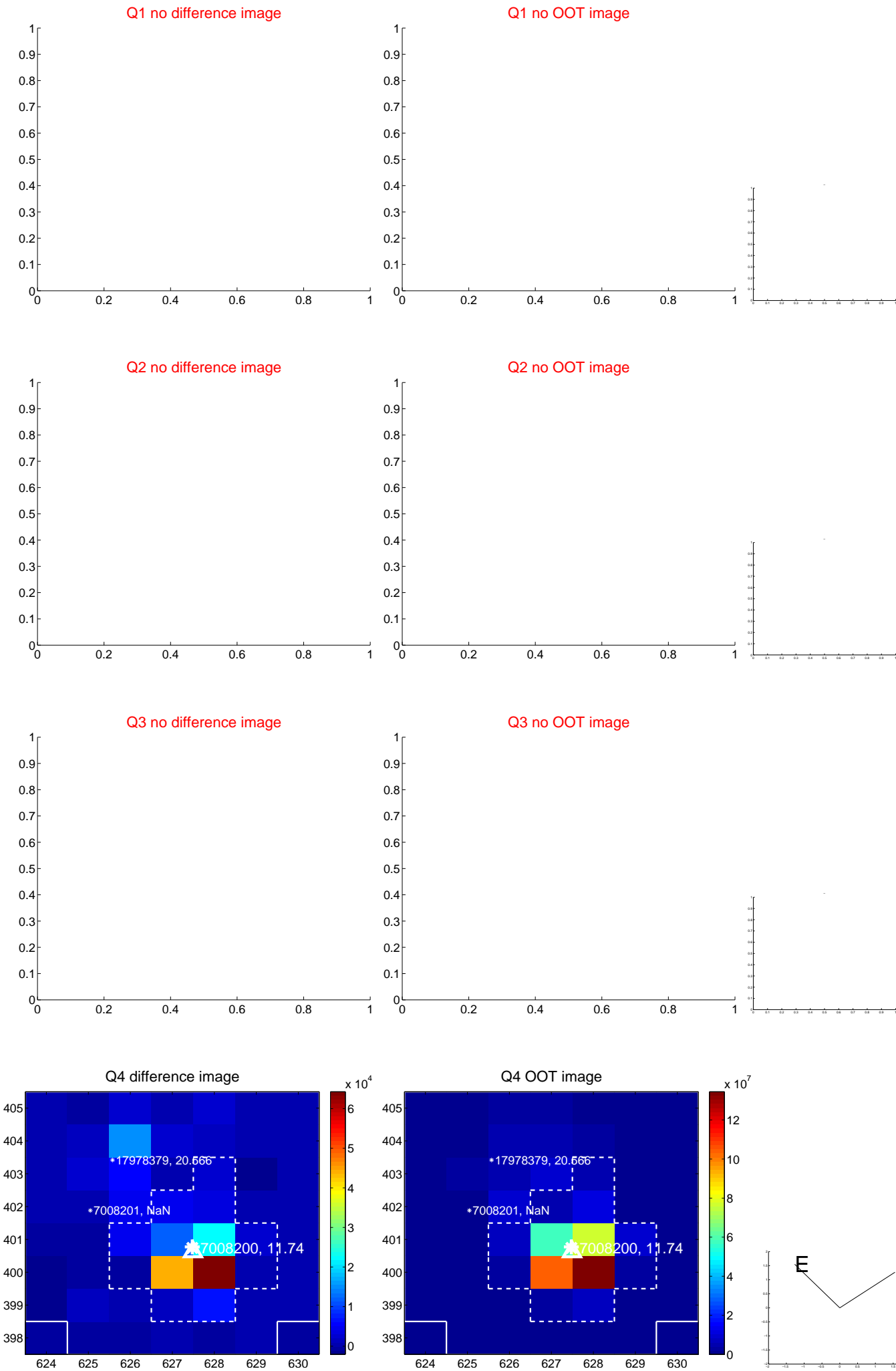


offset from photometric centroids



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.

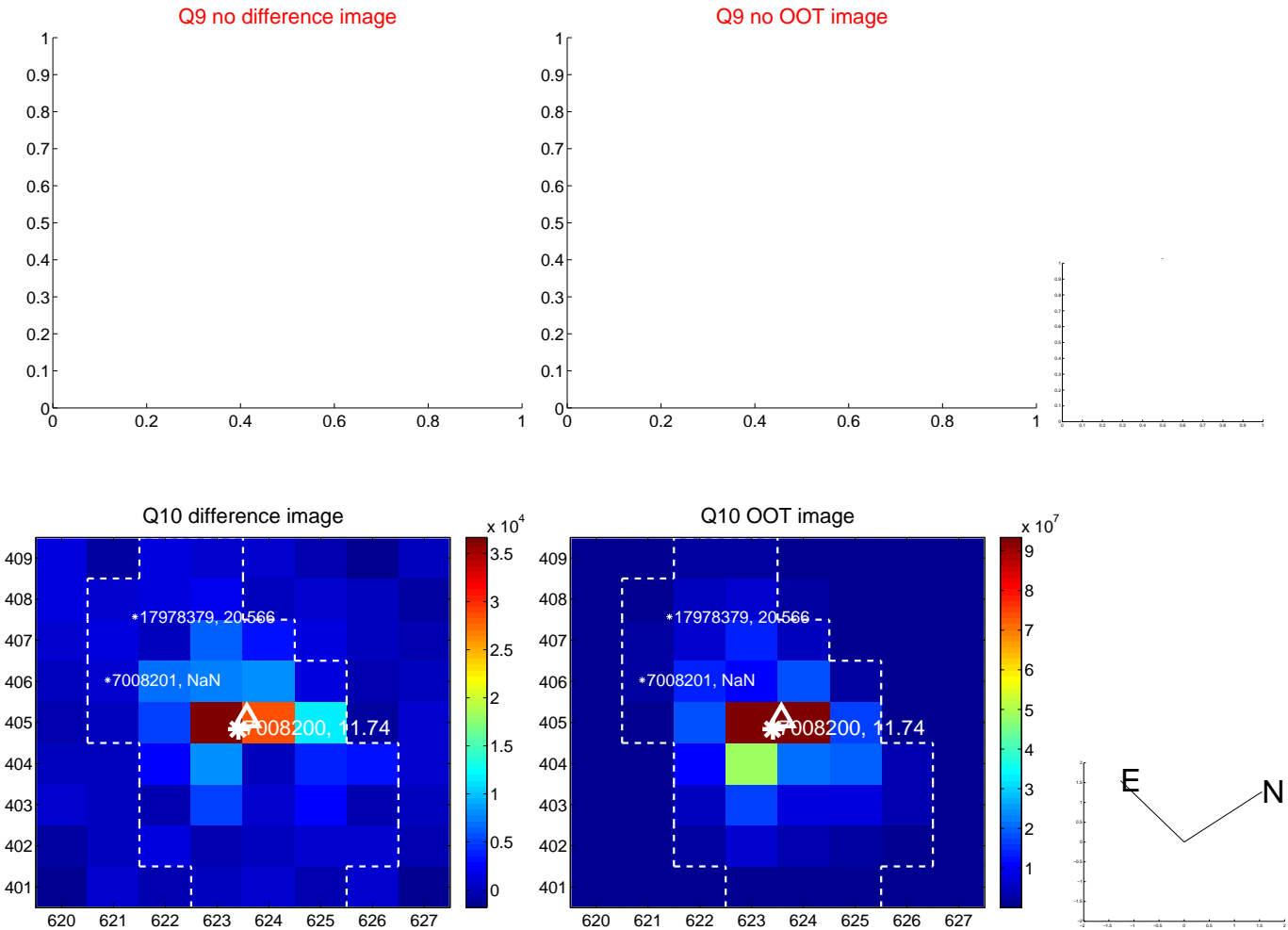
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



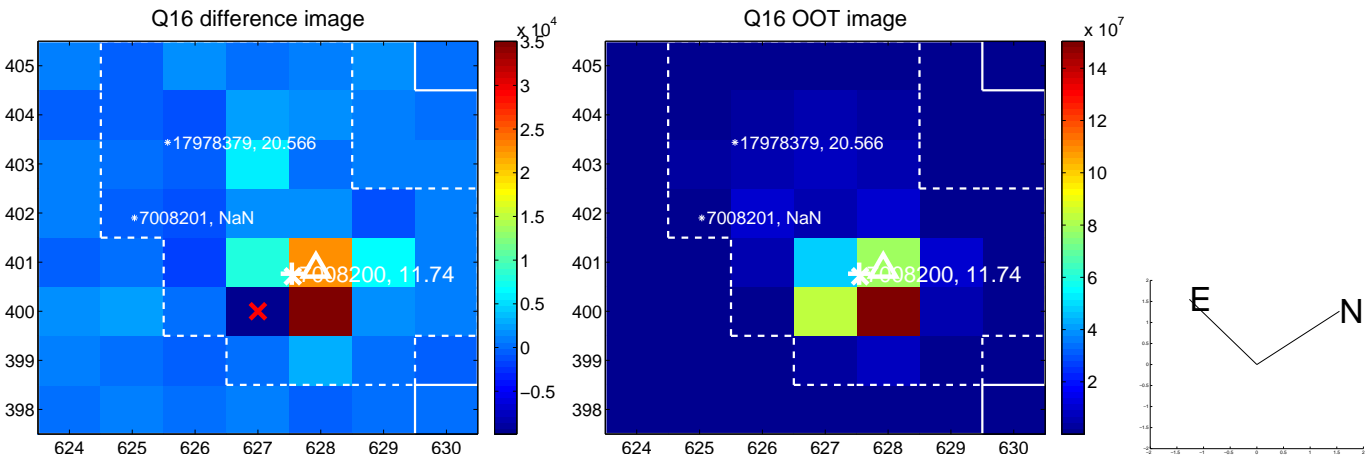
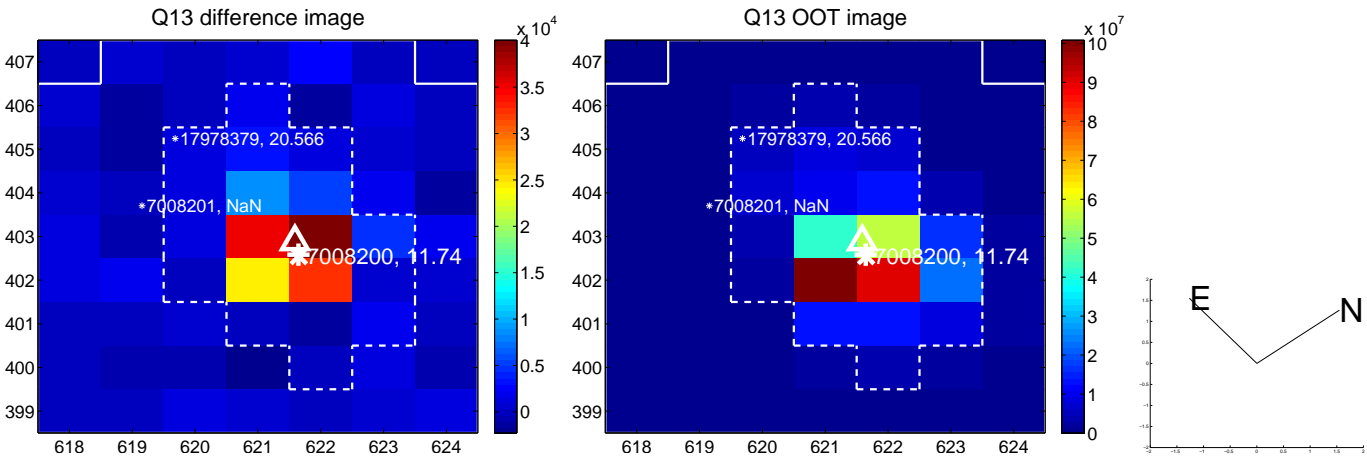
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



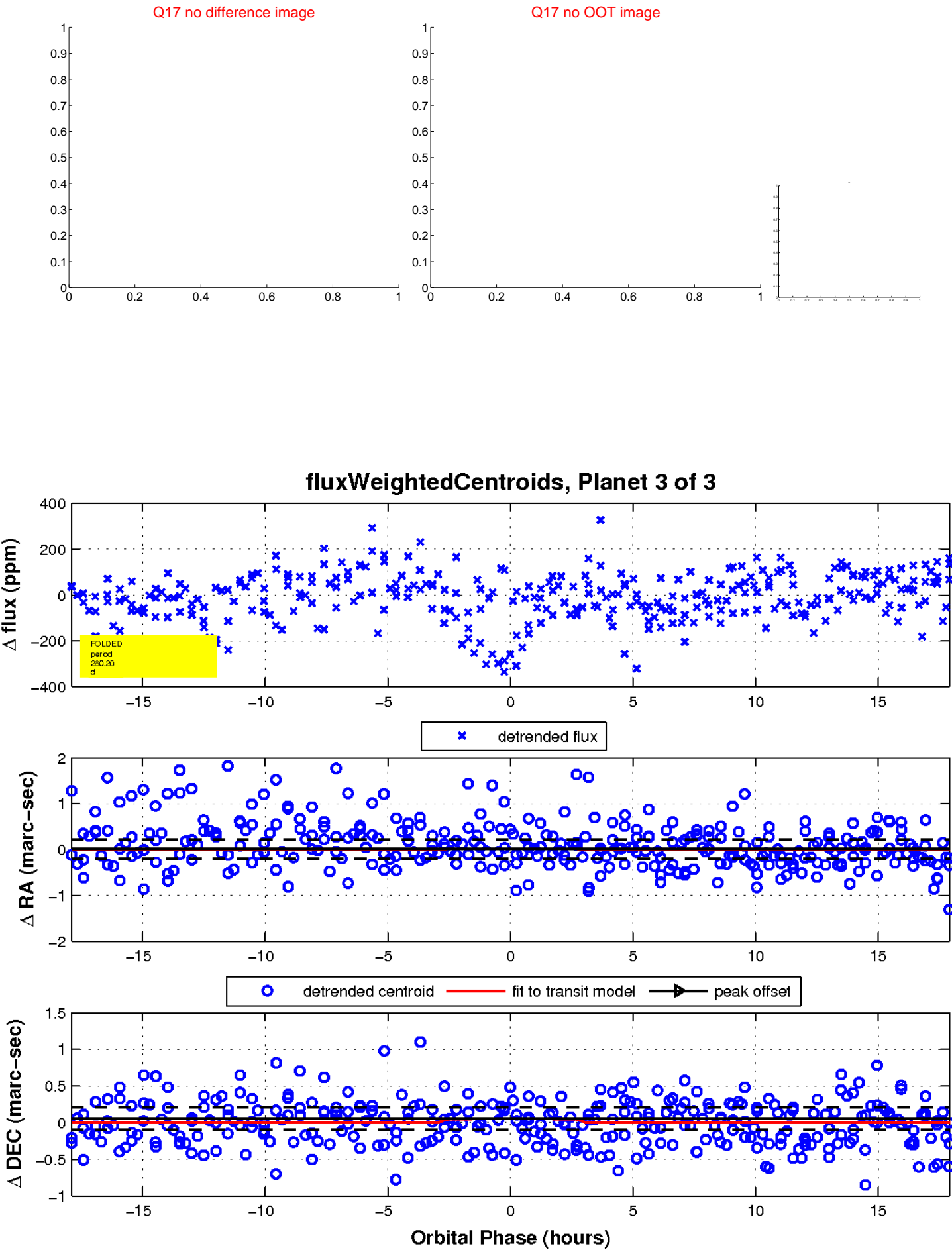
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

