

KIC 009204718

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})
009204718-01	OBS	No	1.826767	131.780036	16.8	6.000	10.2	-1.0	2.51	7372	1.04	13267.03
009204718-02	OBS	No	159.301369	251.678384	28.9	13.203	10.5	5.6	2.51	7372	1.56	34.31
009204718-03	OBS	No	1.826167	133.279285	3.8	19.183	8.6	8.4	2.51	7372	0.56	13272.85

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009204718-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
009204718-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_TER_DV—INCONSISTENT_TRANS—CENT_SATURATED
009204718-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

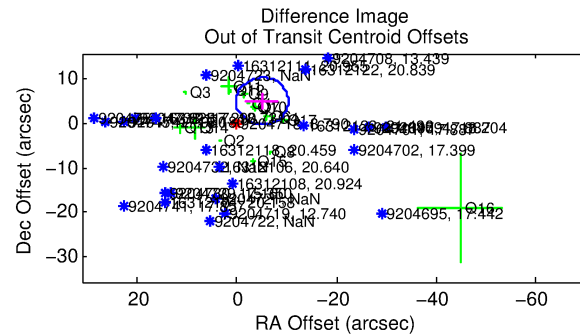
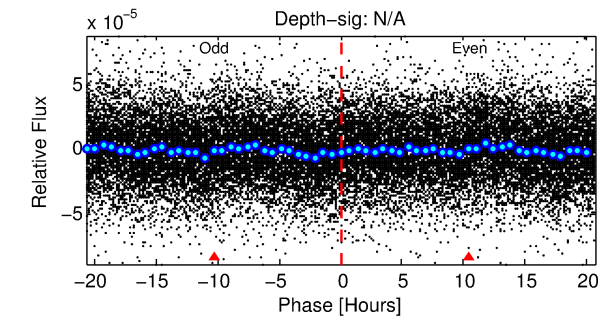
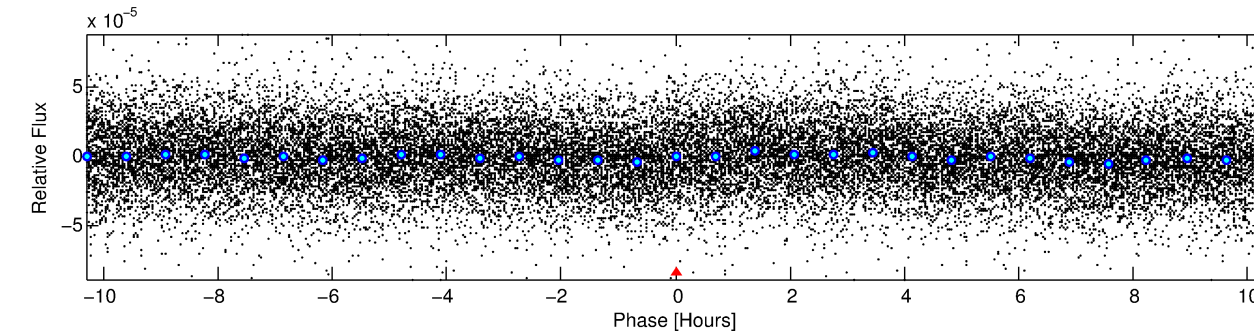
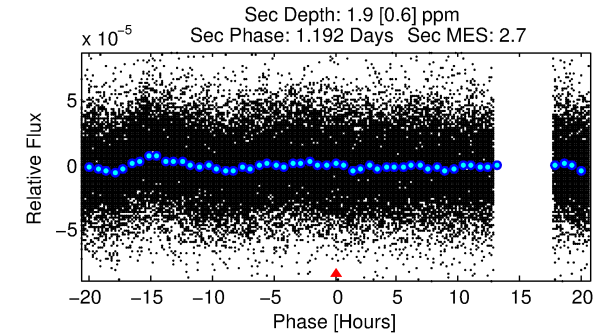
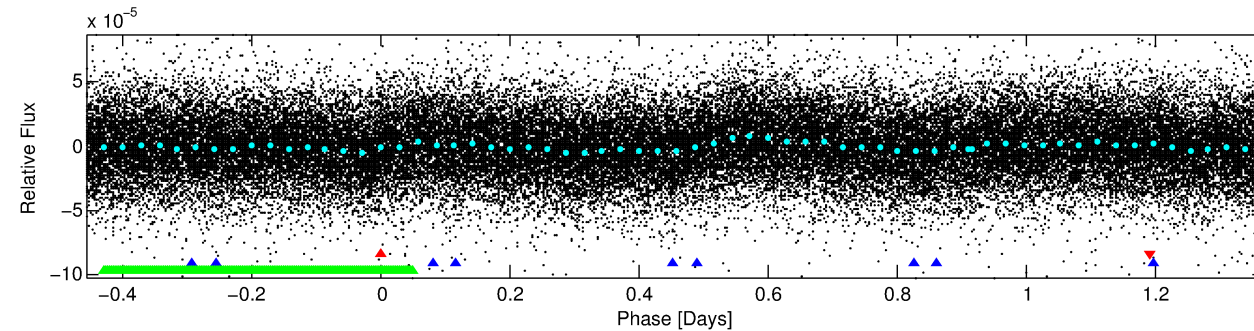
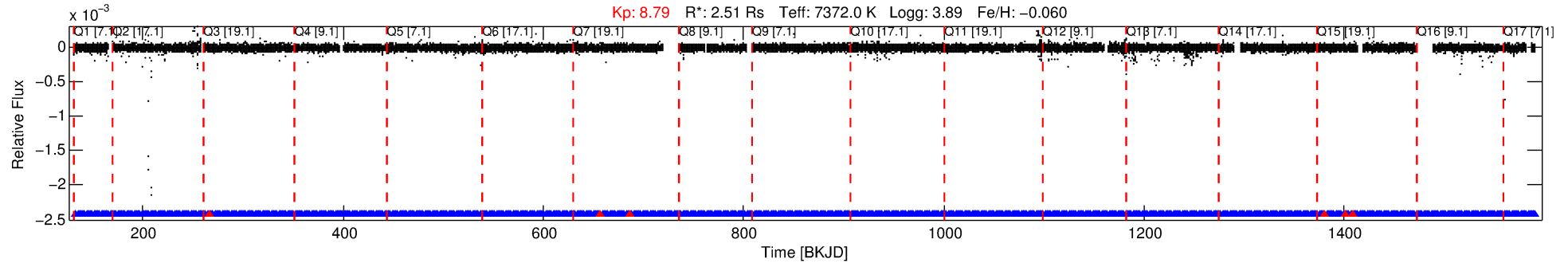
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009204718-01

No Significant Match Found

DV One-Page Summary

KIC: 9204718 Candidate: 1 of 3 Period: 1.827 d



TPS TCE Results:

Period = 1.82677 d
Epoch = 131.7800 BKJD

DV fit results are unavailable

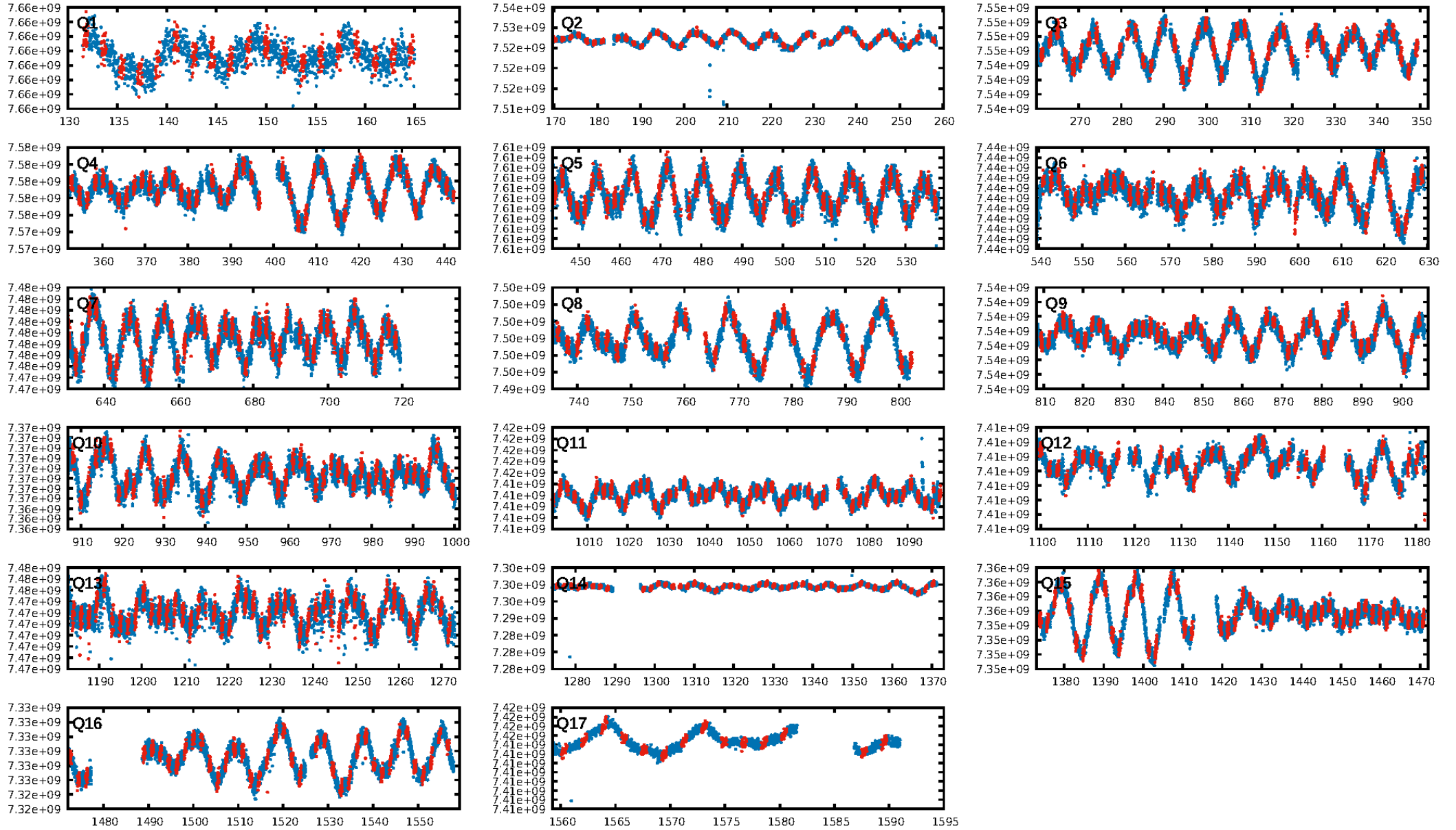
DV Diagnostic Results:

ShortPeriod-sig: 0.1% [0.00 σ]
LongPeriod-sig: 100.0% [260.61 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [694/700]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 7.055 arcsec [4.04 σ]
KicOffset-rm: 1.949 arcsec [0.75 σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.00 [0/16]
DiffImageOverlap-fno: 0.00 [0/17]

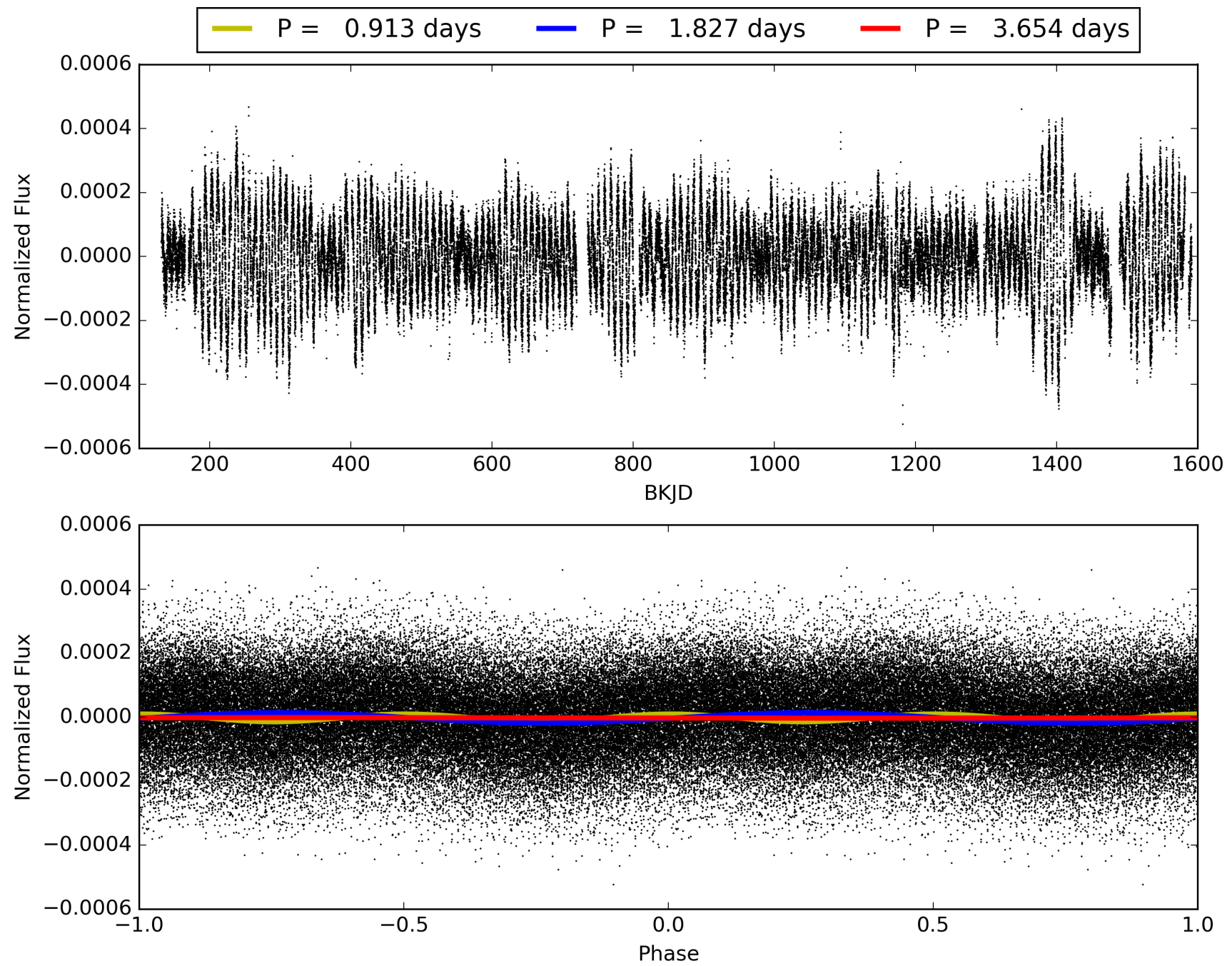
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:01:33 Z

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

TCE 009204718-01, PDC Light Curves

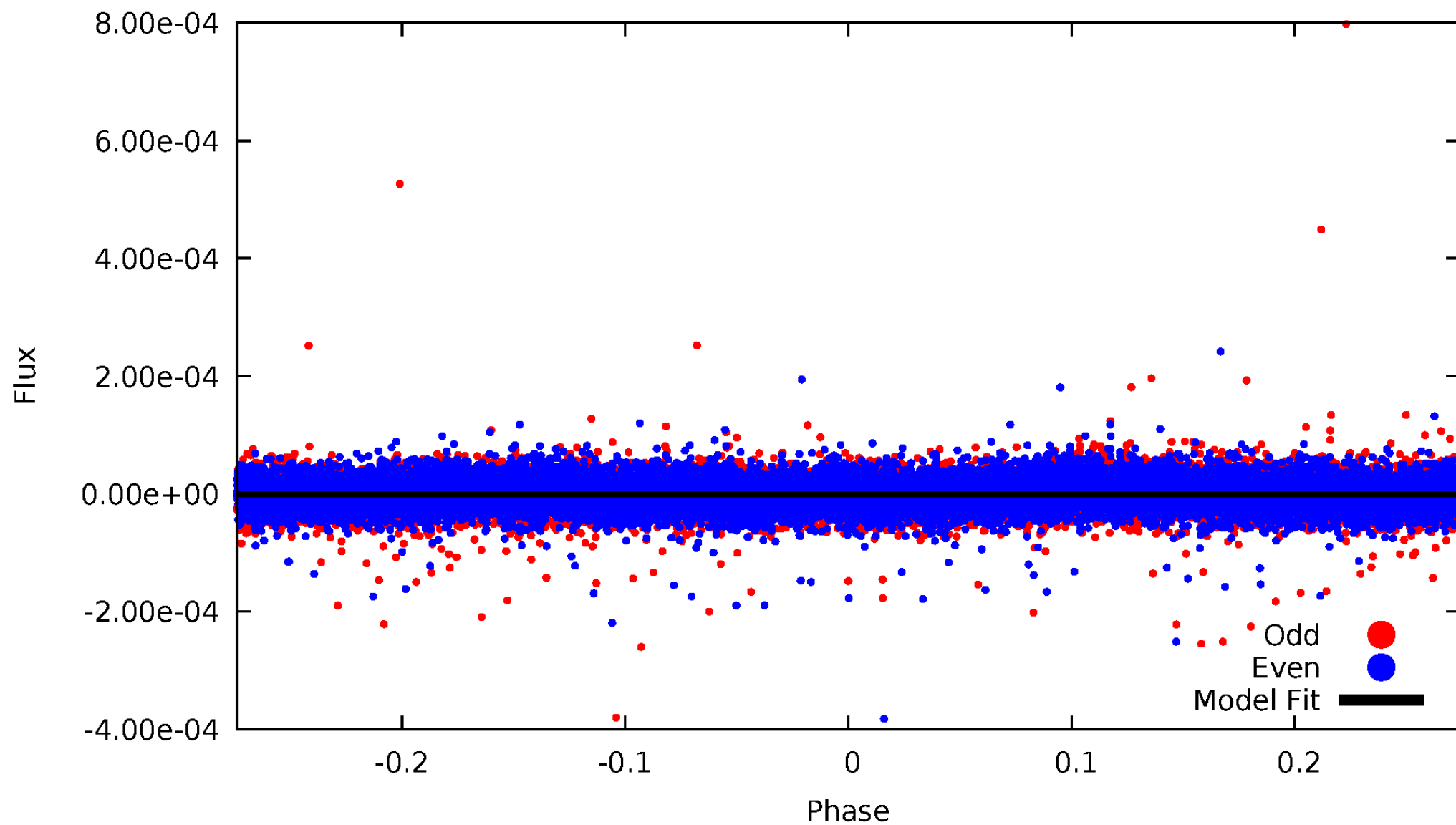


TCE 009204718-01



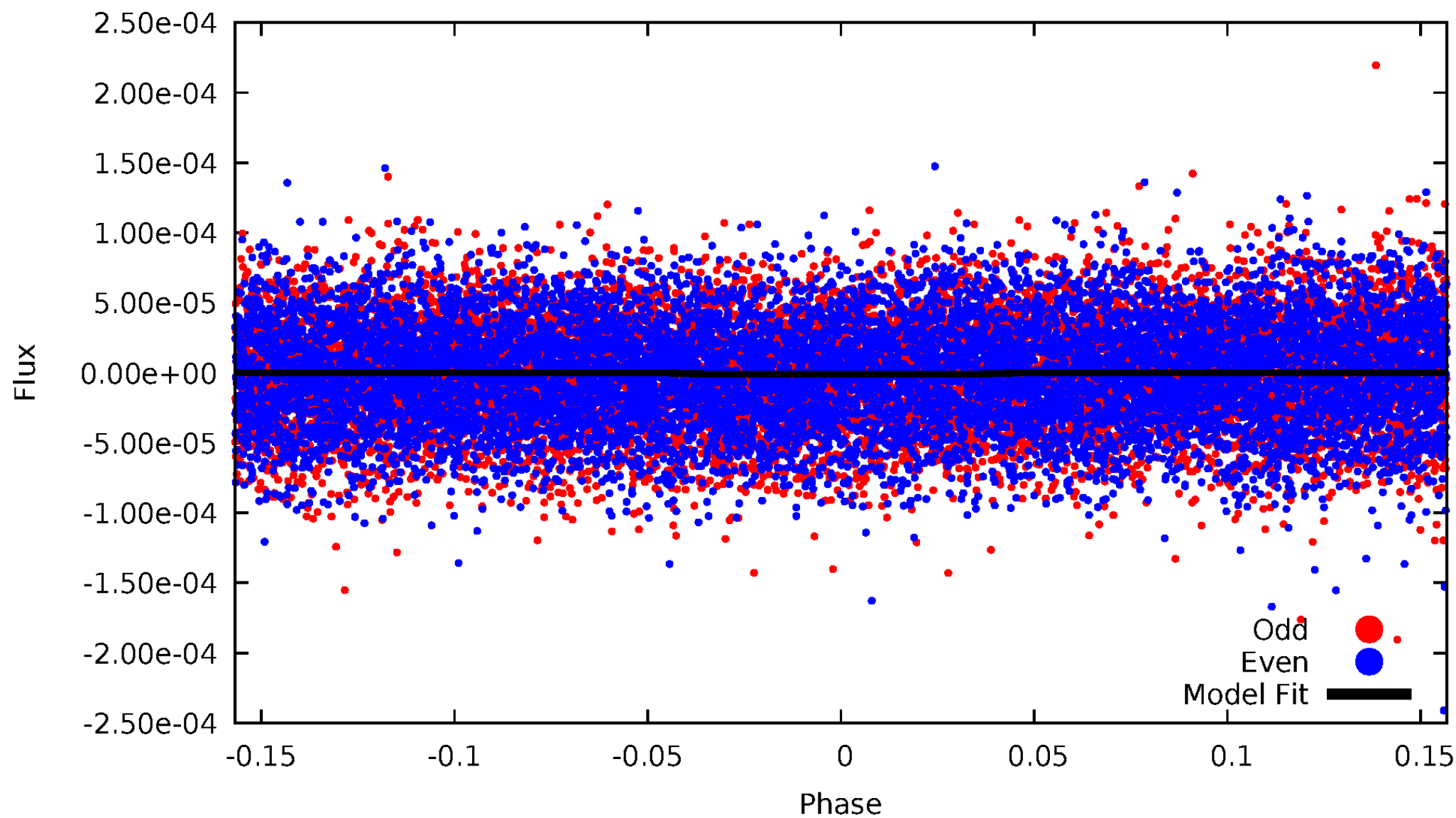
DV Odd/Even

TCE 009204718-01

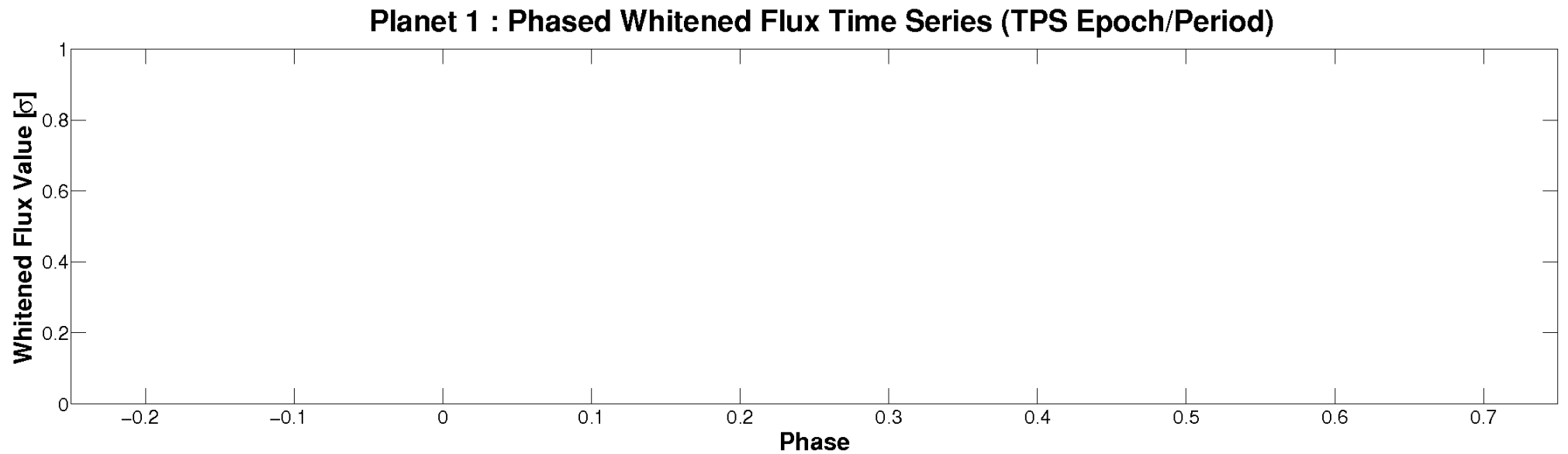
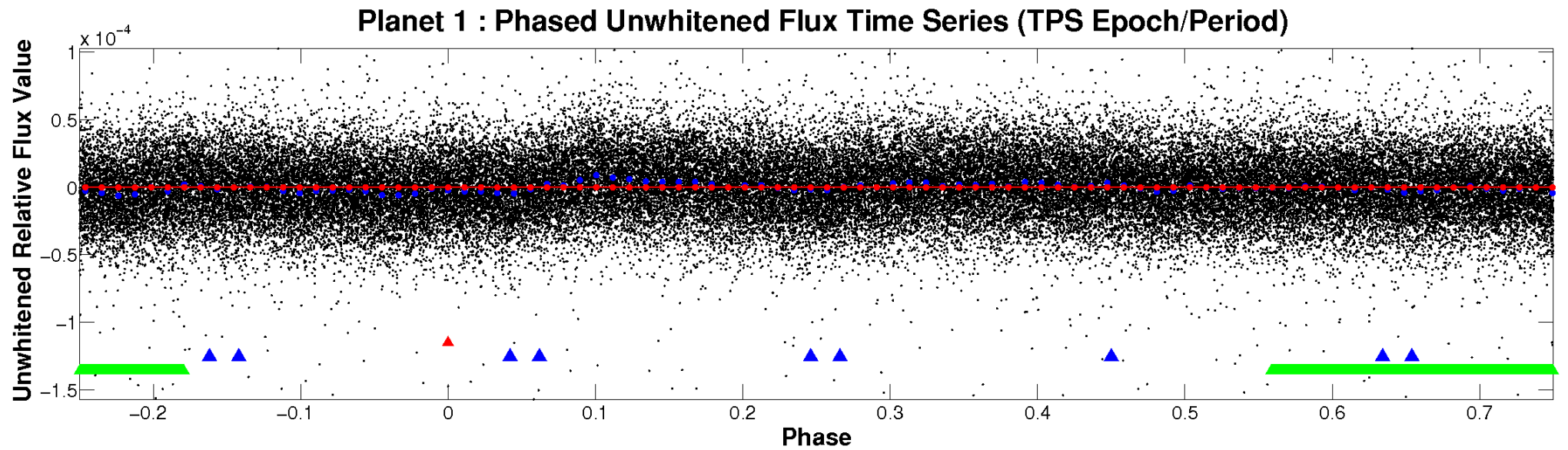


ALT Odd/Even

TCE 009204718-01

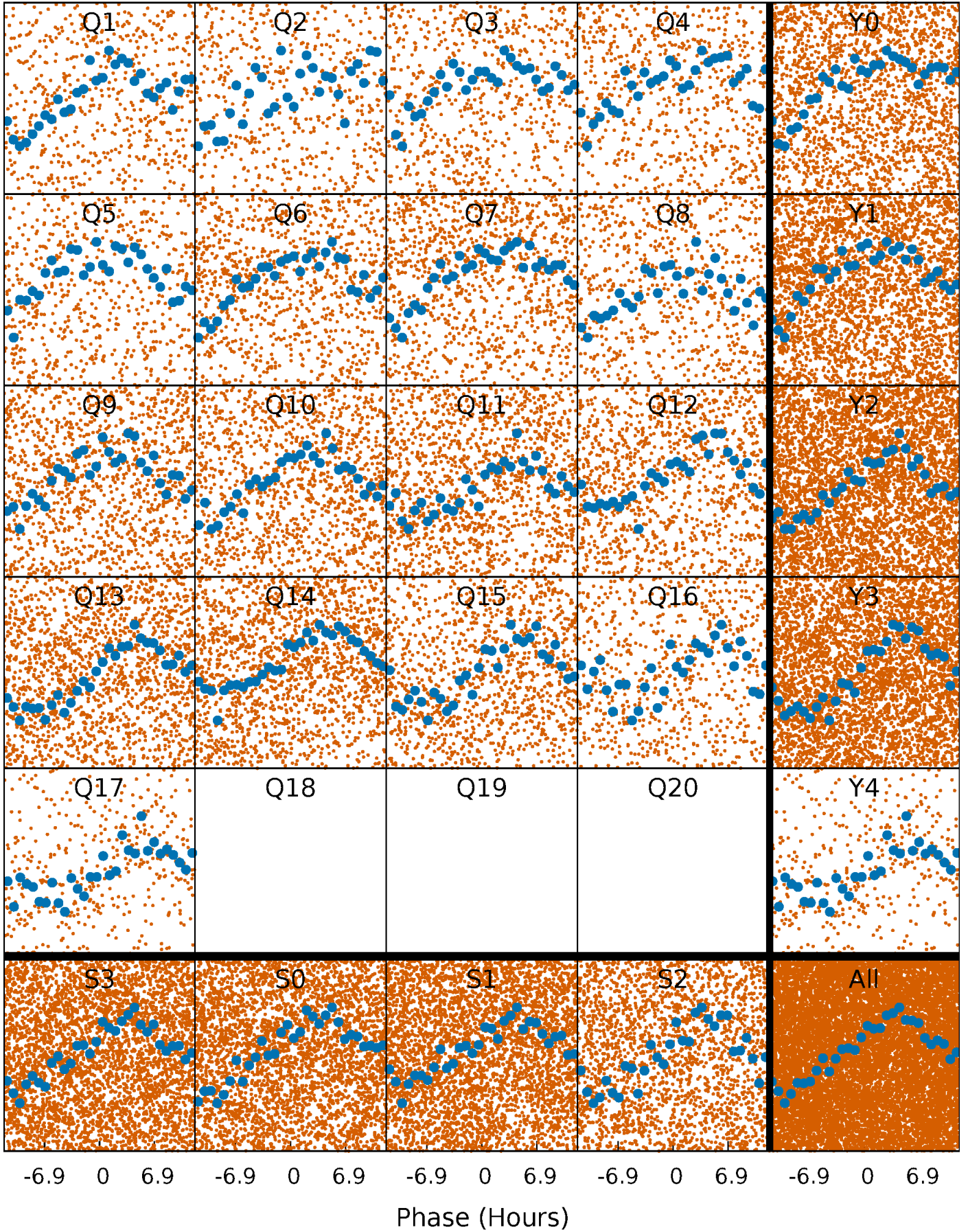


Non-Whitened Vs. Whitened Light Curve



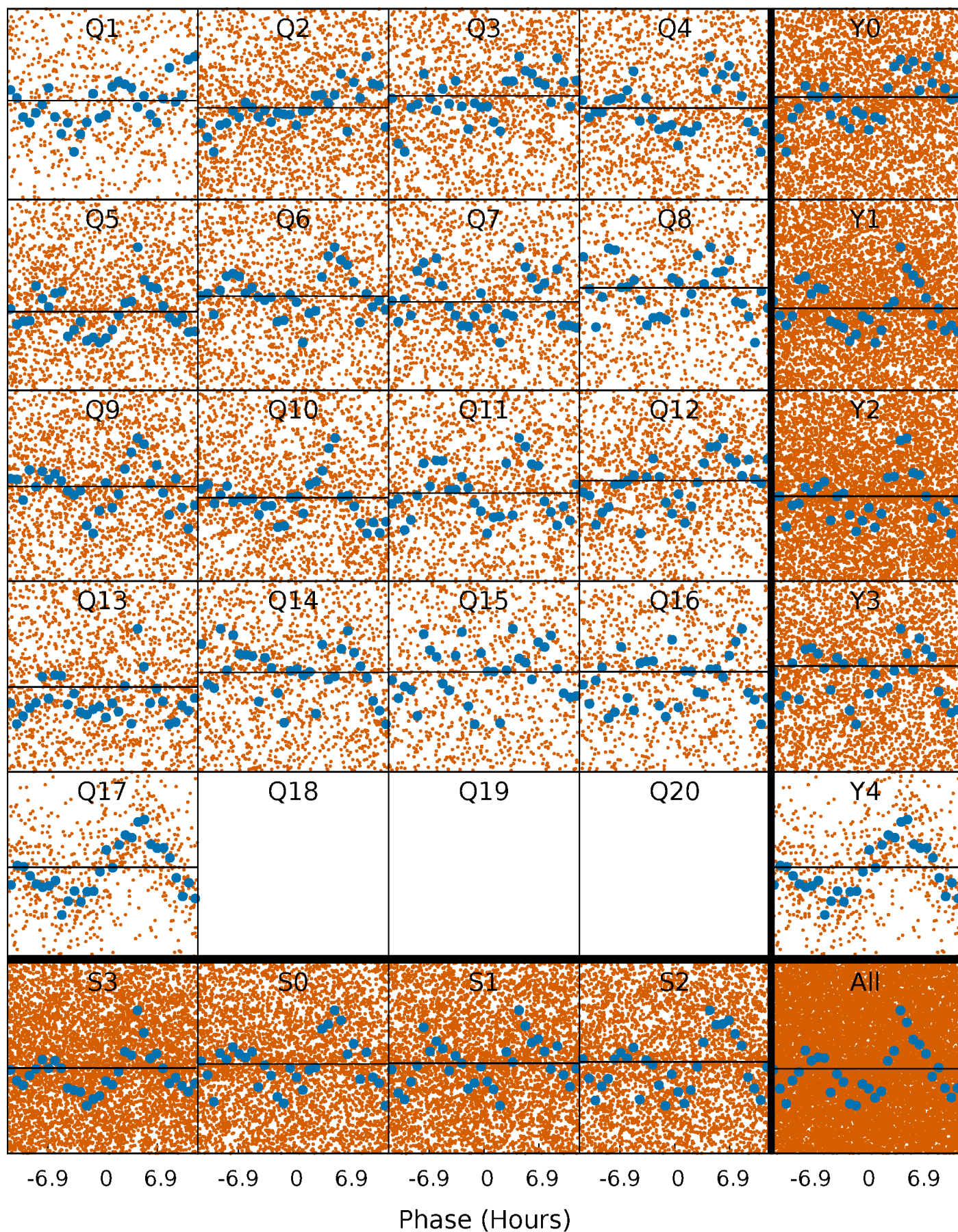
PDC Quarter-Phased Transit Curves

TCE 009204718-01 P= 1.826767 Days $T_0=131.780036$ (BKJD)



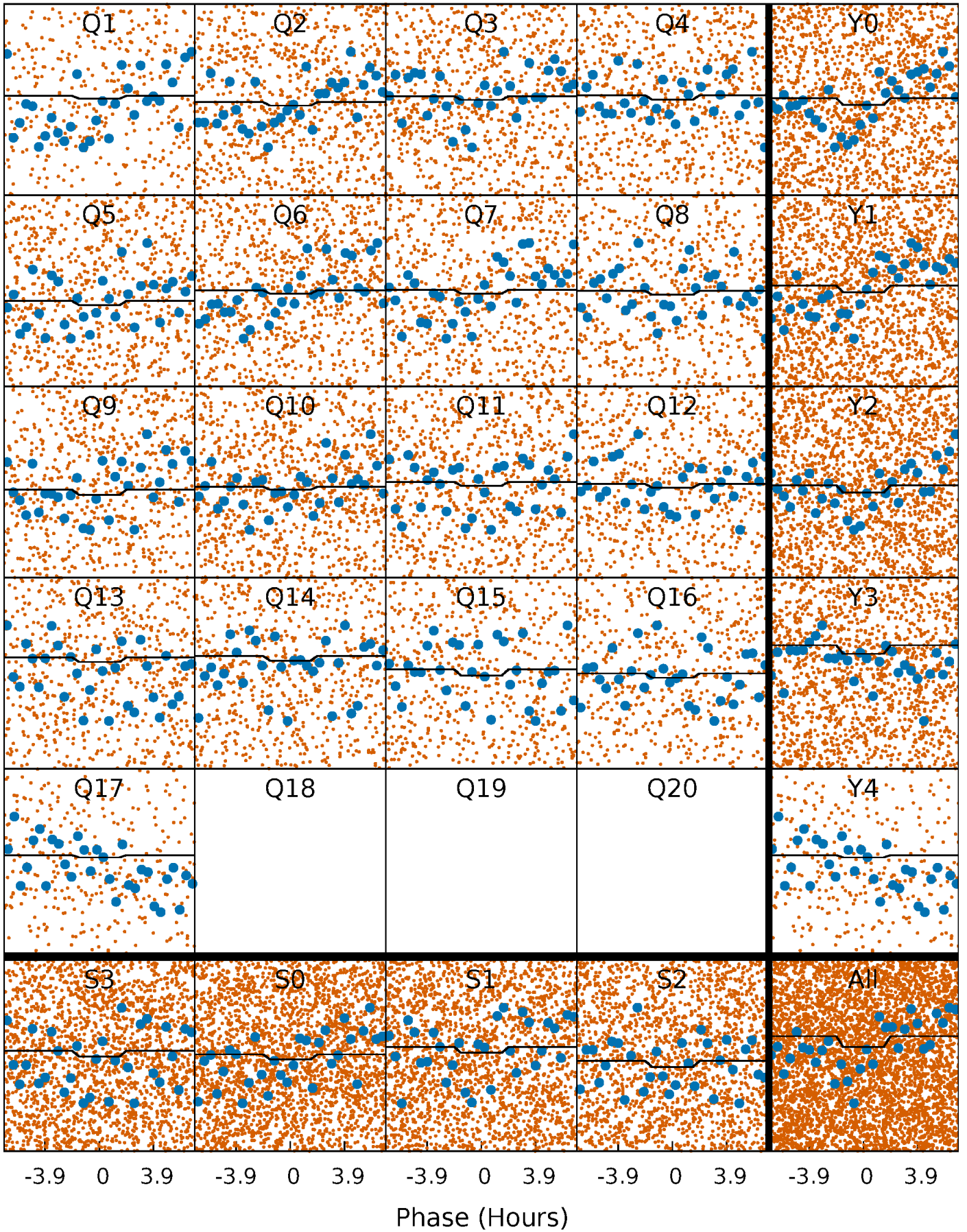
DV Quarter-Phased Transit Curves

TCE 009204718-01 P= 1.826767 Days $T_0=131.780036$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

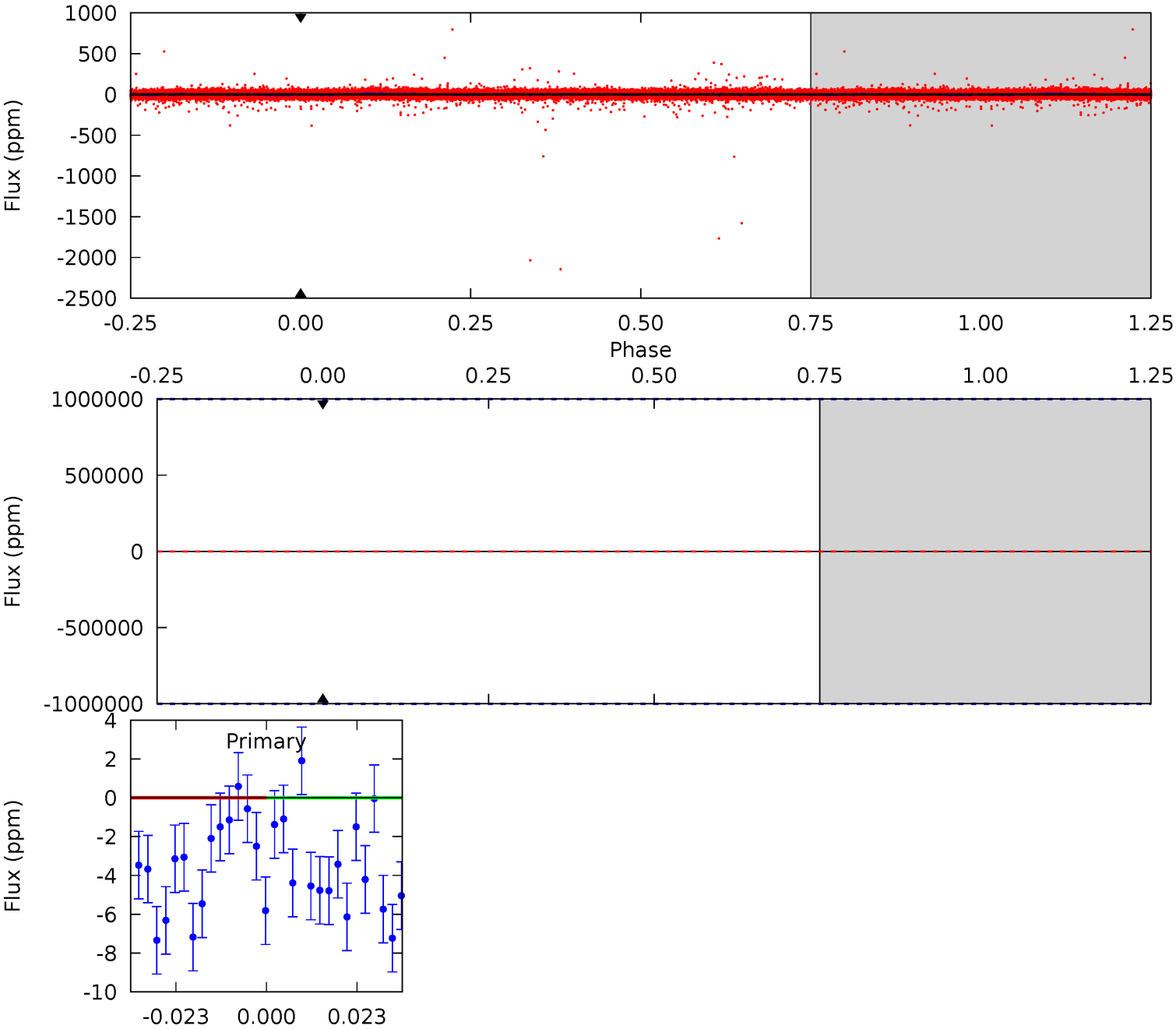
TCE 009204718-01 P= 1.826767 Days $T_0=133.230052$ (BKJD)



DV Model-Shift Uniqueness Test

009204718-01, P = 1.826767 Days, E = 129.953269 Days

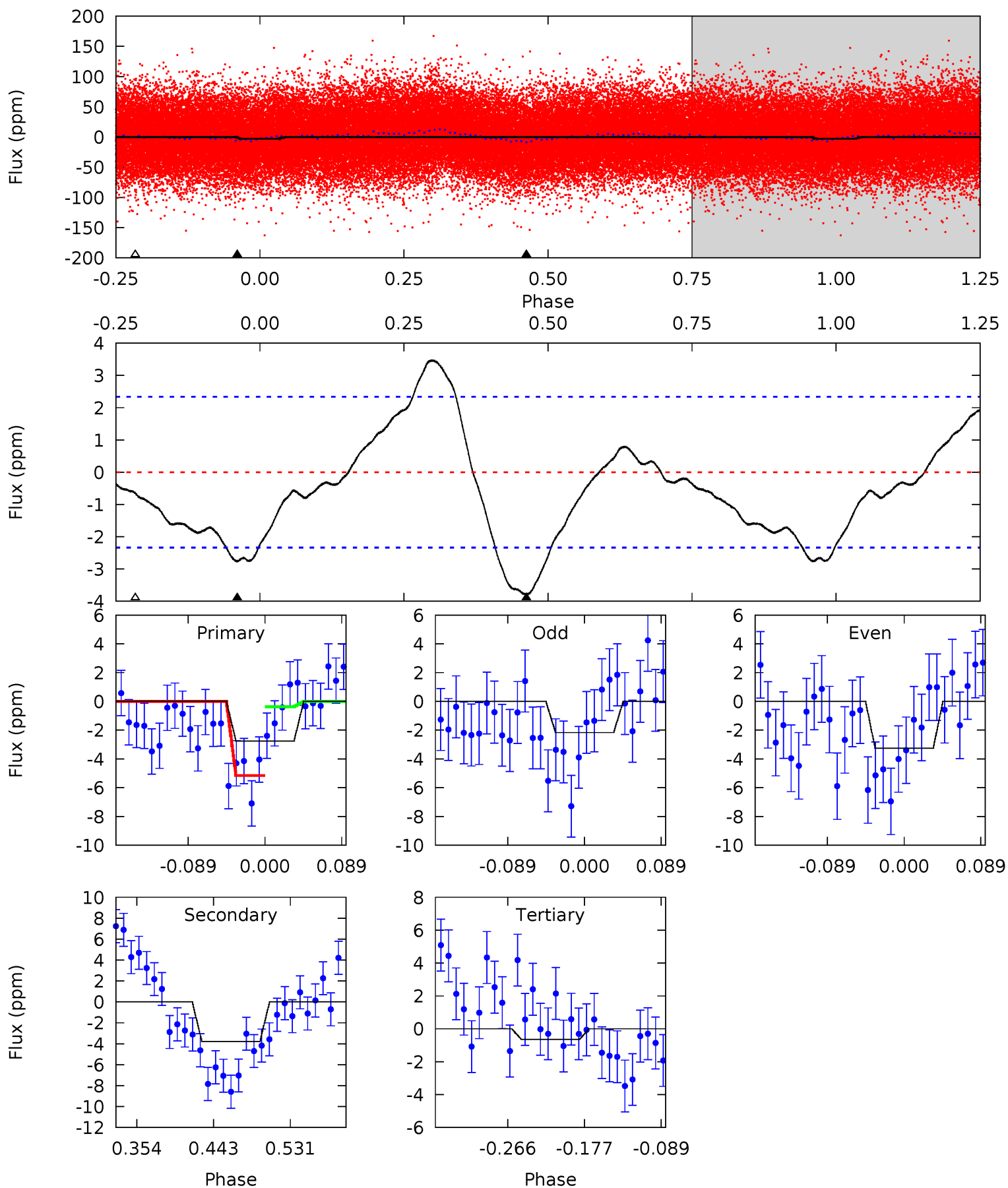
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

009204718-01, P = 1.826767 Days, E = 131.403285 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.43	7.43	1.28	0	4.59	1.70	2.56	4.15	5.43	6.15	7.43	1.08	1.11	0.48	4.65



Stellar Parameters For KIC 009204718

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7372^{+203}_{-330}	$3.889^{+0.301}_{-0.129}$	$-0.060^{+0.200}_{-0.350}$	$2.510^{+0.498}_{-0.995}$	$1.780^{+0.175}_{-0.409}$	$0.158^{+0.373}_{-0.060}$
	+3%/-4%	+8%/-3%	+333%/-583%	+20%/-40%	+10%/-23%	+236%/-38%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 009204718-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$17.28^{+19.23}_{-12.69}$	3745^{+252}_{-364}	6256^{+36306}_{-49204}	$6.130^{+441.374}_{-372.301}$
Alt.	-4 ± 1	$17.75^{+19.48}_{-12.58}$	3761^{+269}_{-391}	-3464^{+352}_{-180}	$0.008^{+0.083}_{-0.006}$

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

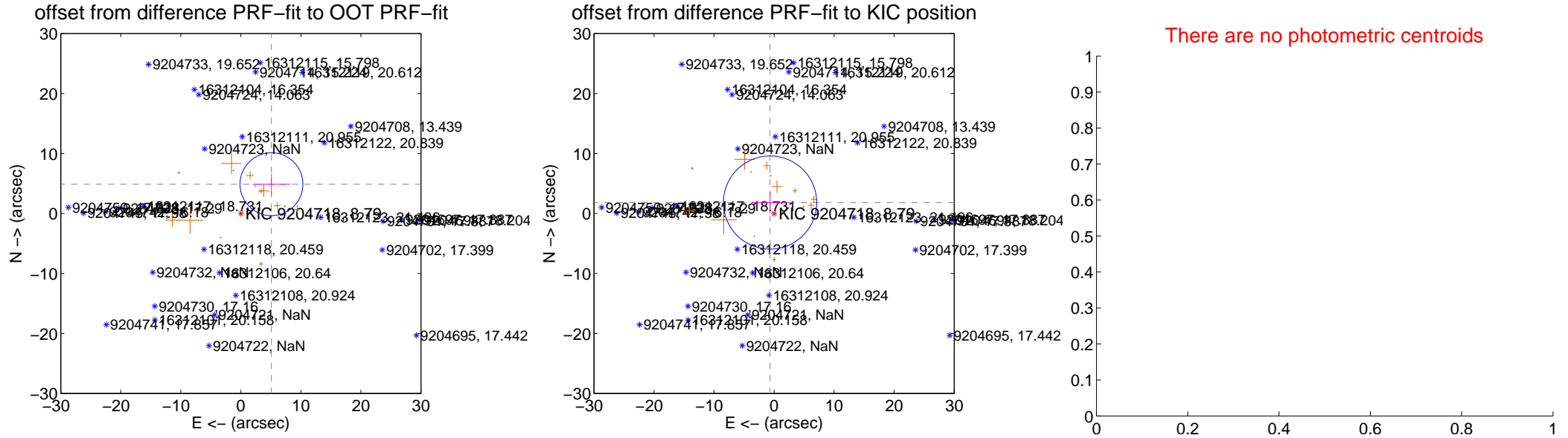
DV Centroid Data

Supplemental centroid analysis for 009204718-01. **Kepler magnitude: 8.79.** Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

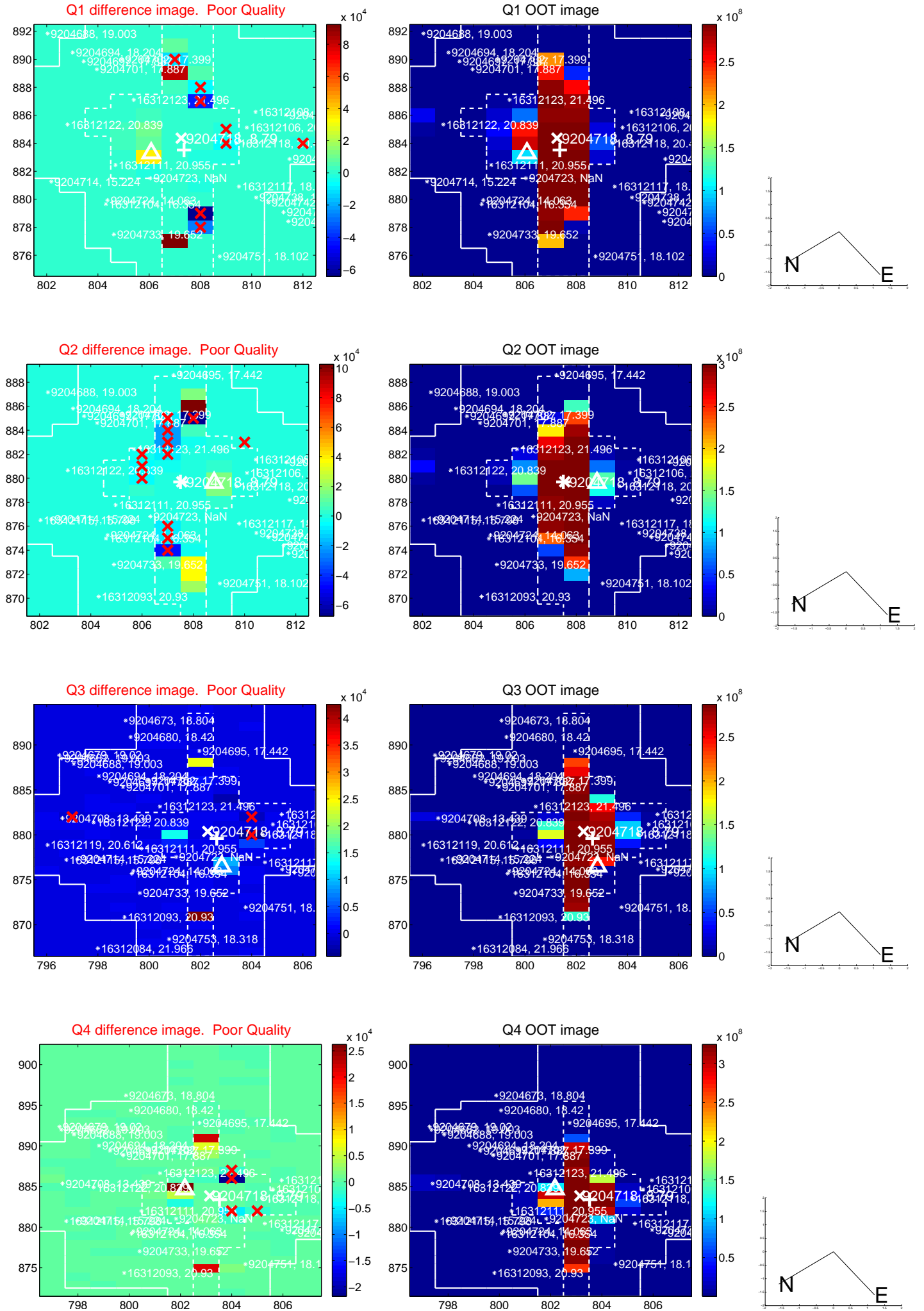
The OOT PRF centroid is offset from the target star catalog position by about 3.20 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.055 ± 1.746	4.04	-5.096 ± 3.165	4.880 ± 1.723
PRF-fit source offset from KIC position	1.949 ± 2.589	0.75	0.675 ± 3.115	1.828 ± 1.809
photometric centroid source offset	—	—	—	—

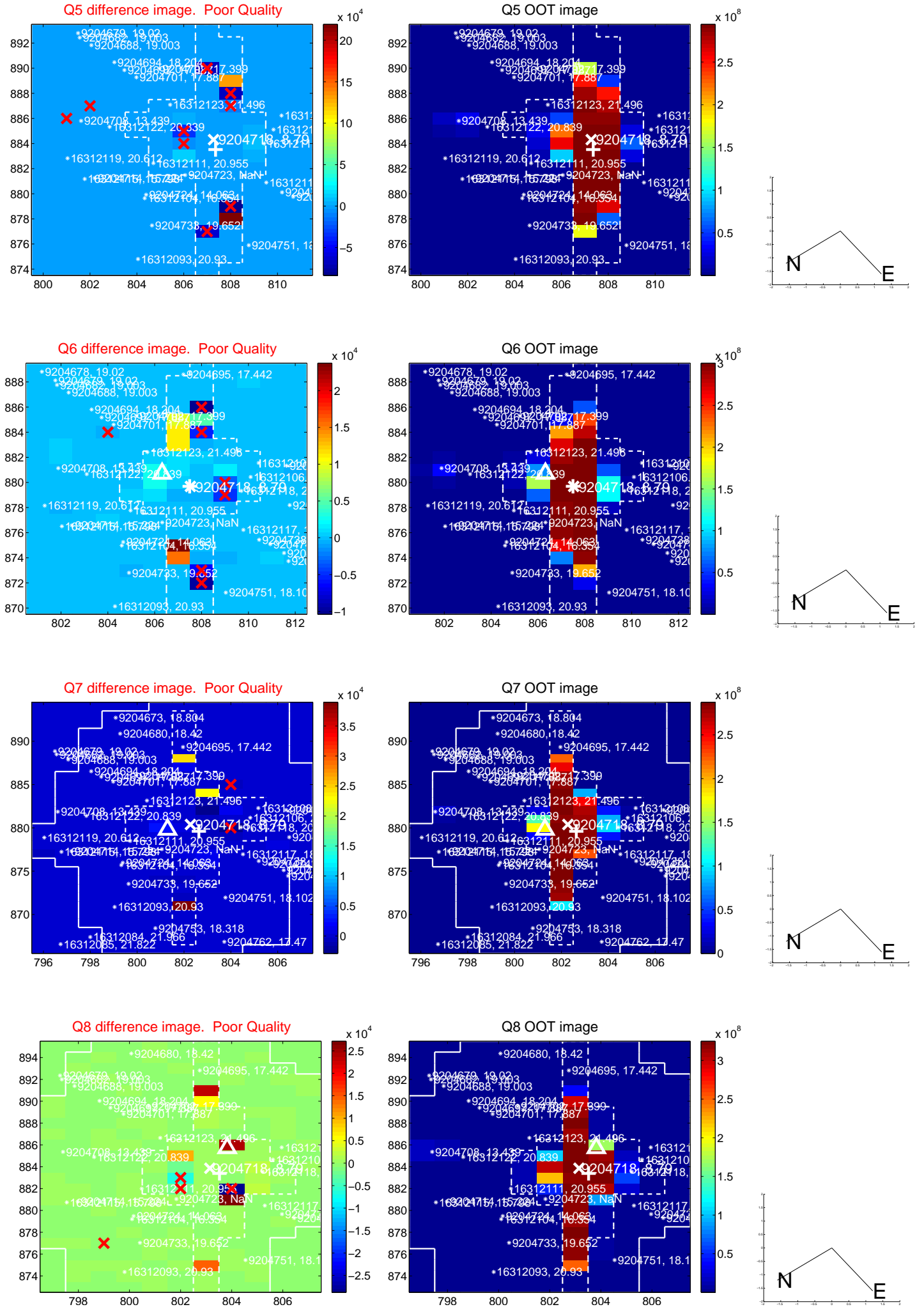


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

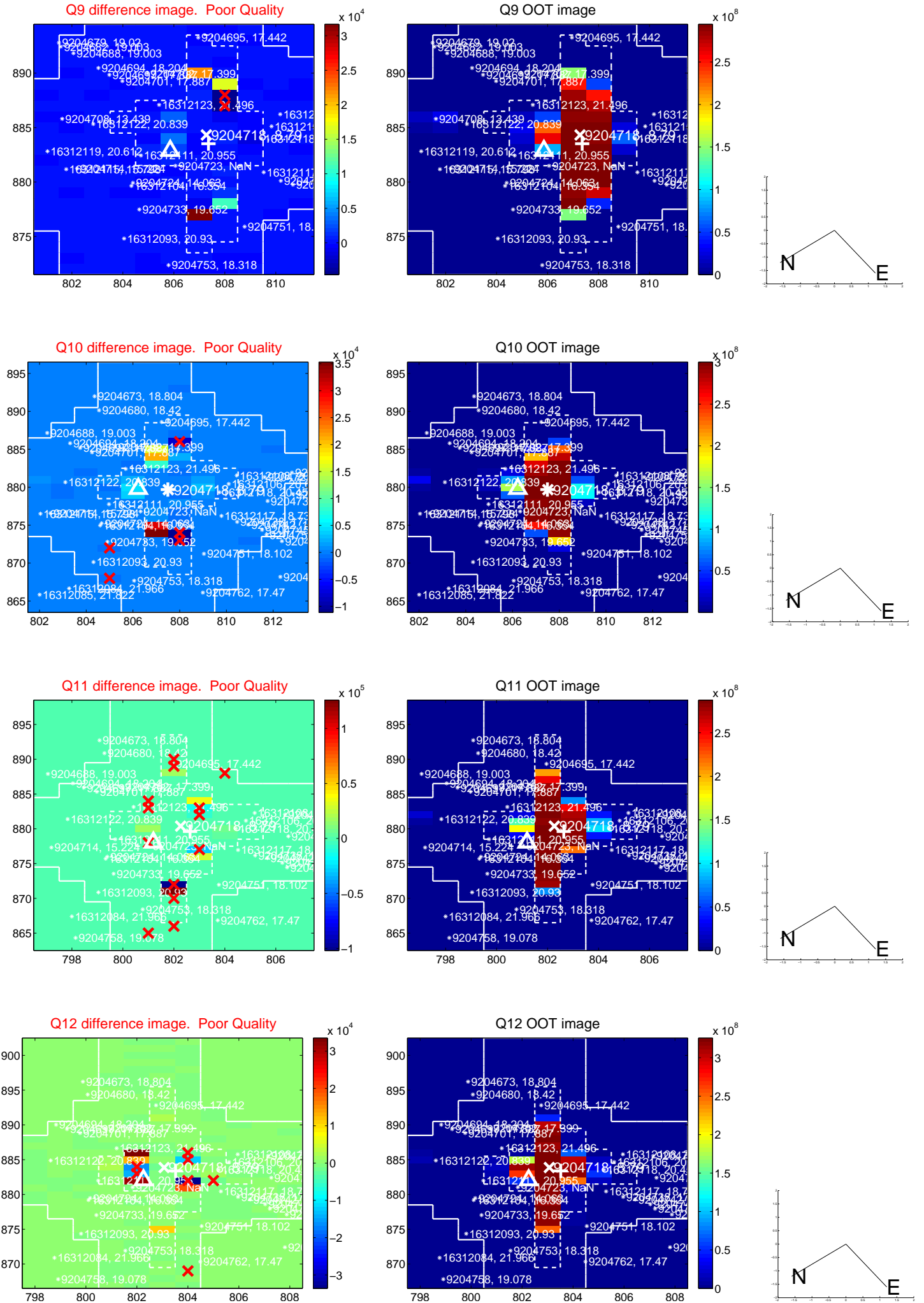
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



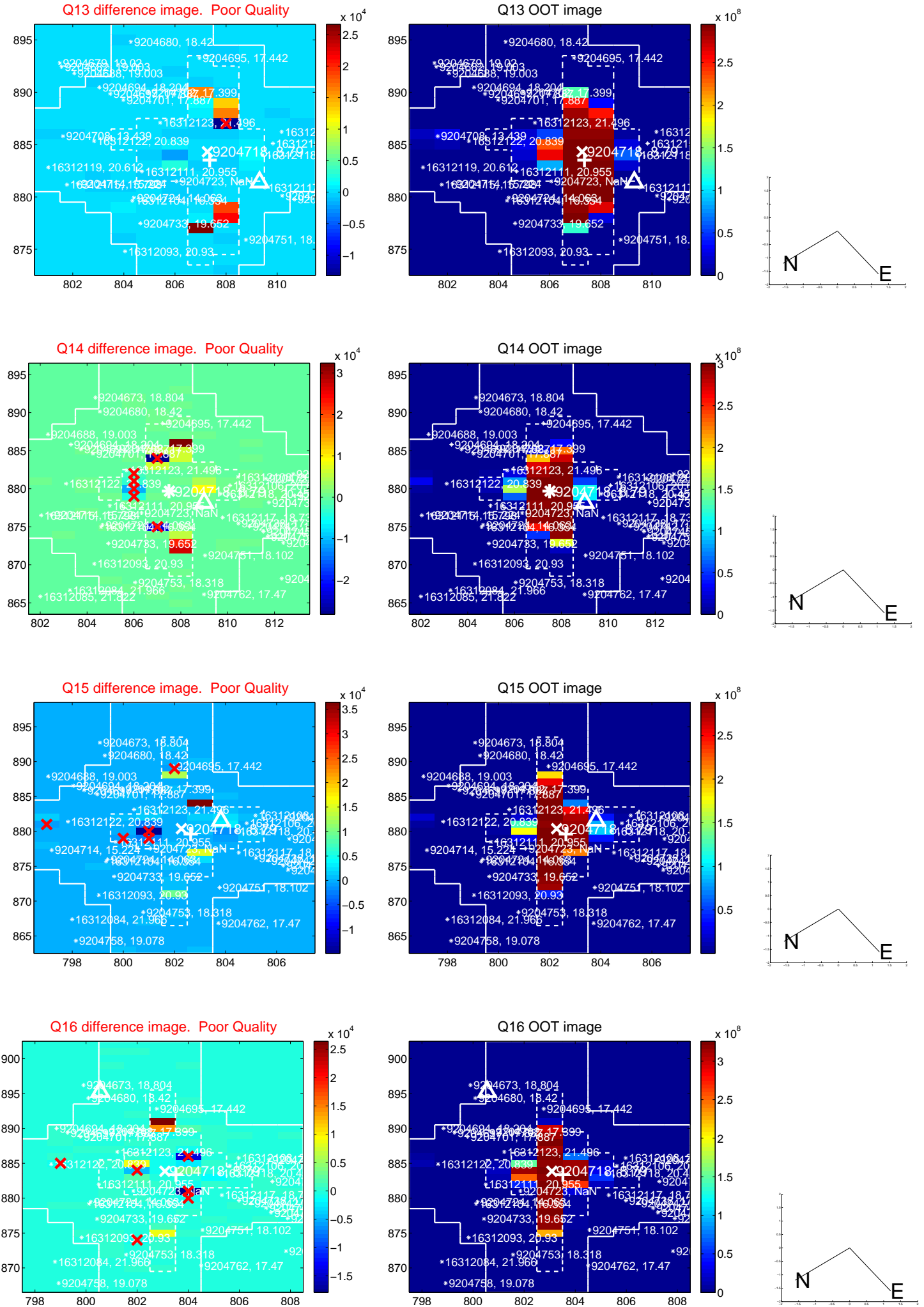
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



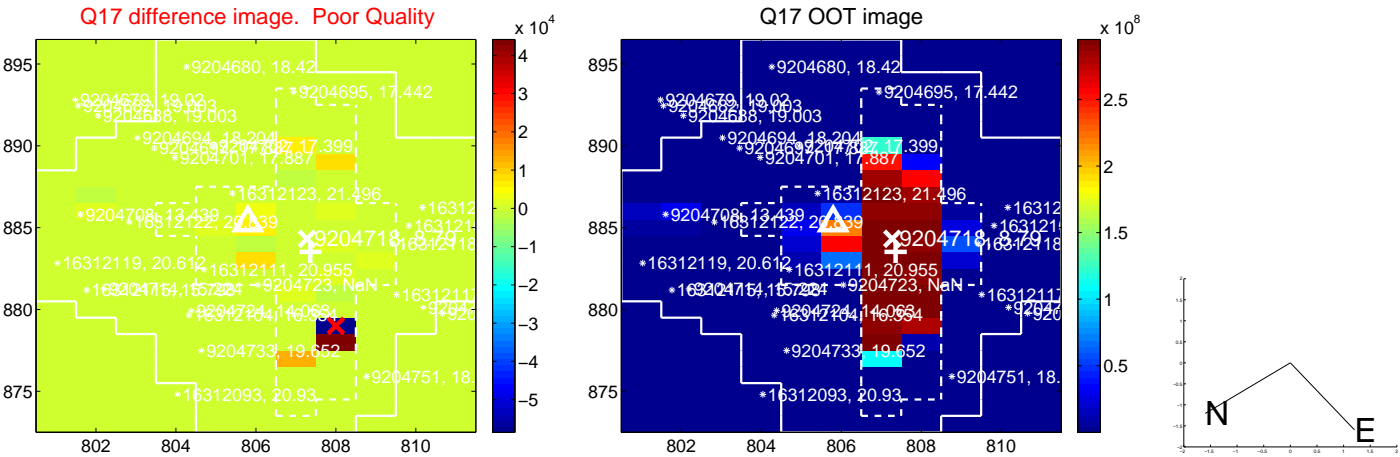
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



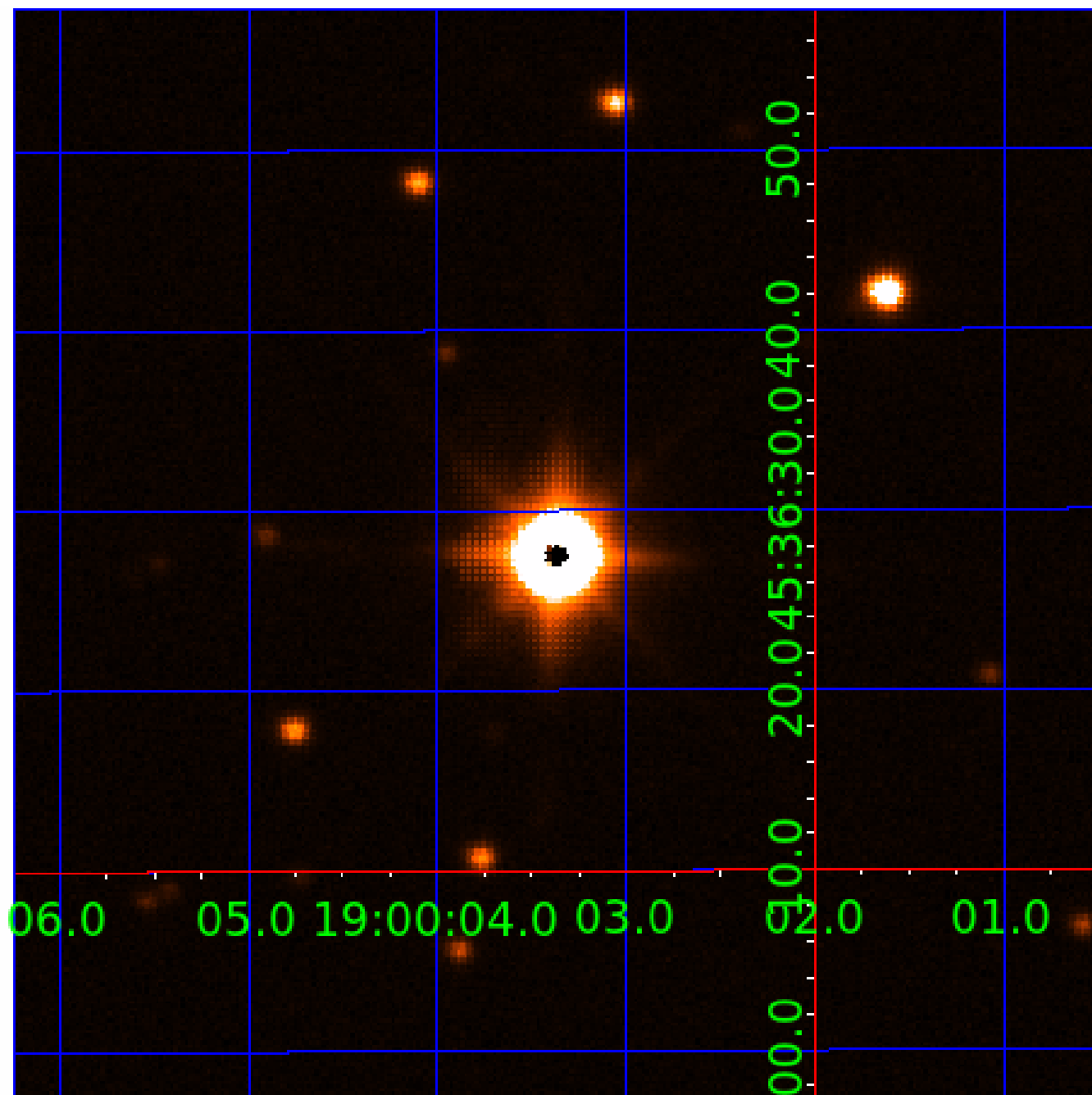
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 009204718

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})
009204718-01	OBS	No	1.826767	131.780036	16.8	6.000	10.2	-1.0	2.51	7372	1.04	13267.03
009204718-02	OBS	No	159.301369	251.678384	28.9	13.203	10.5	5.6	2.51	7372	1.56	34.31
009204718-03	OBS	No	1.826167	133.279285	3.8	19.183	8.6	8.4	2.51	7372	0.56	13272.85

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009204718-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
009204718-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_TER_DV—INCONSISTENT_TRANS—CENT_SATURATED
009204718-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

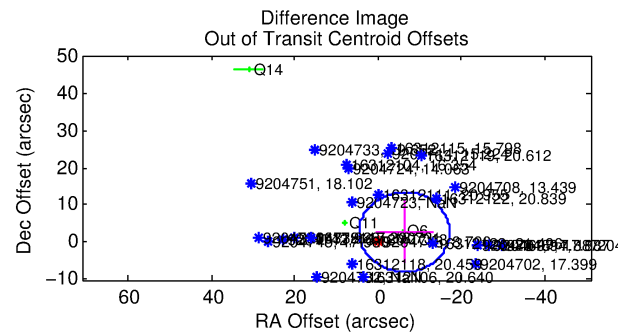
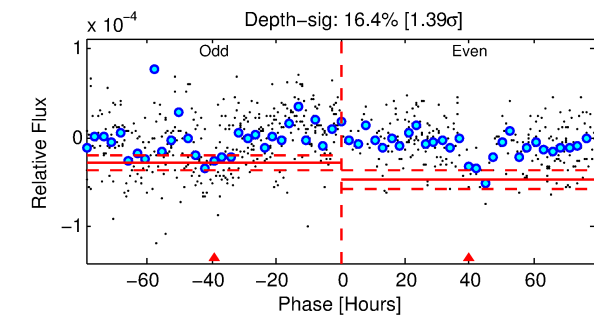
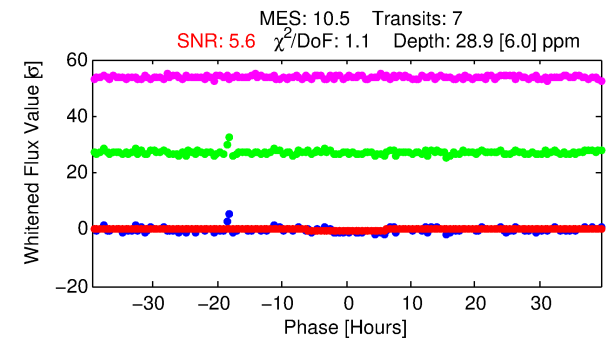
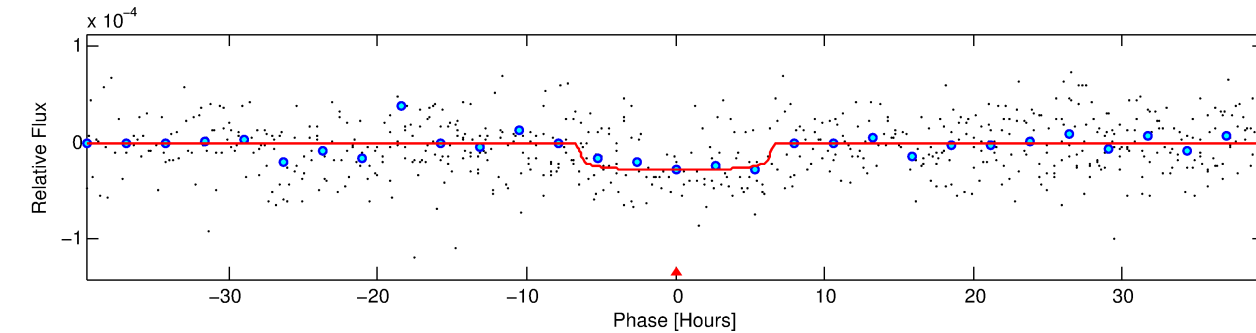
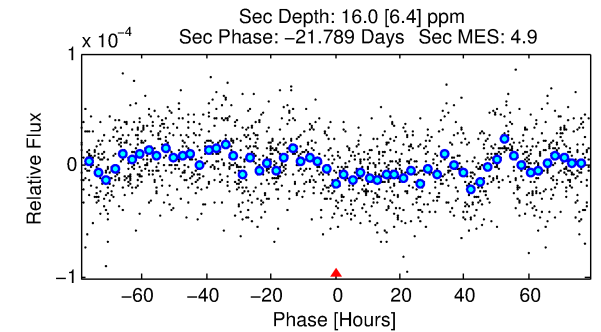
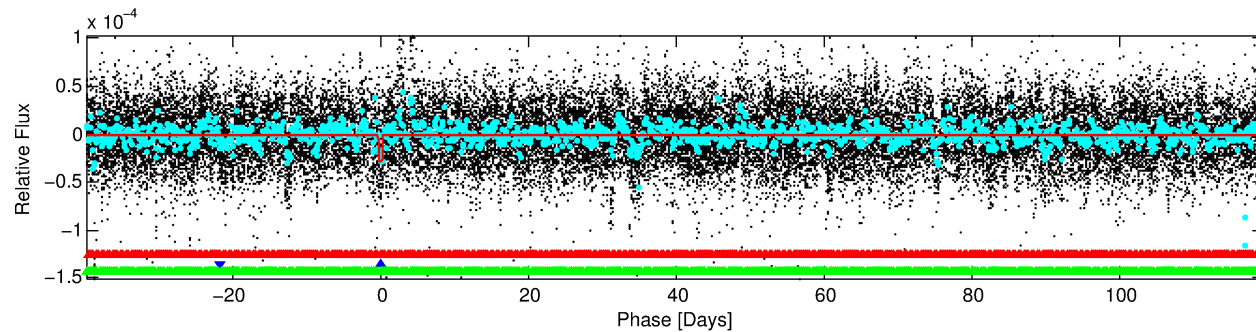
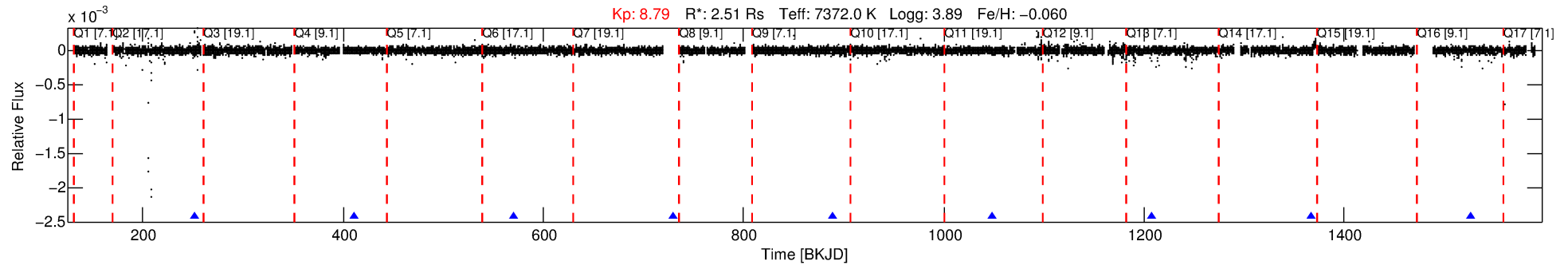
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009204718-02

No Significant Match Found

DV One-Page Summary

KIC: 9204718 Candidate: 2 of 3 Period: 159.301 d



DV Fit Results:

Period = 159.30137 [0.00436] d
Epoch = 251.6784 [0.0203] BKJD
Rp/R* = 0.0057 [0.0016]
a/R* = 41.54 [71.81]
b = 0.90 [0.37]
Seff = 34.31 [19.27]
Teq = 617 [87] K
Rp = 1.56 [0.77] Re
a = 0.6971 [0.2447] AU
Ag = 1761.91 [1556.02] [1.13σ]
Teff = 6182 [1124] K [4.94σ]

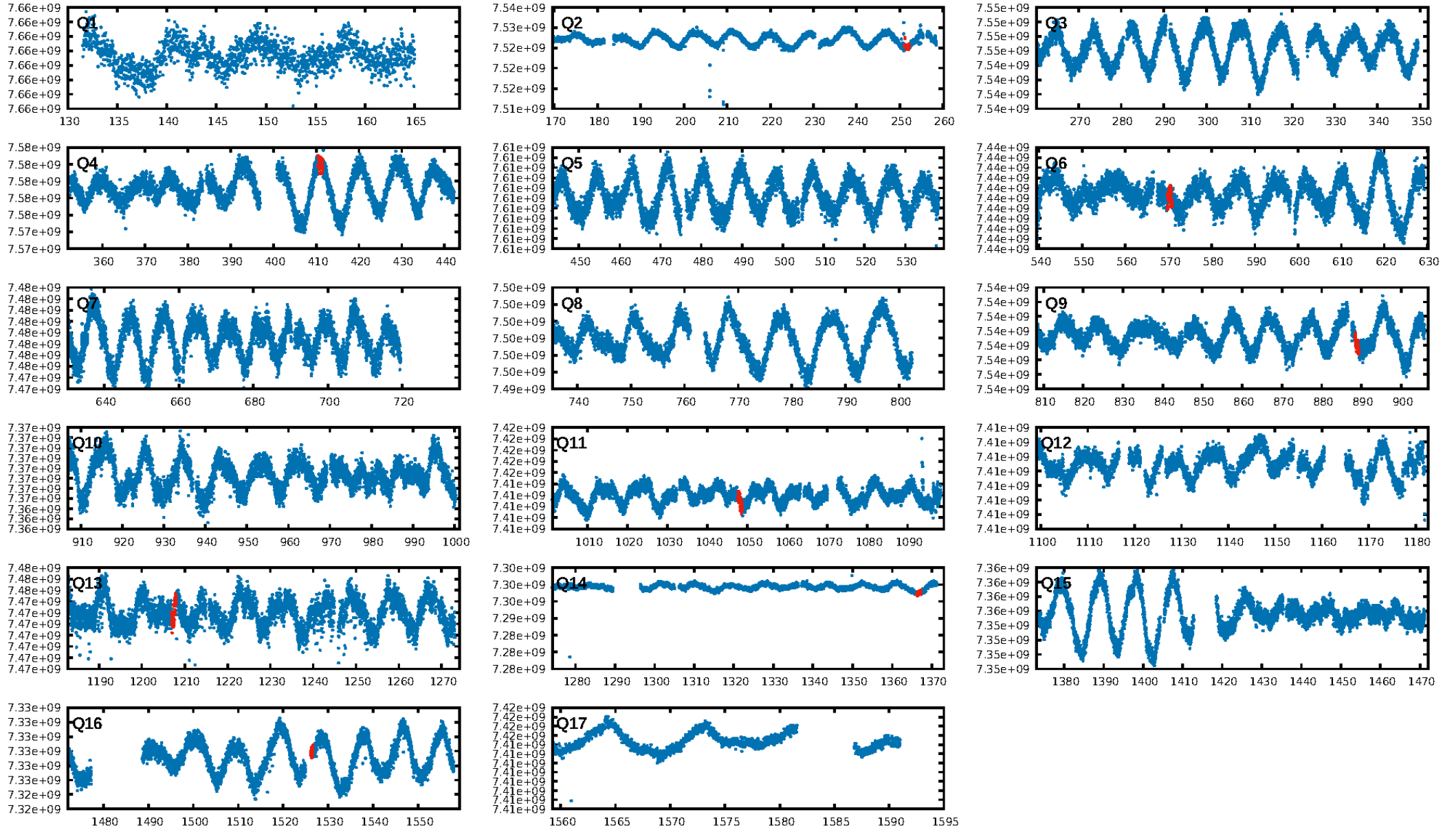
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [260.61σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: N/A
Centroid-sig: 52.9%
Centroid-so: 4.729 arcsec [0.87σ]
OotOffset-rm: 6.773 arcsec [1.88σ]
OotOffset-st: 2/1/0/1 [4]
KicOffset-rm: 6.689 arcsec [2.66σ]
KicOffset-st: 2/1/0/1 [4]
DiffImageQuality-fgm: 0.00 [0/4]
DiffImageOverlap-fno: 0.00 [0/7]

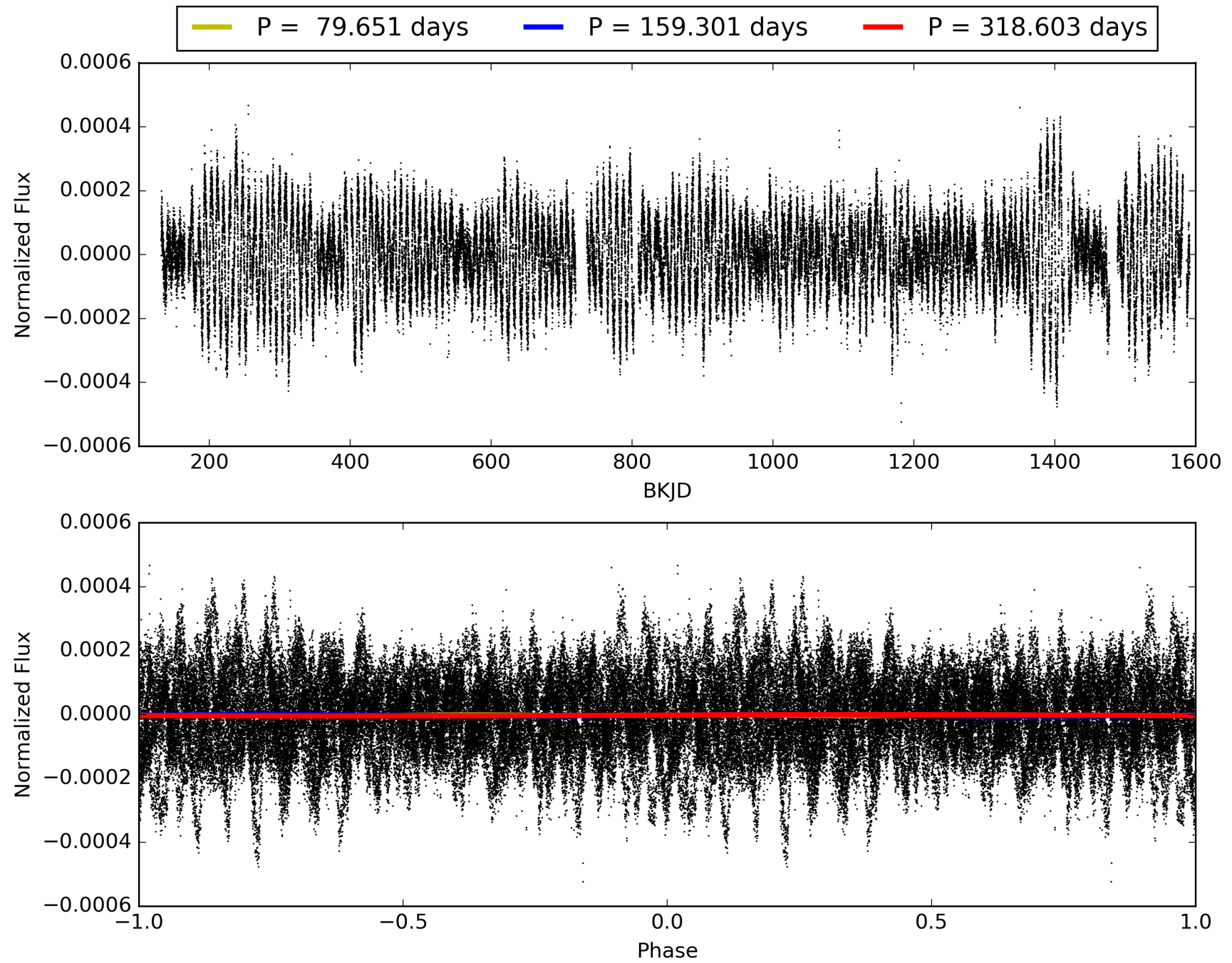
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:01:42 Z

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

TCE 009204718-02, PDC Light Curves

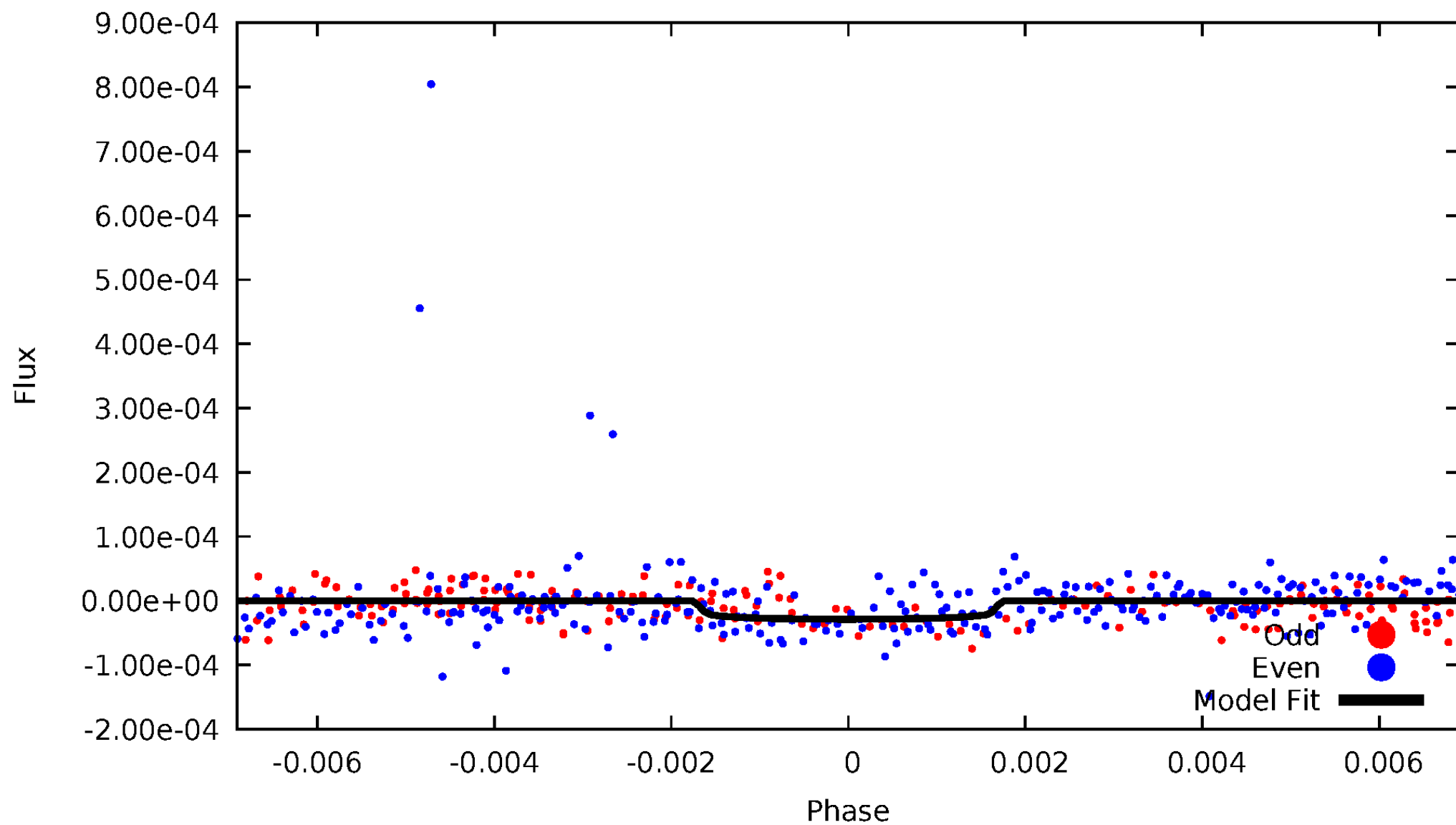


TCE 009204718-02



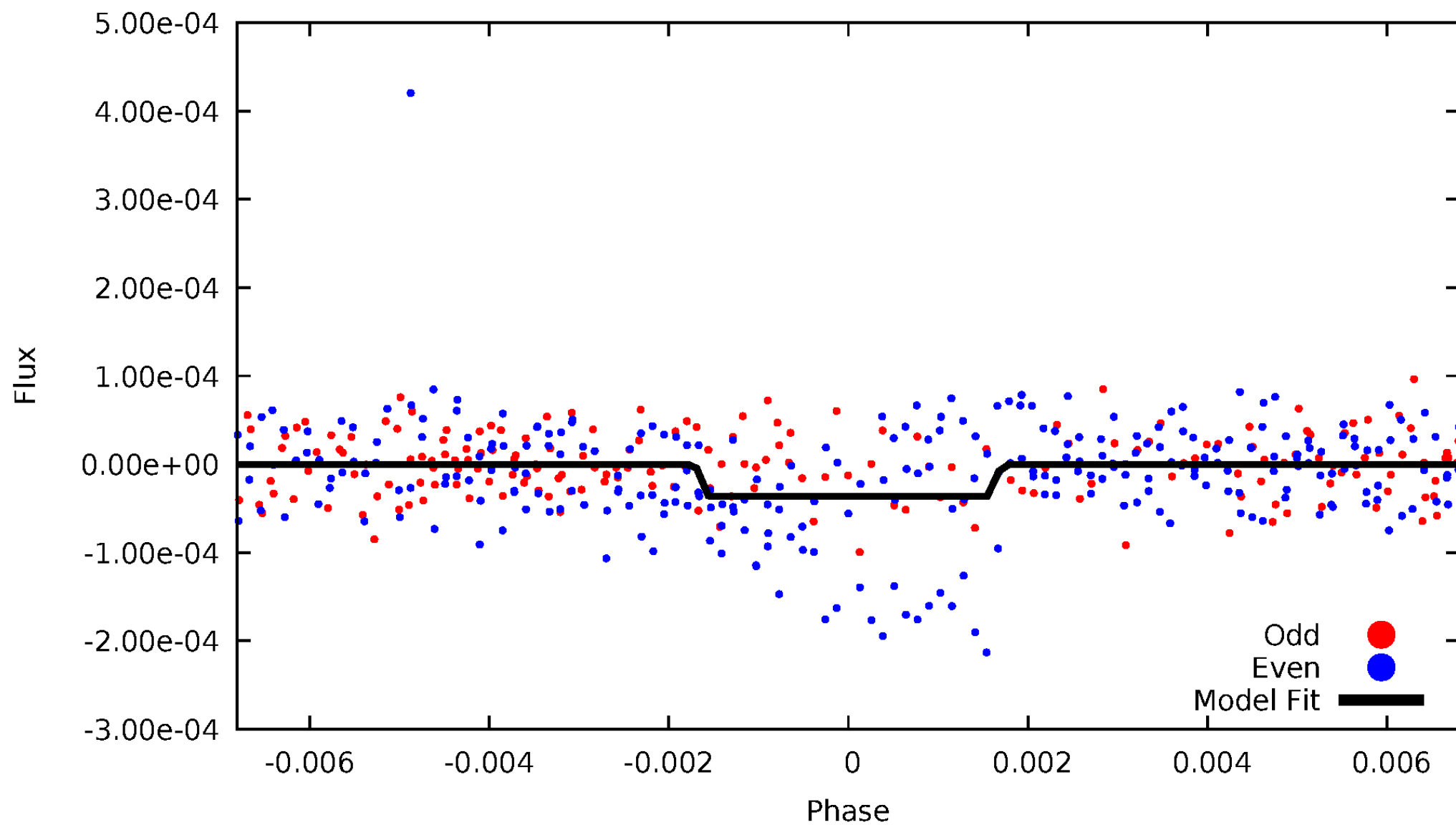
DV Odd/Even

TCE 009204718-02



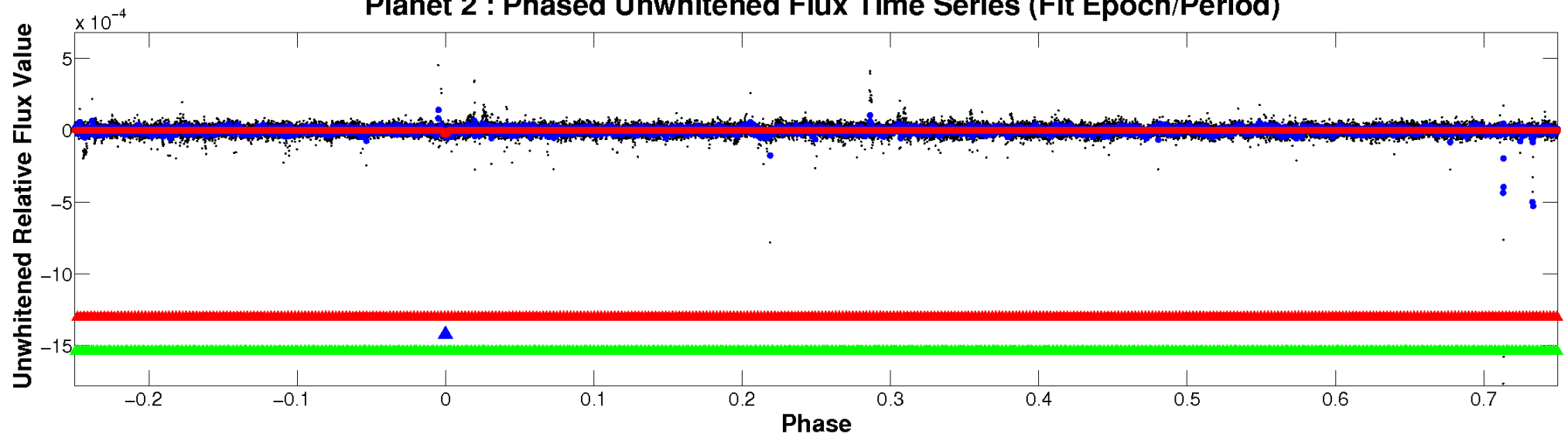
ALT Odd/Even

TCE 009204718-02

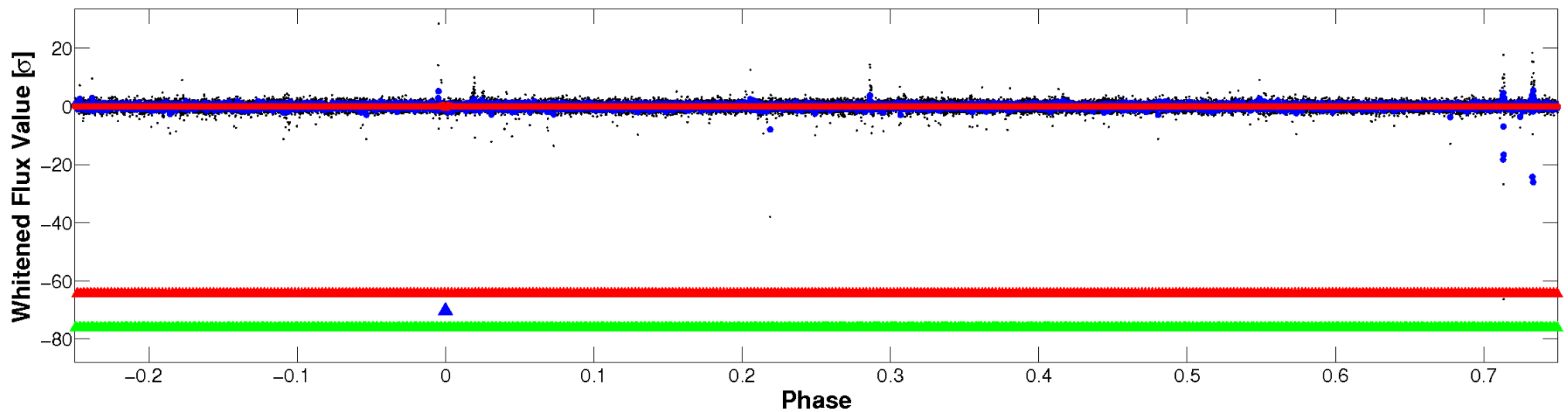


Non-Whitened Vs. Whitened Light Curve

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

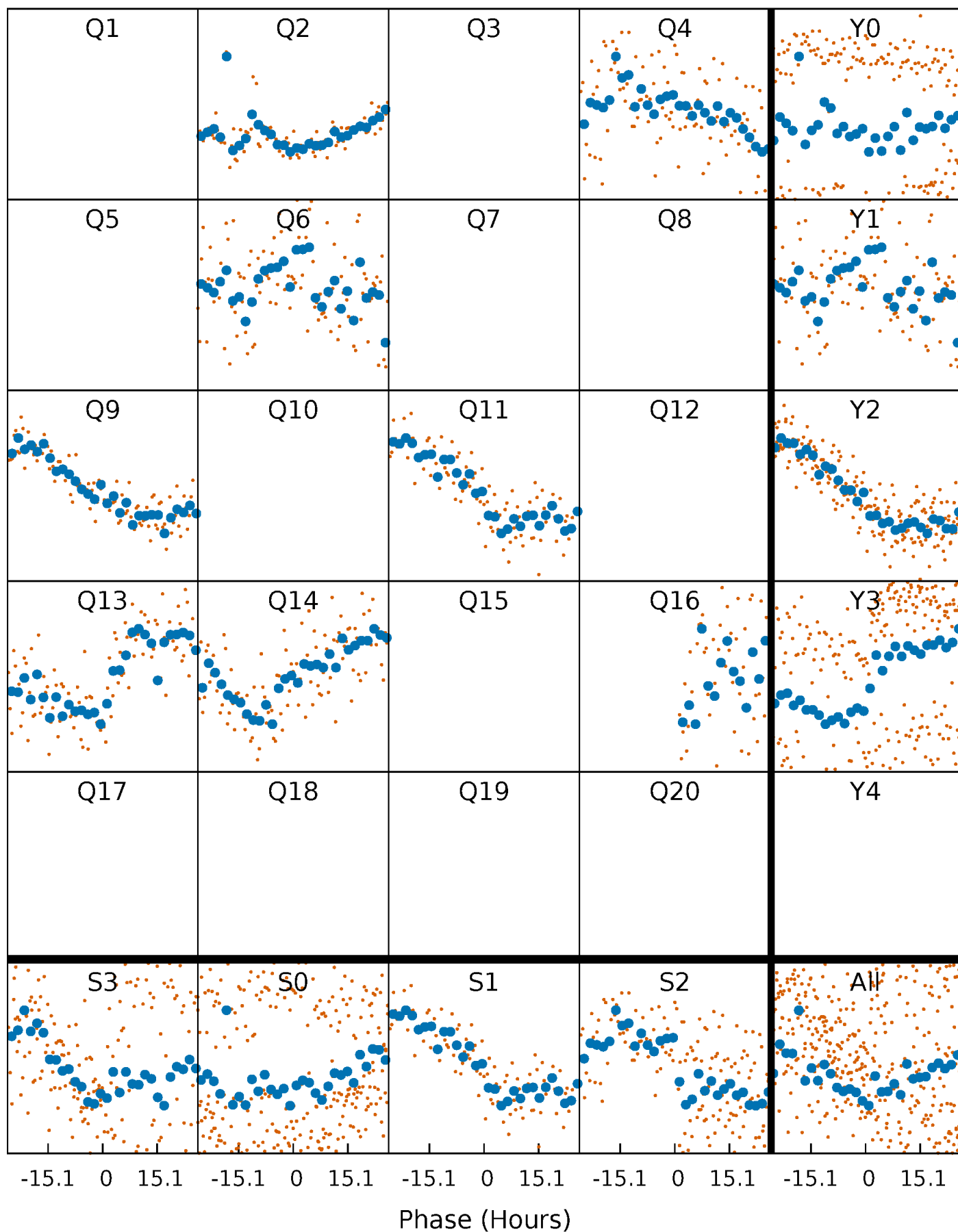


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 009204718-02 P=159.301369 Days $T_0=251.678383$ (BKJD)



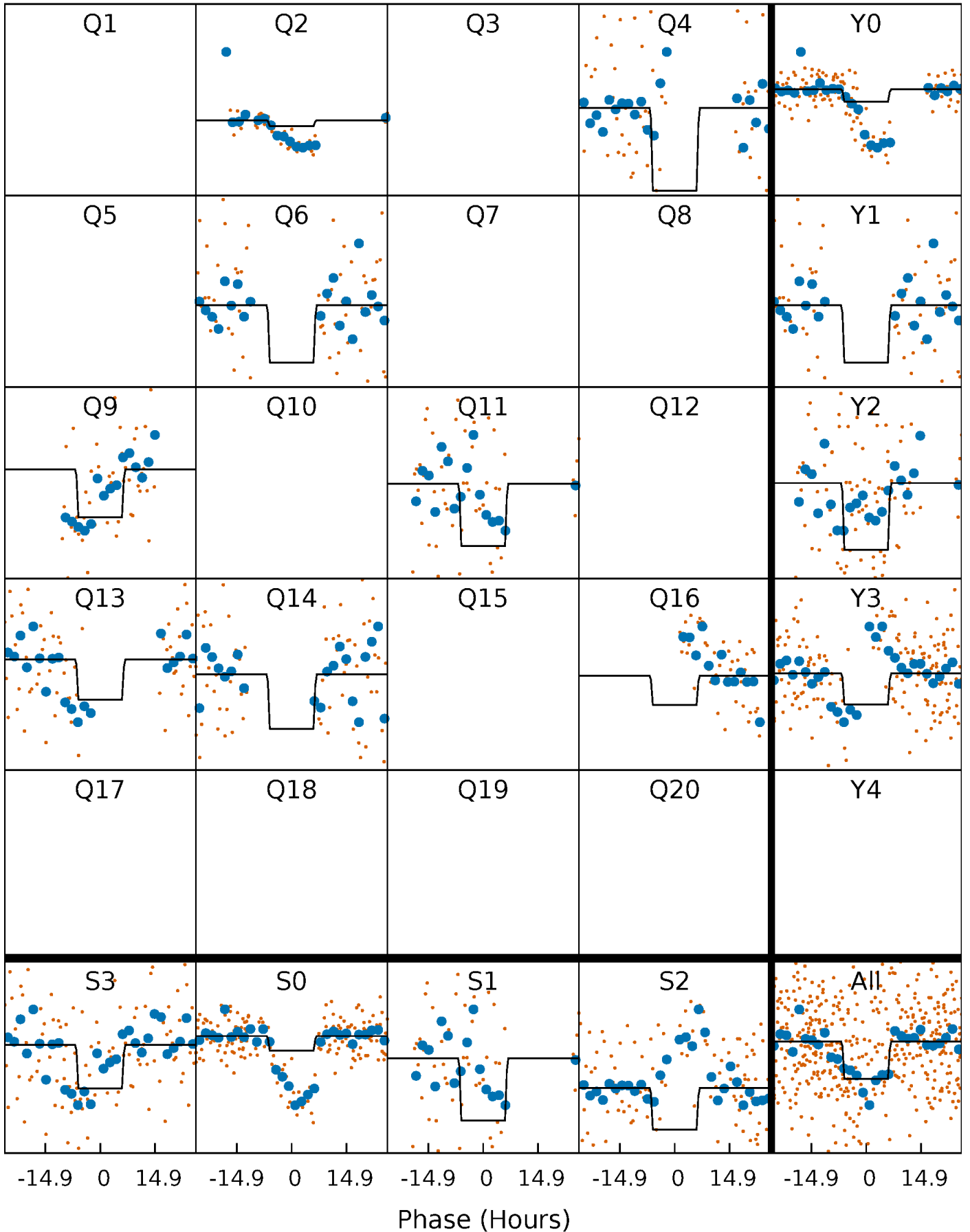
DV Quarter-Phased Transit Curves

TCE 009204718-02 P=159.301369 Days $T_0=251.678383$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

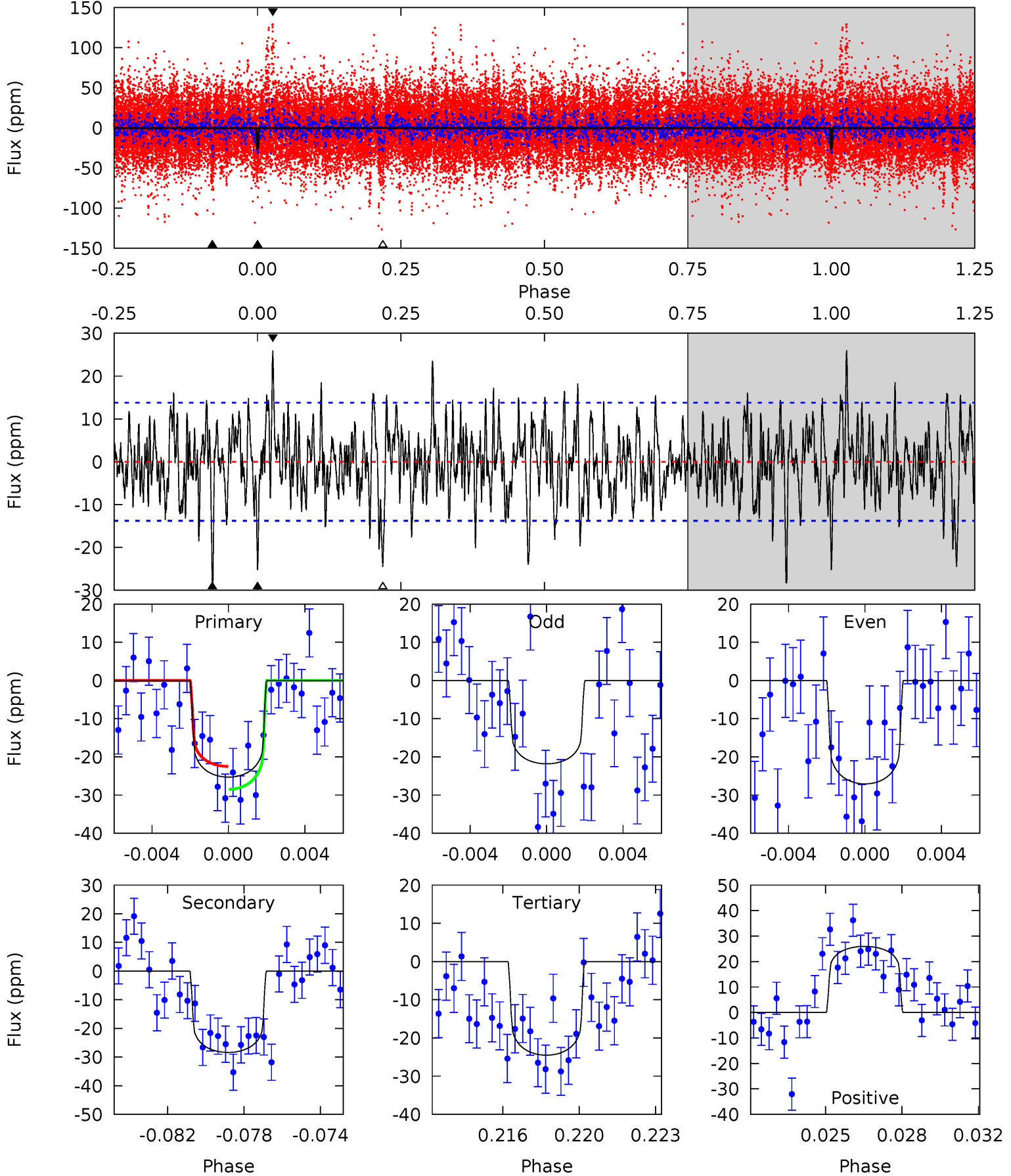
TCE 009204718-02 P=159.300034 Days $T_0=251.683300$ (BKJD)



DV Model-Shift Uniqueness Test

009204718-02, P = 159.301369 Days, E = 92.377014 Days

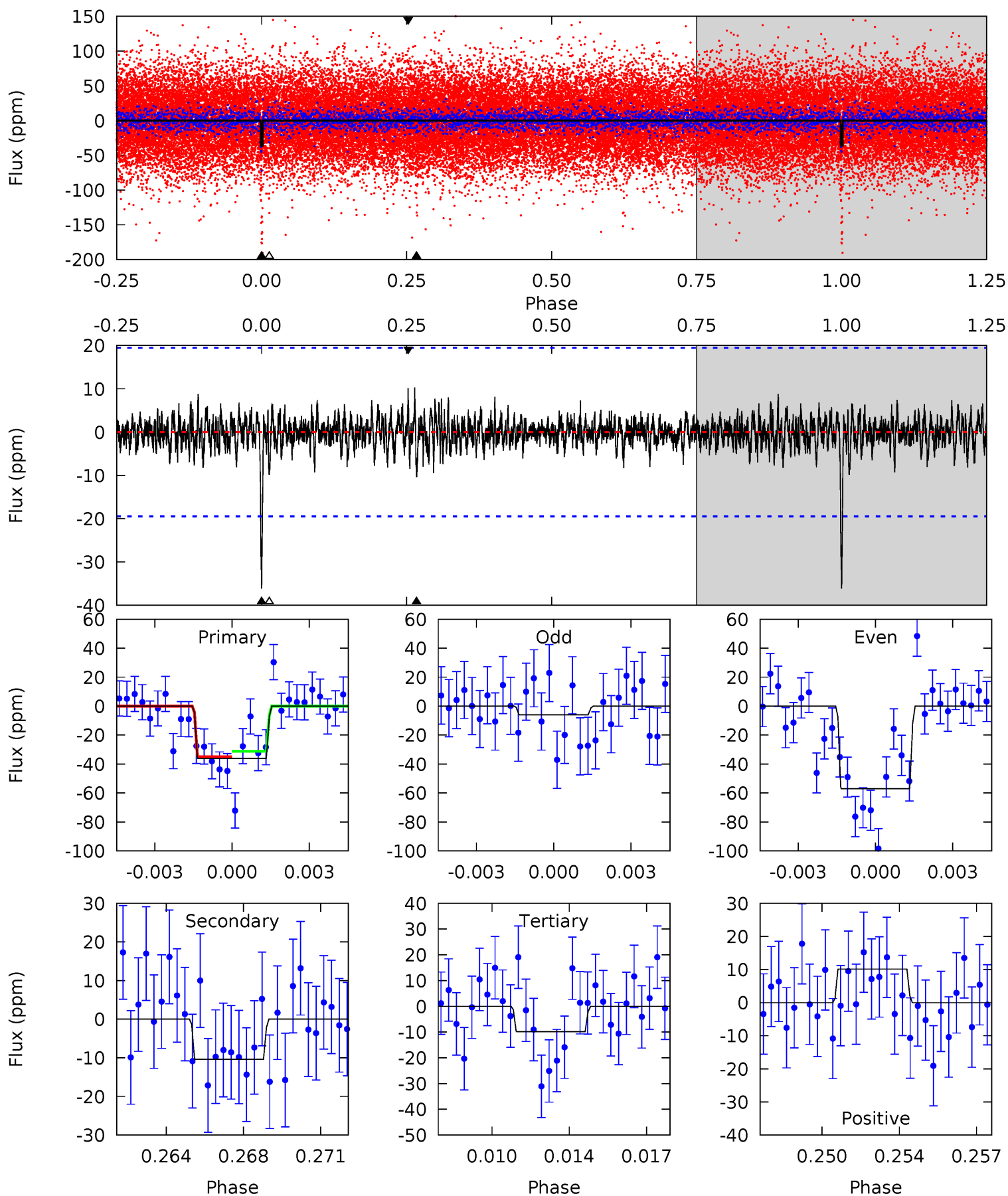
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.58	10.7	9.28	9.83	5.22	2.92	2.65	0.30	-0.25	1.47	0.91	0.94	0.77	0.48	1.14



Alt Model-Shift Uniqueness Test

009204718-02, $P = 159.300034$ Days, $E = 92.383266$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.70	2.79	2.65	2.72	5.23	2.92	0.68	7.05	6.98	0.14	0.06	6.54	1.91	0.22	0.49



Stellar Parameters For KIC 009204718

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7372^{+203}_{-330}	$3.889^{+0.301}_{-0.129}$	$-0.060^{+0.200}_{-0.350}$	$2.510^{+0.498}_{-0.995}$	$1.780^{+0.175}_{-0.409}$	$0.158^{+0.373}_{-0.060}$
	+3%/-4%	+8%/-3%	+333%/-583%	+20%/-40%	+10%/-23%	+236%/-38%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 009204718-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-28 ± 3	$1.48^{+0.54}_{-0.49}$	852^{+63}_{-88}	7039^{+1703}_{-917}	3466^{+3923}_{-1627}
Alt.	-10 ± 4	$1.58^{+0.49}_{-0.50}$	853^{+48}_{-82}	5310^{+1003}_{-685}	1119^{+1249}_{-588}

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

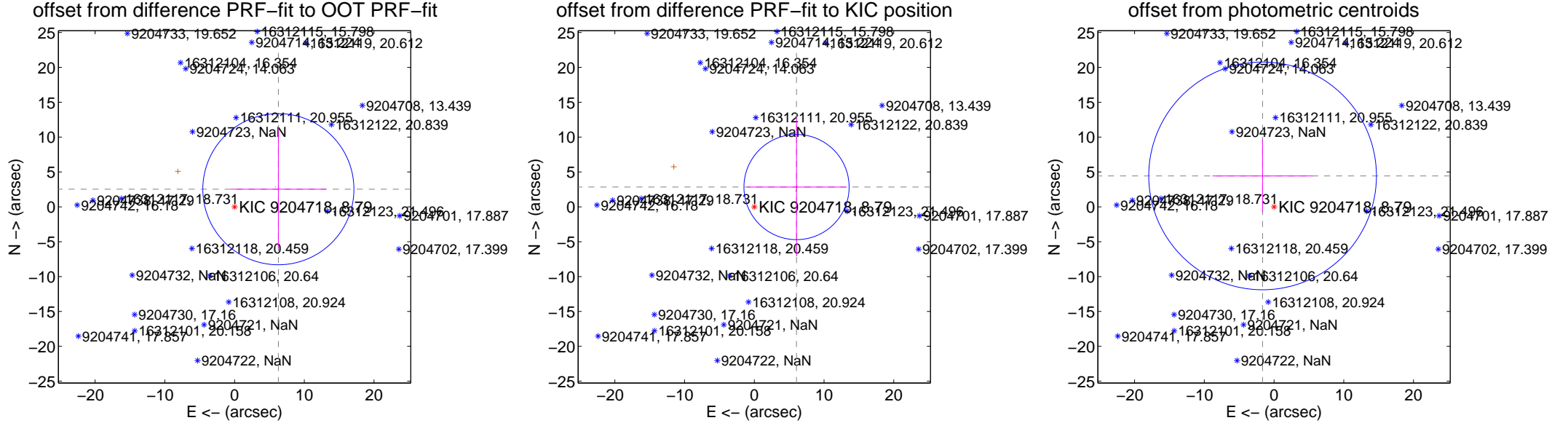
DV Centroid Data

Supplemental centroid analysis for 009204718-02. **Kepler magnitude: 8.79.** Transit SNR 5.62

There are 0 quarters with good PRF difference image offsets

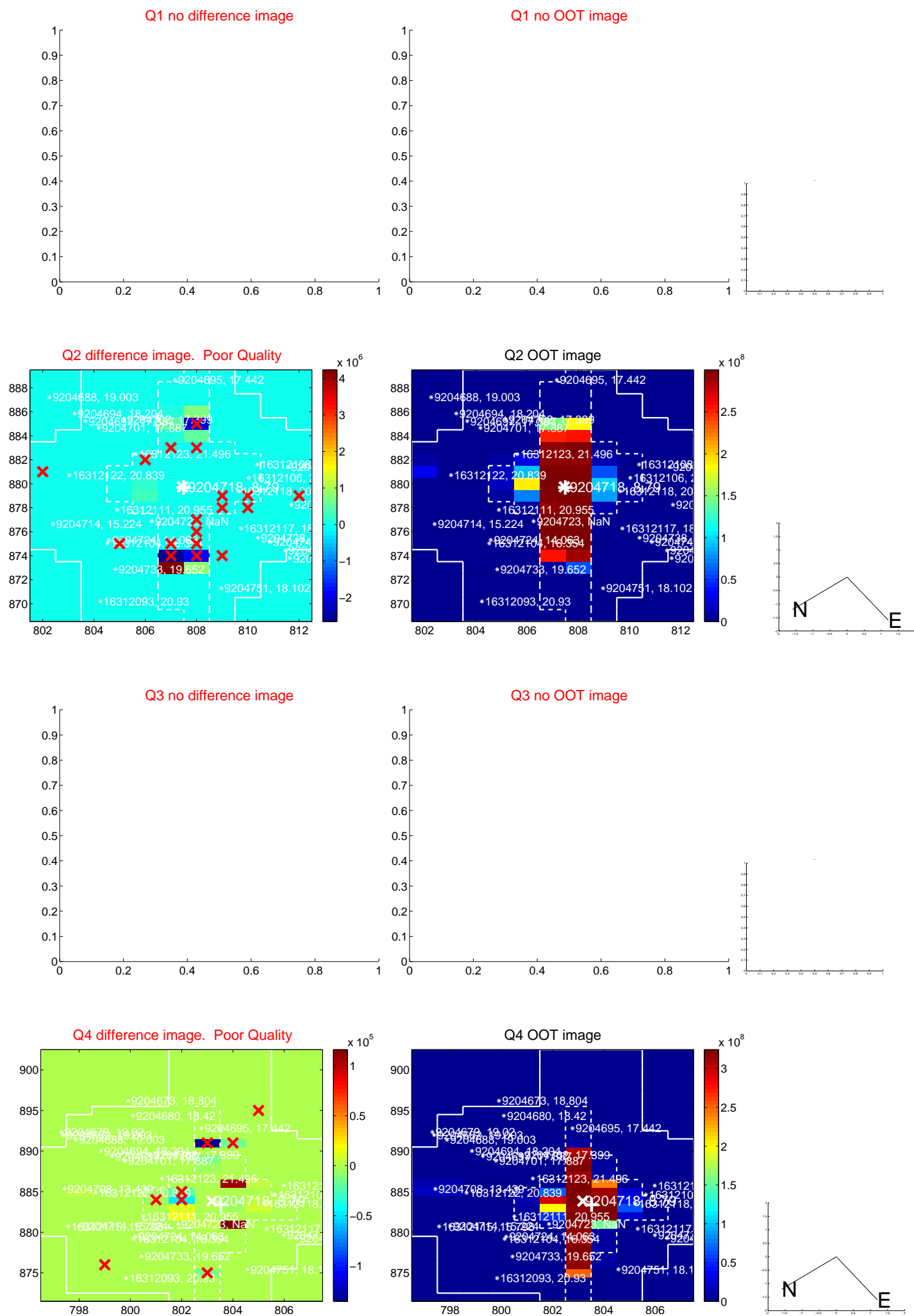
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.773 ± 3.612	1.88	-6.283 ± 6.839	2.528 ± 8.444
PRF-fit source offset from KIC position	6.689 ± 2.514	2.66	-6.057 ± 7.112	2.837 ± 9.918
photometric centroid source offset	4.73 ± 5.44	0.87	1.64 ± 7.19	4.44 ± 5.16



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 ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.

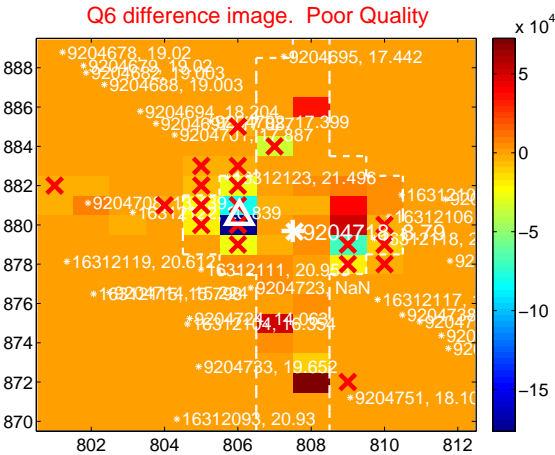
Q5 no difference image



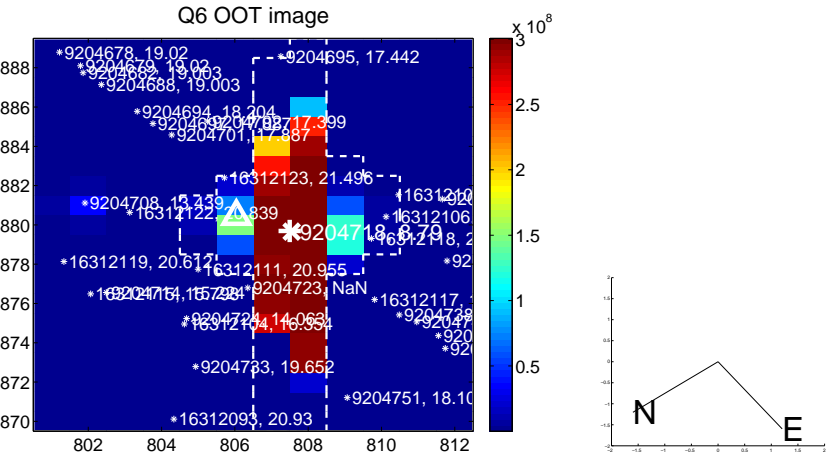
Q5 no OOT image



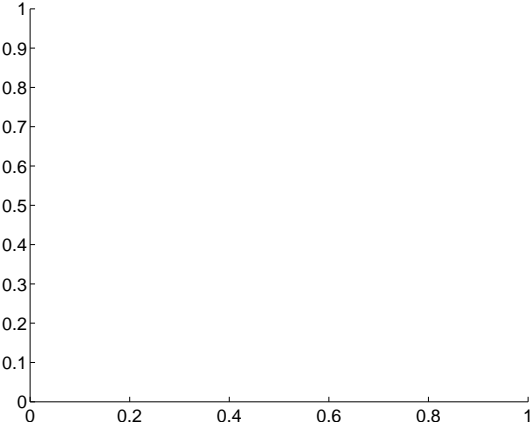
Q6 difference image. Poor Quality



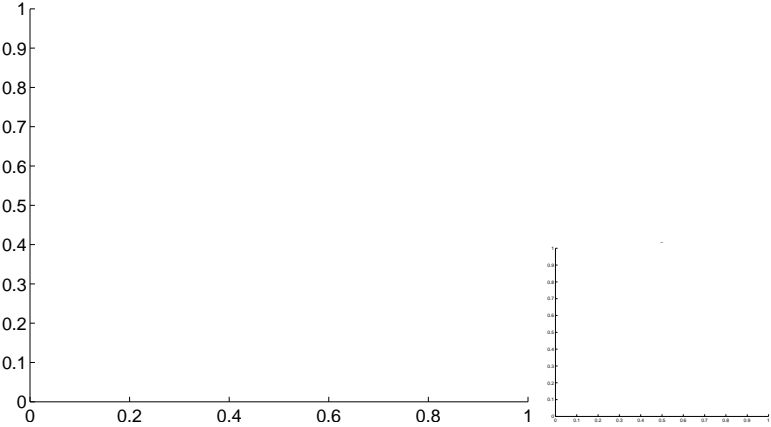
Q6 OOT image



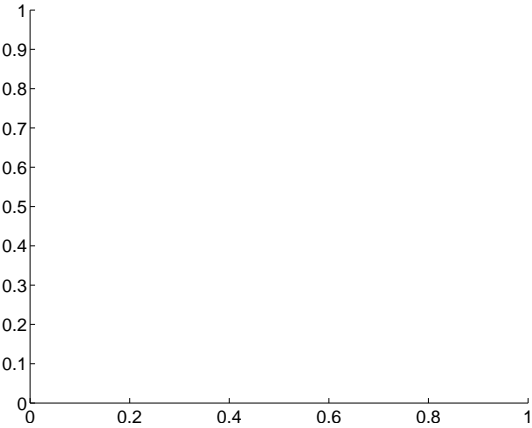
Q7 no difference image



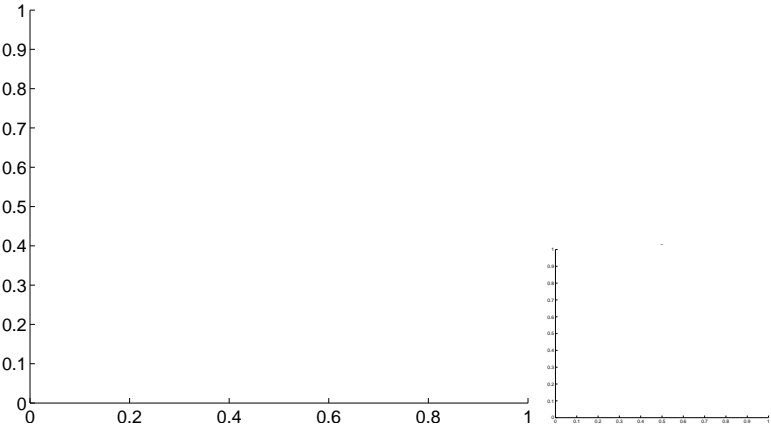
Q7 no OOT image



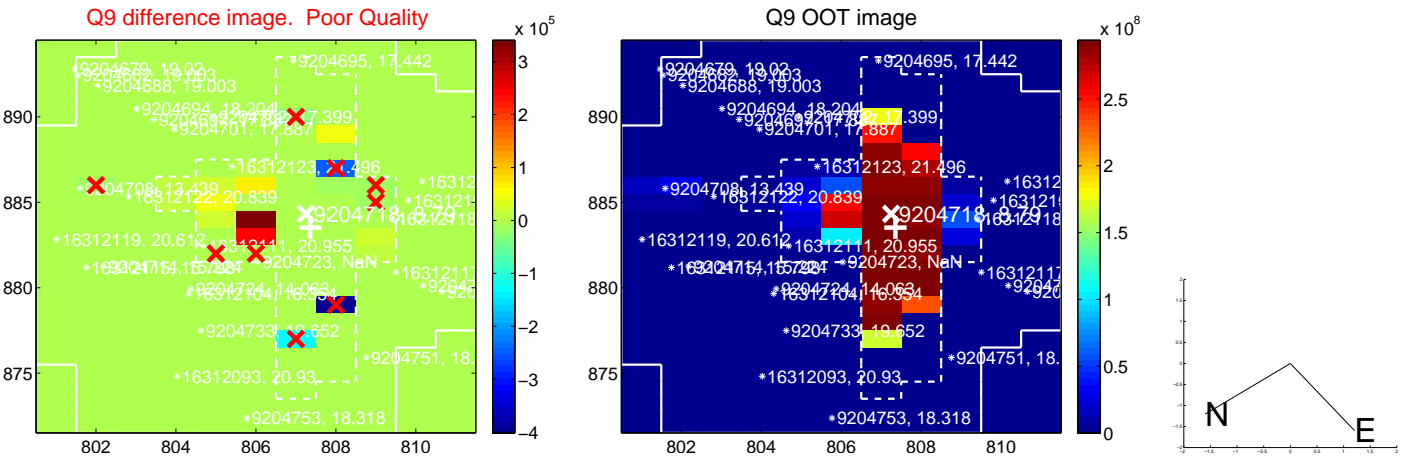
Q8 no difference image



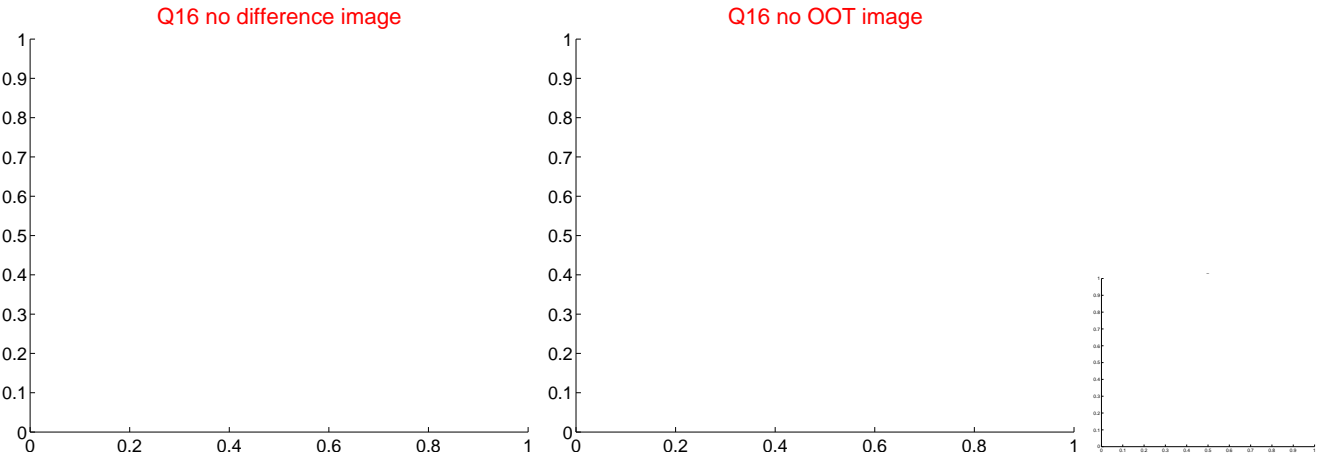
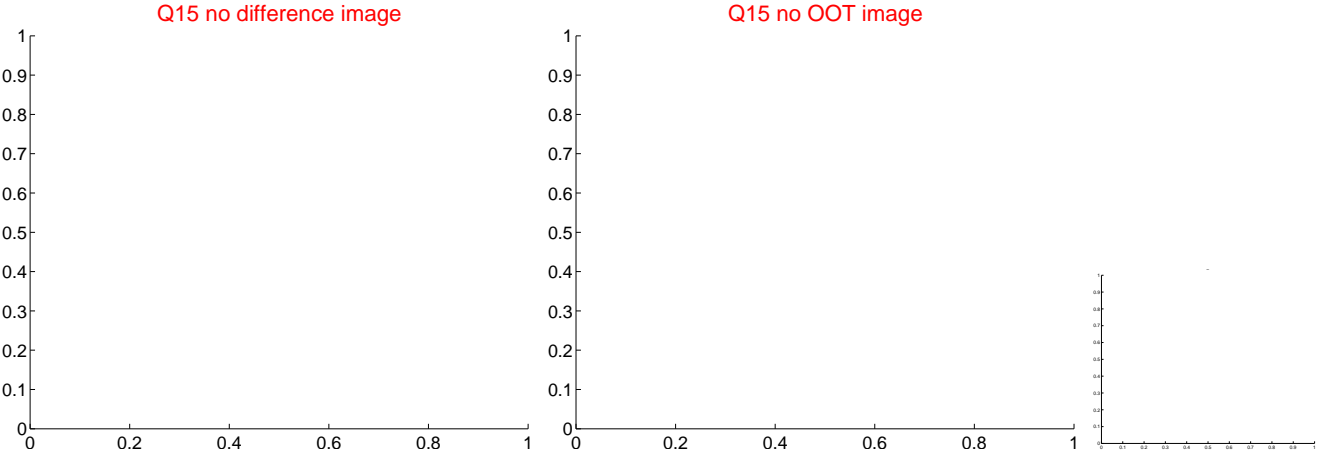
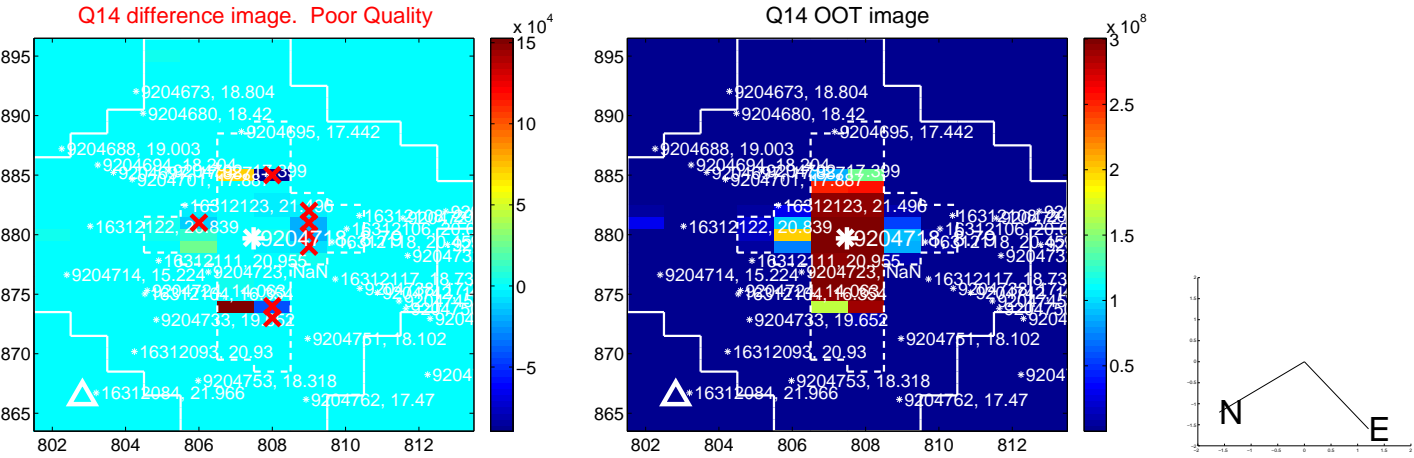
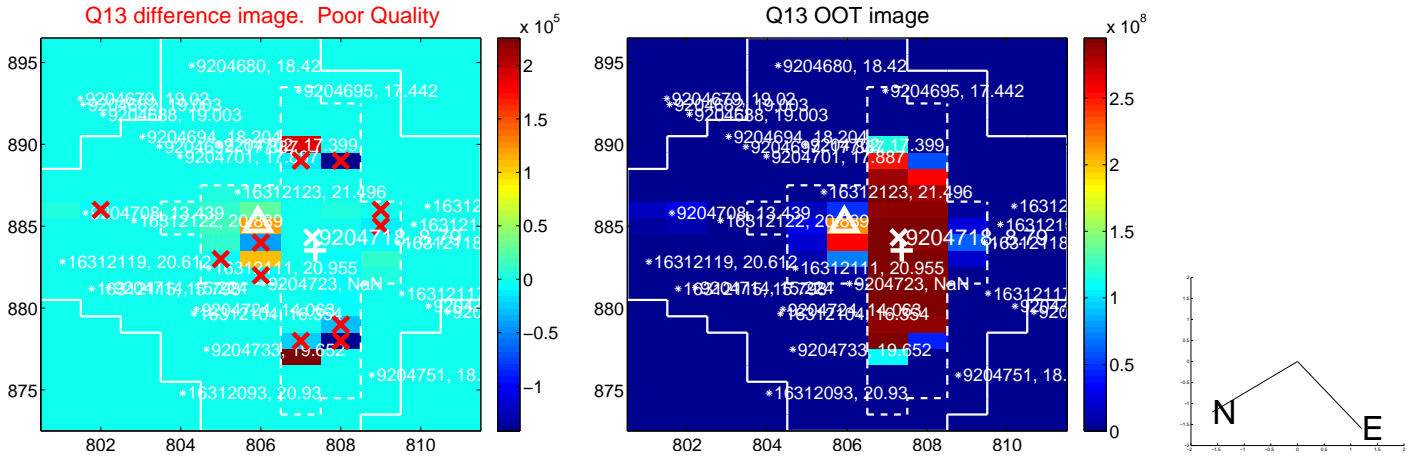
Q8 no OOT image



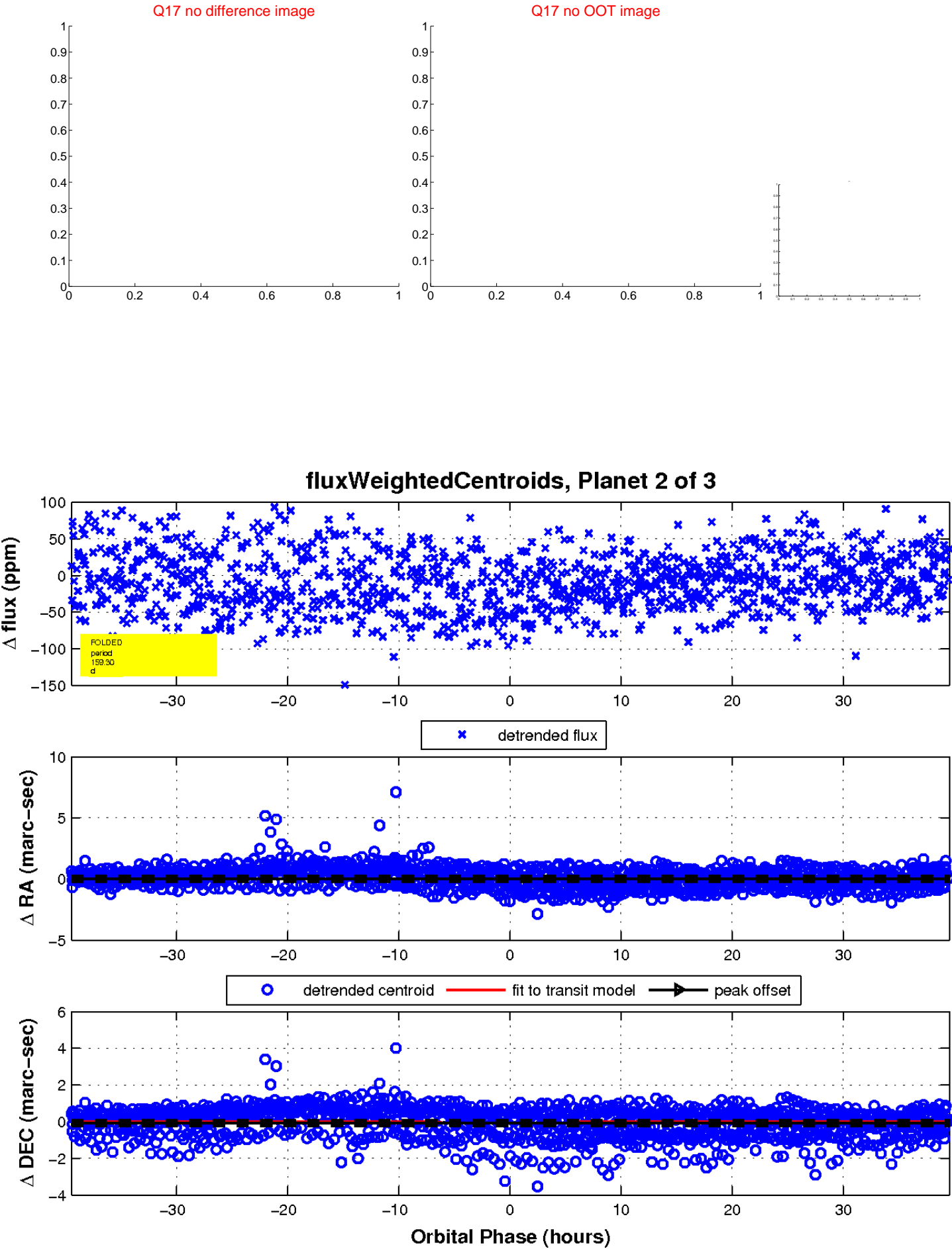
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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

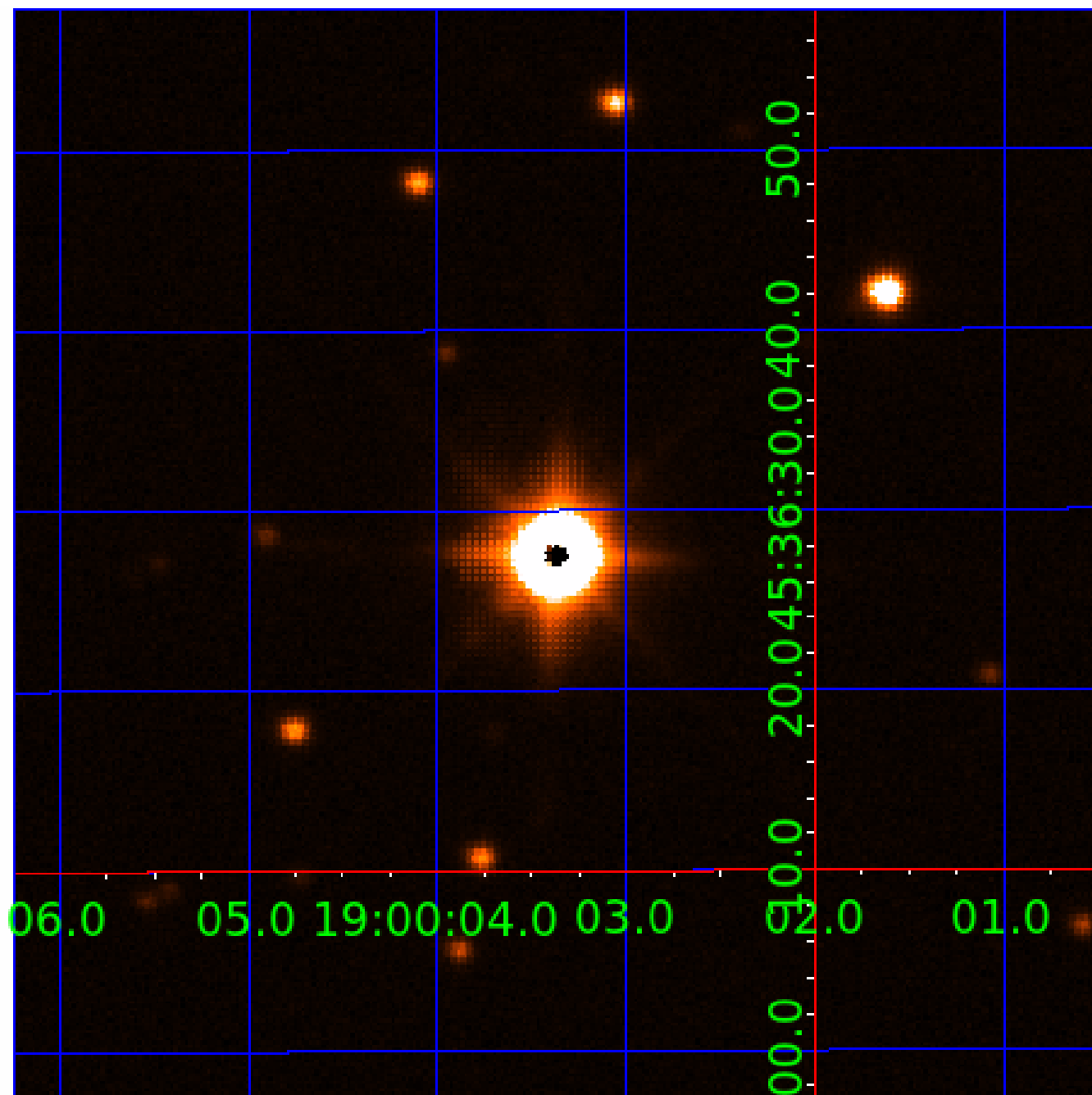


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 009204718

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})
009204718-01	OBS	No	1.826767	131.780036	16.8	6.000	10.2	-1.0	2.51	7372	1.04	13267.03
009204718-02	OBS	No	159.301369	251.678384	28.9	13.203	10.5	5.6	2.51	7372	1.56	34.31
009204718-03	OBS	No	1.826167	133.279285	3.8	19.183	8.6	8.4	2.51	7372	0.56	13272.85

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
009204718-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
009204718-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_TER_DV—INCONSISTENT_TRANS—CENT_SATURATED
009204718-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

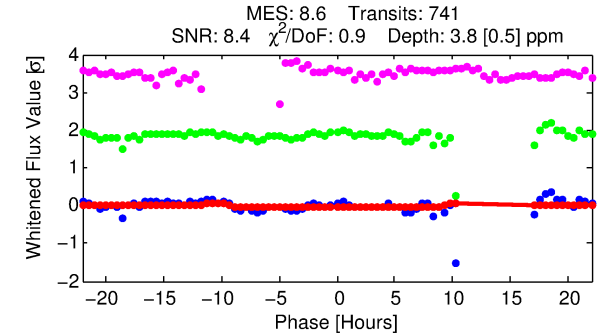
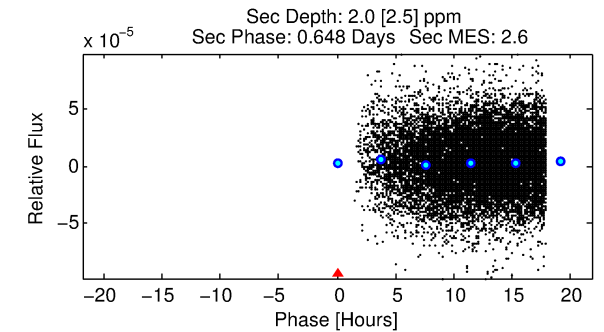
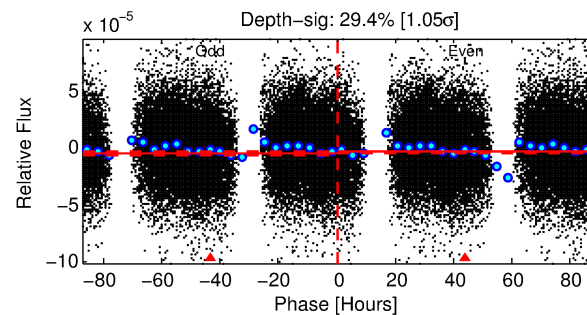
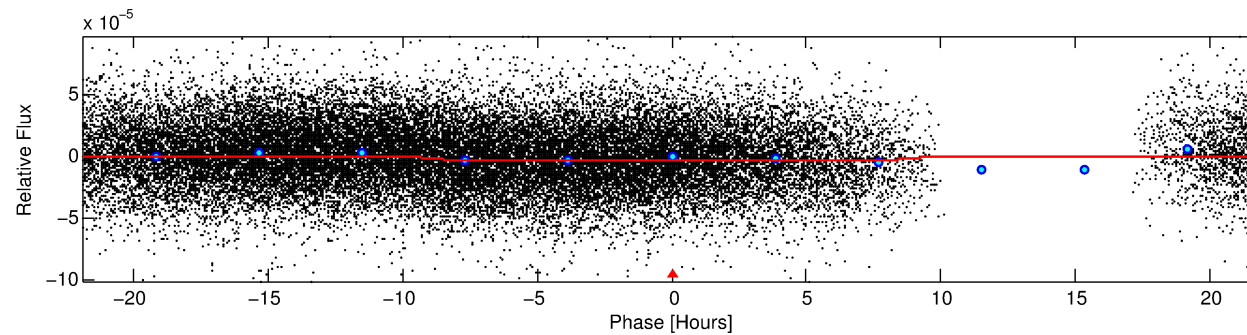
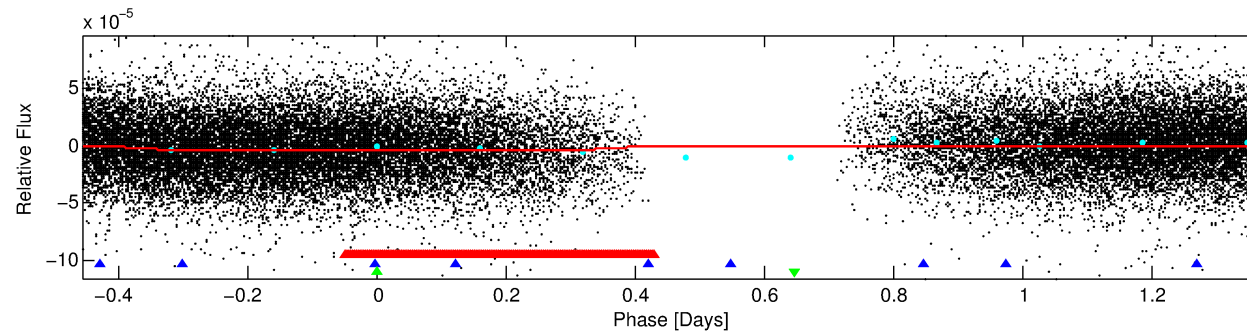
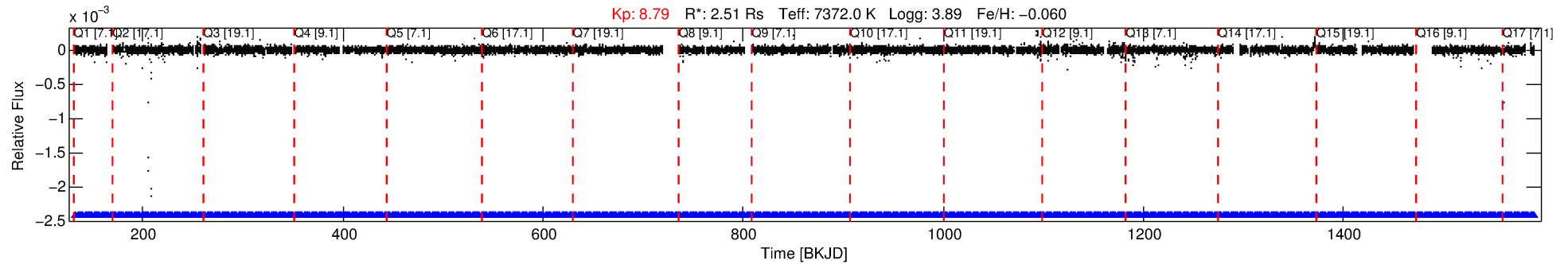
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 009204718-03

No Significant Match Found

DV One-Page Summary

KIC: 9204718 Candidate: 3 of 3 Period: 1.826 d



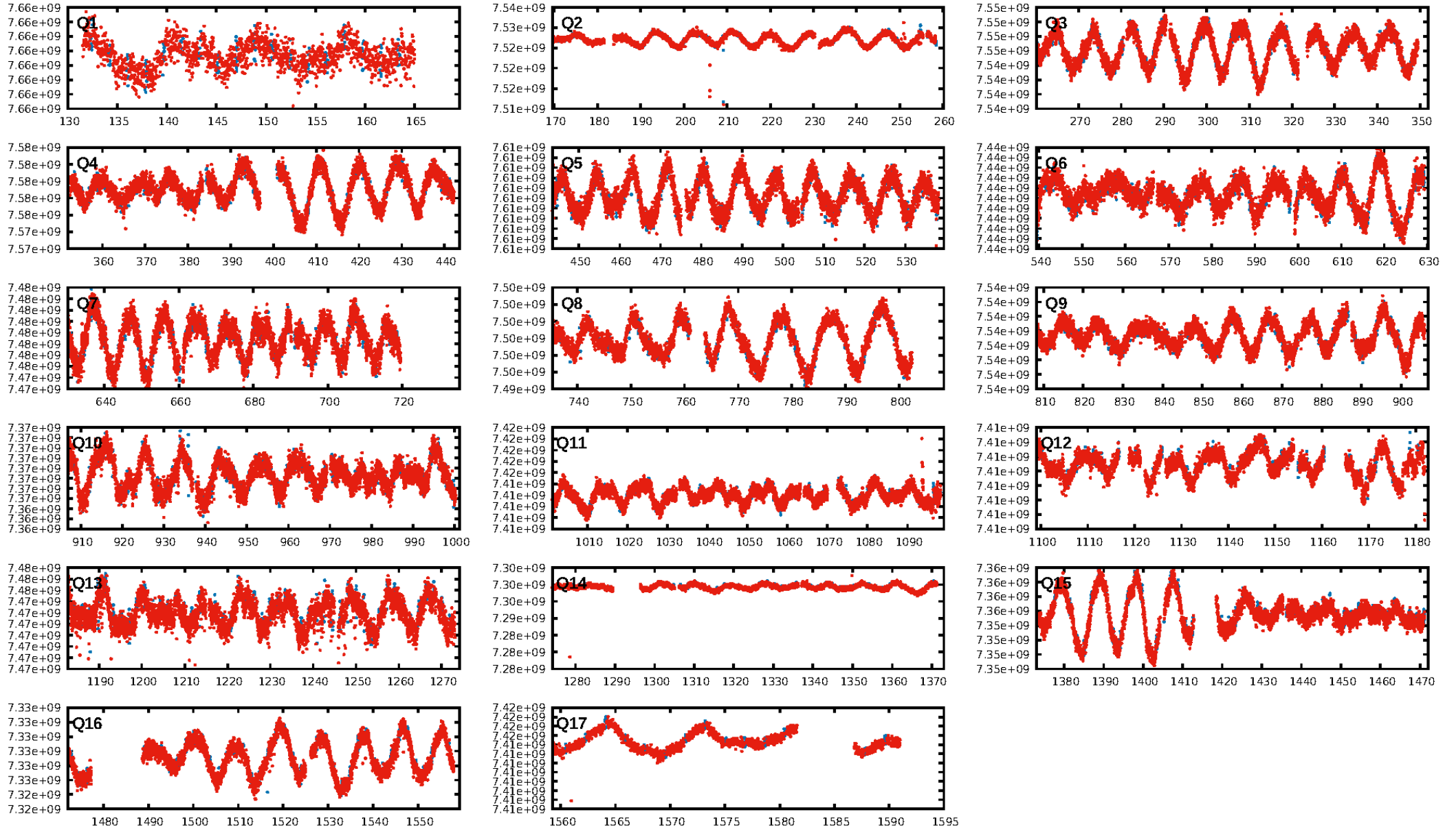
DV Fit Results:

Period = 1.82617 [0.00004] d
Epoch = 133.2793 [0.0196] BKJD
Rp/R* = 0.0020 [0.0006]
a/R* = 1.01 [0.02]
b = 0.87 [0.48]
Seff = 13272.85 [7454.04]
Teq = 2737 [384] K
Rp = 0.56 [0.27] Re
a = 0.0354 [0.0124] AU
Ag = 4.44 [6.60] [0.52 σ]
Teffp = 6143 [2149] K [1.56 σ]

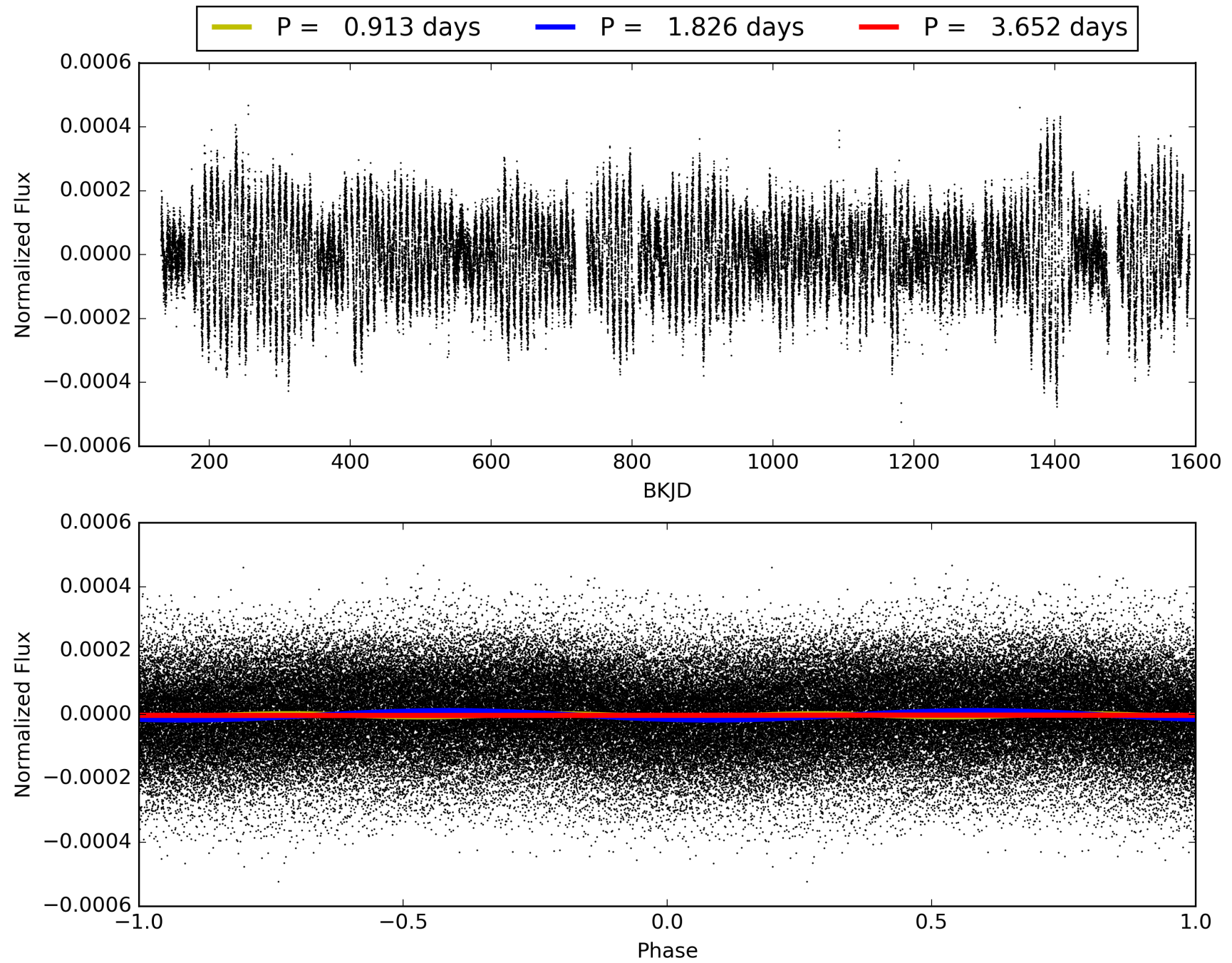
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.1% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [707/707]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 0.00 [0/17]

TCE 009204718-03, PDC Light Curves

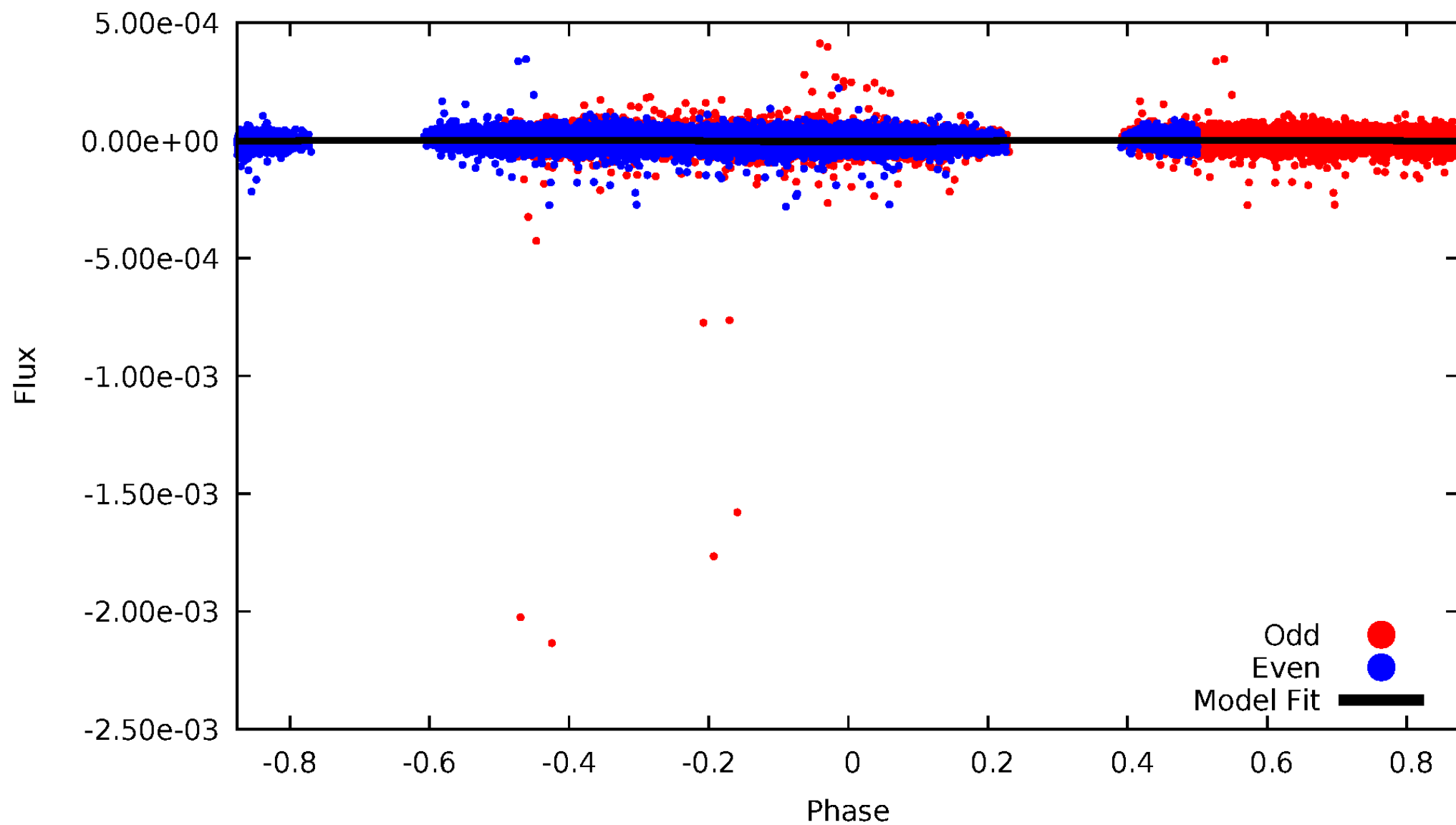


TCE 009204718-03



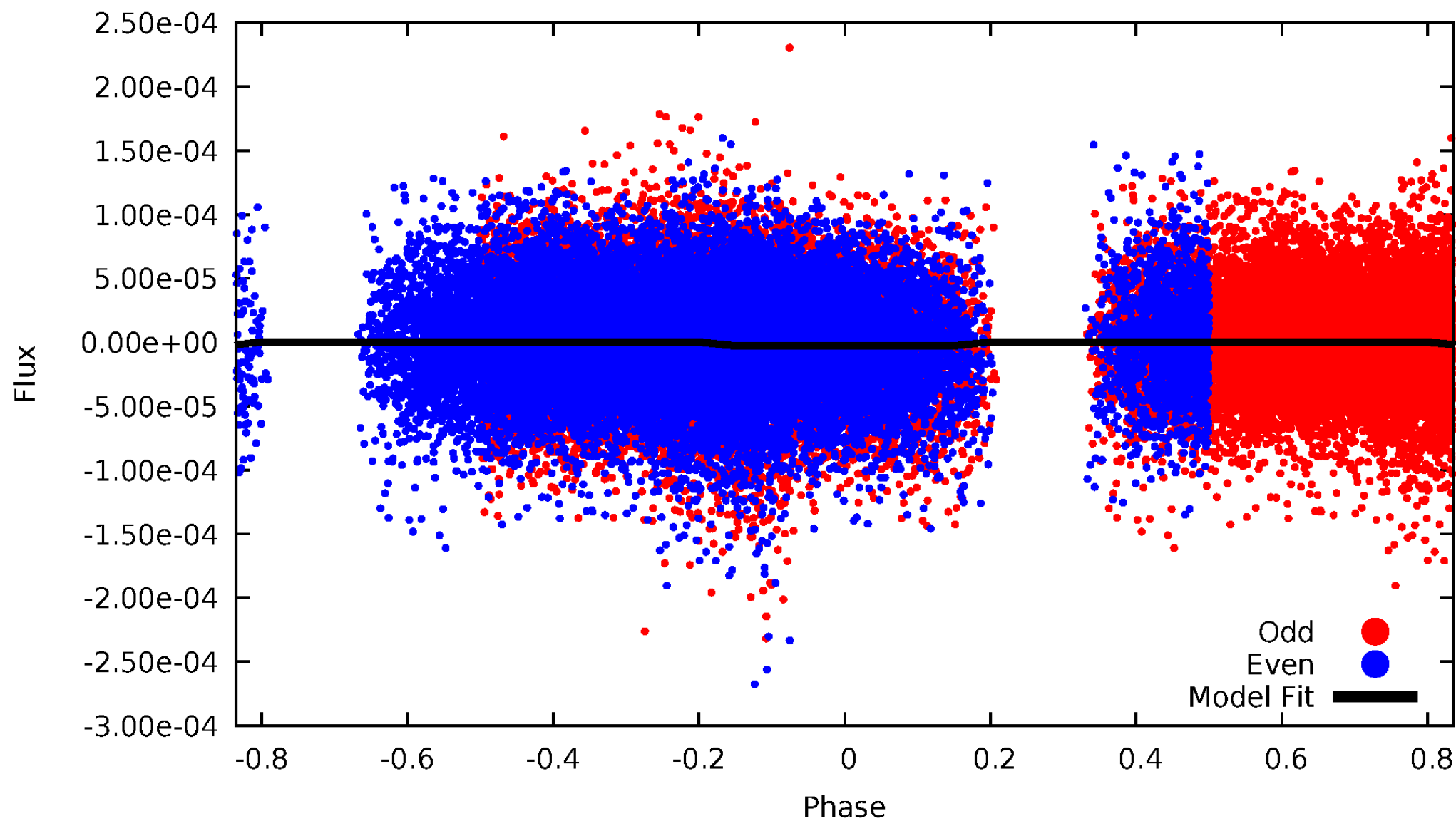
DV Odd/Even

TCE 009204718-03



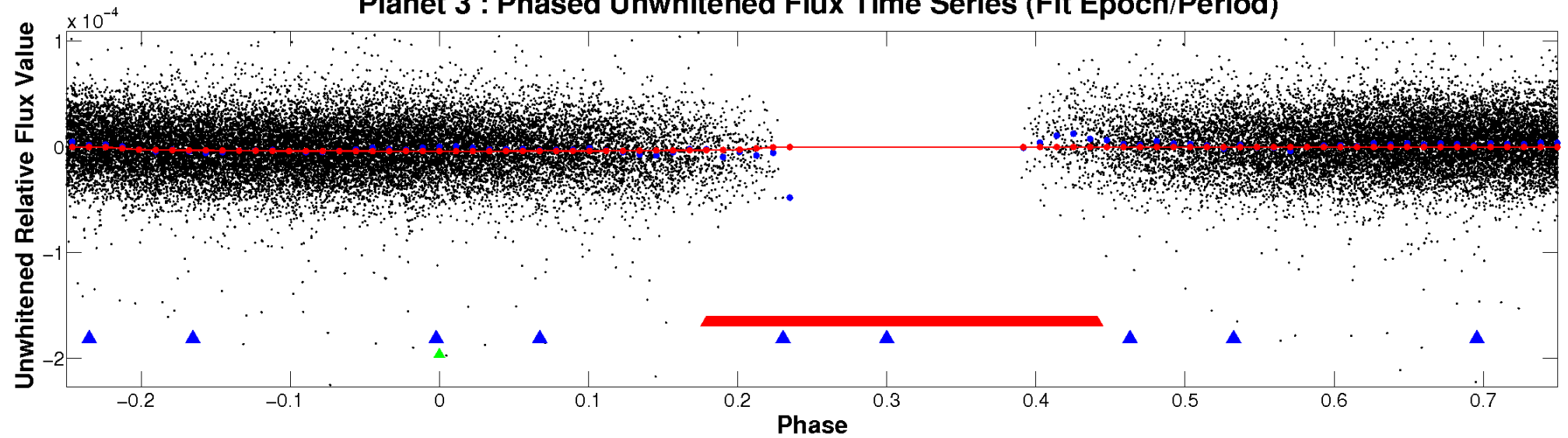
ALT Odd/Even

TCE 009204718-03

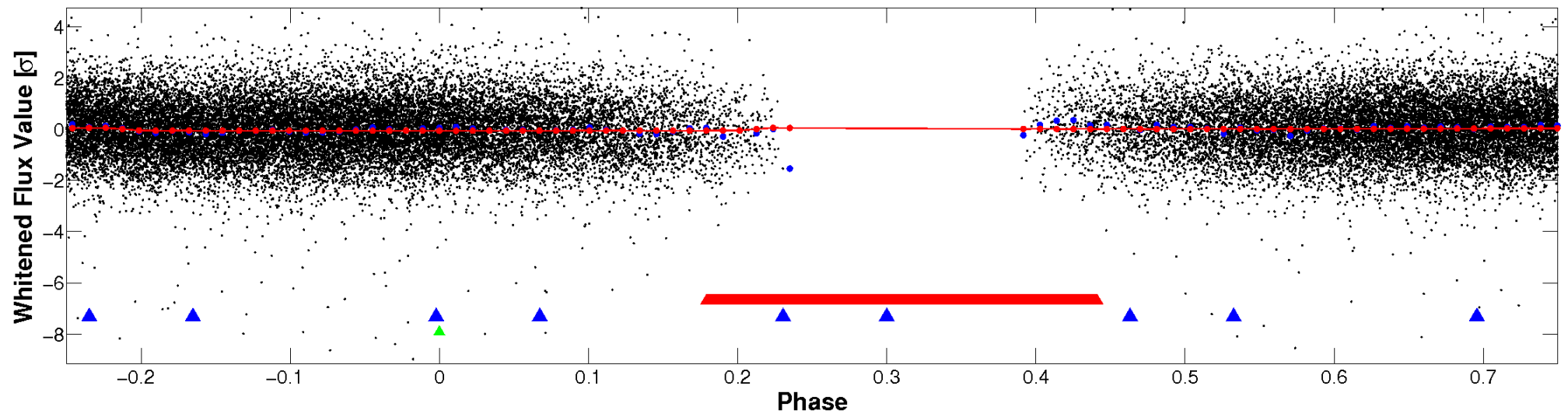


Non-Whitened Vs. Whitened Light Curve

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

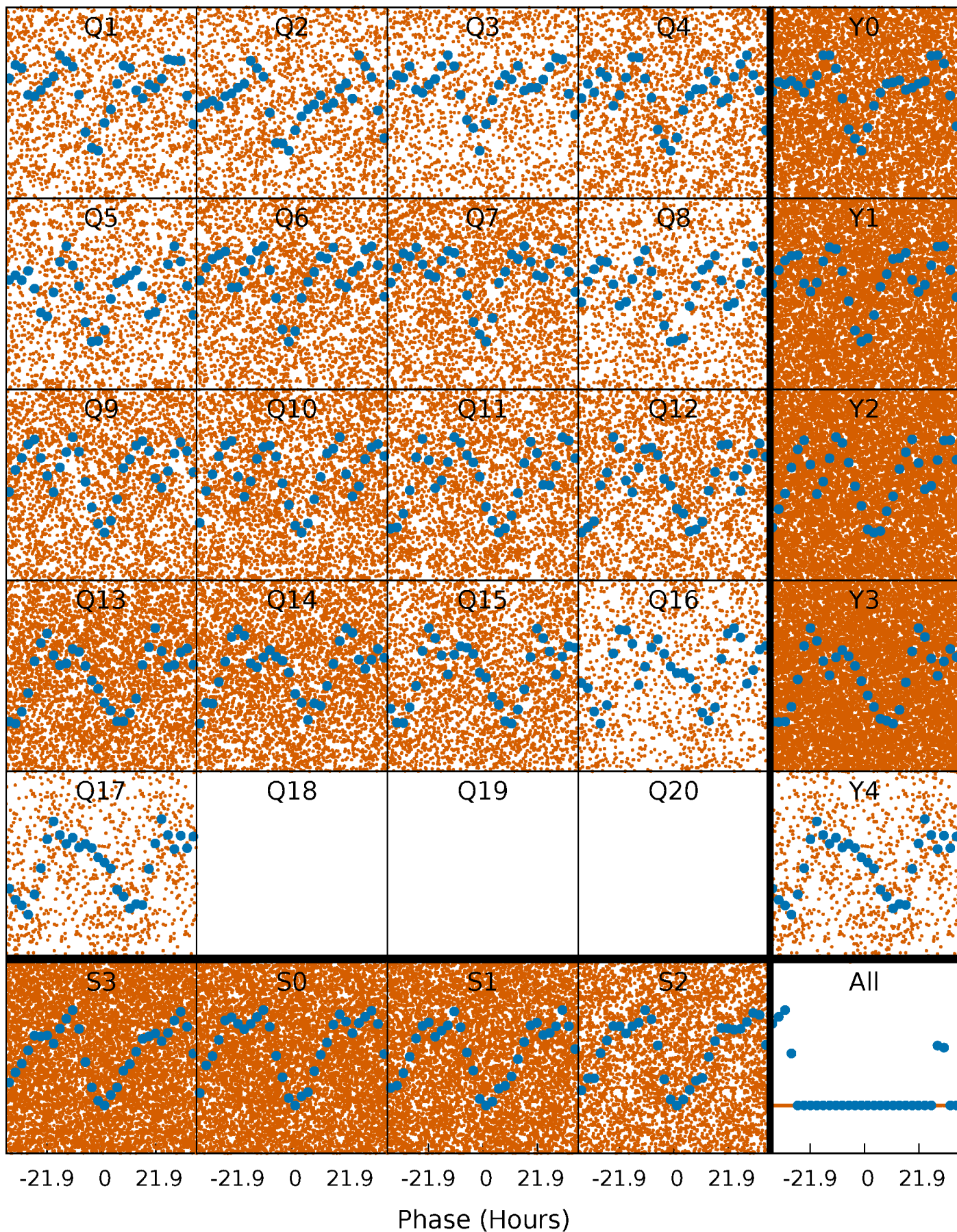


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



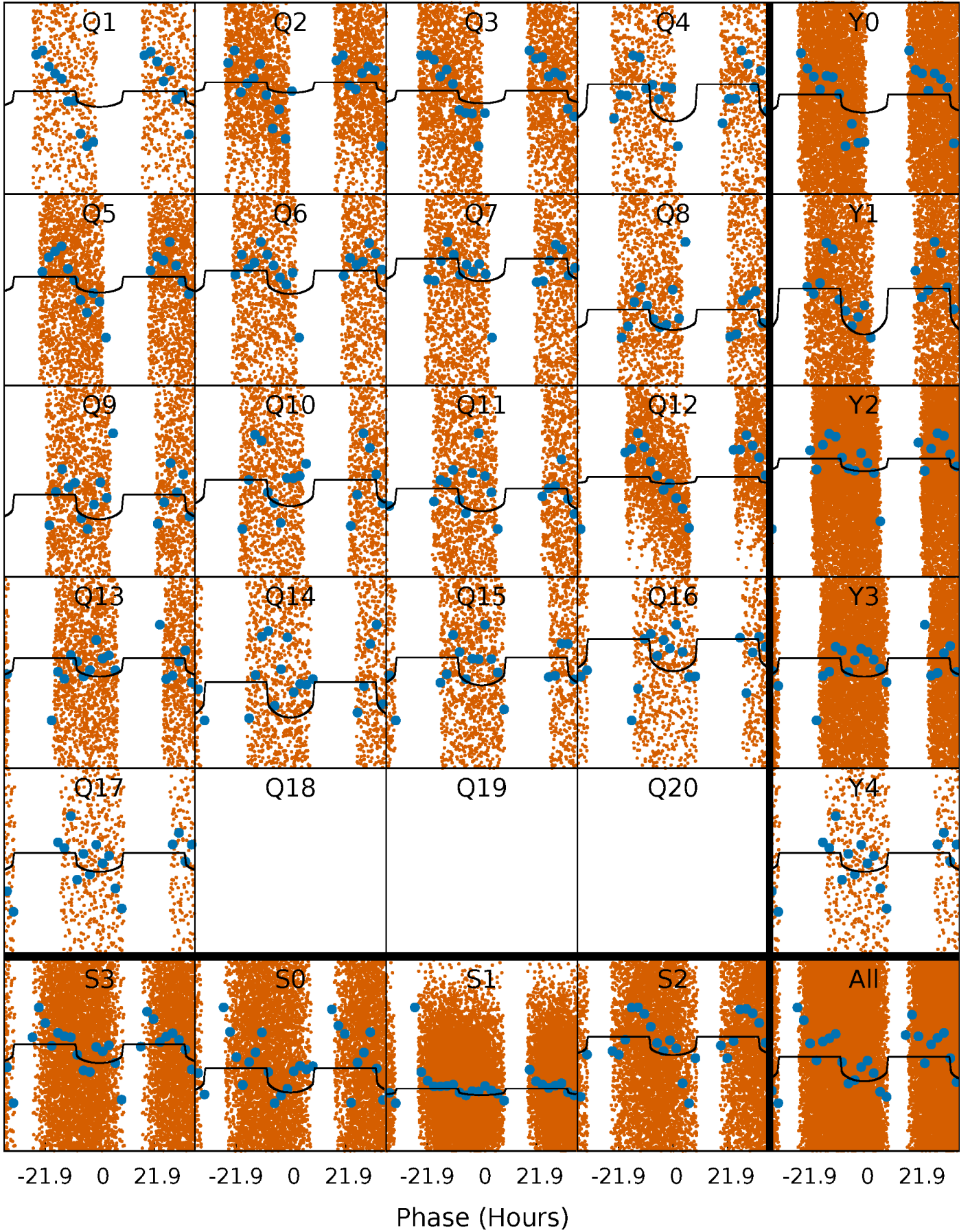
PDC Quarter-Phased Transit Curves

TCE 009204718-03 P= 1.826167 Days $T_0=133.279285$ (BKJD)



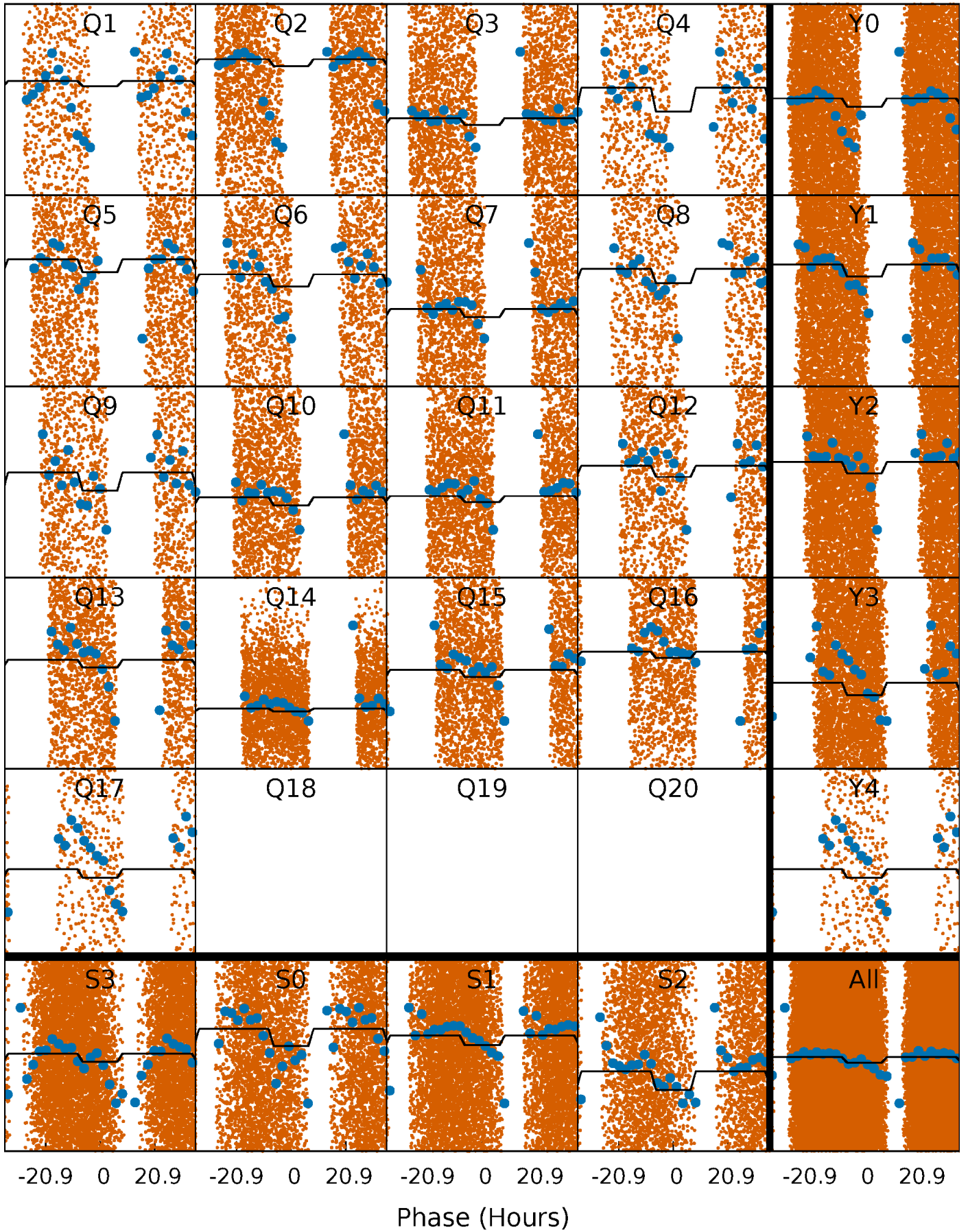
DV Quarter-Phased Transit Curves

TCE 009204718-03 P= 1.826167 Days $T_0=133.279285$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

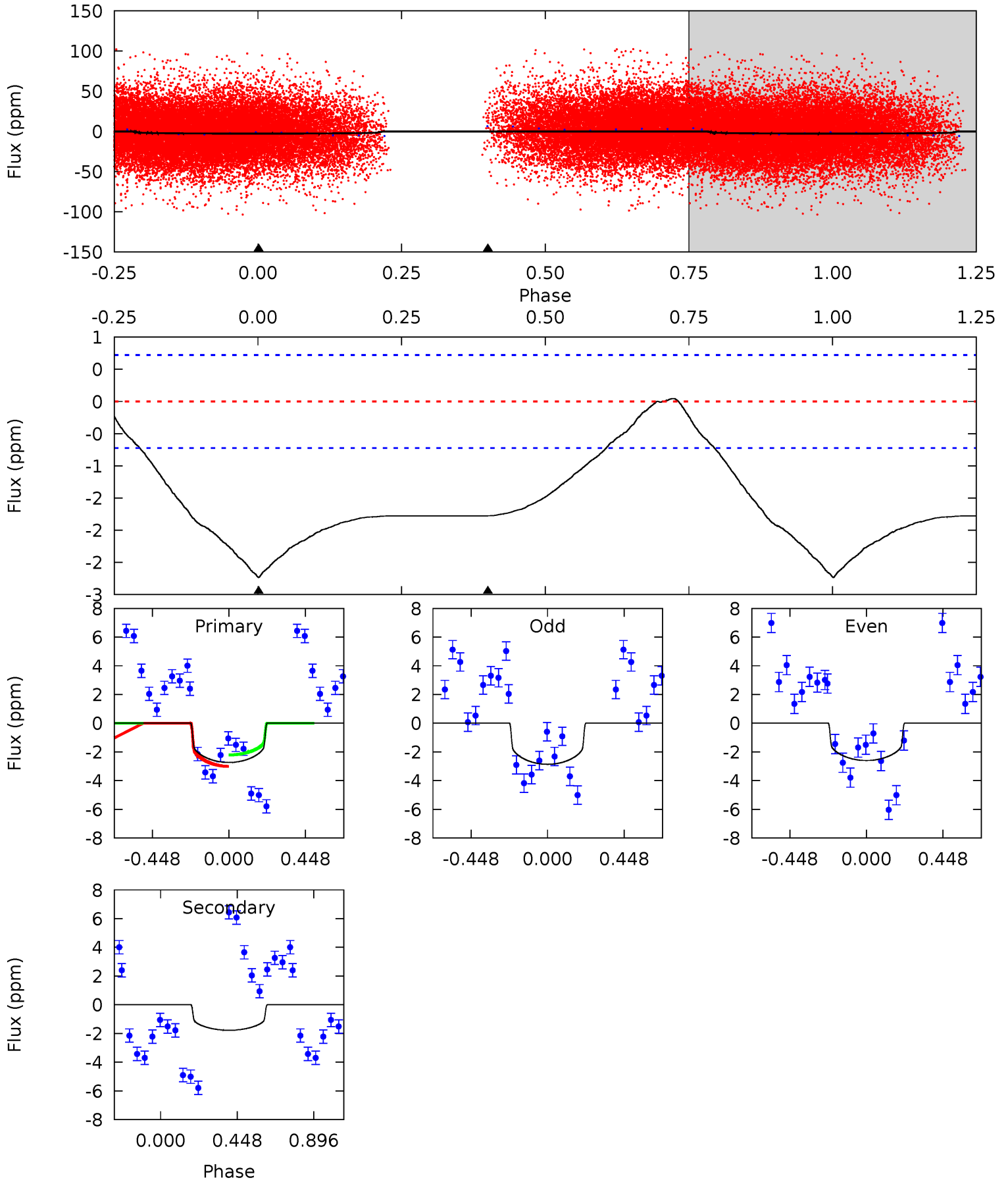
TCE 009204718-03 P= 1.826080 Days $T_0=133.389303$ (BKJD)



DV Model-Shift Uniqueness Test

009204718-03, P = 1.826167 Days, E = 131.453118 Days

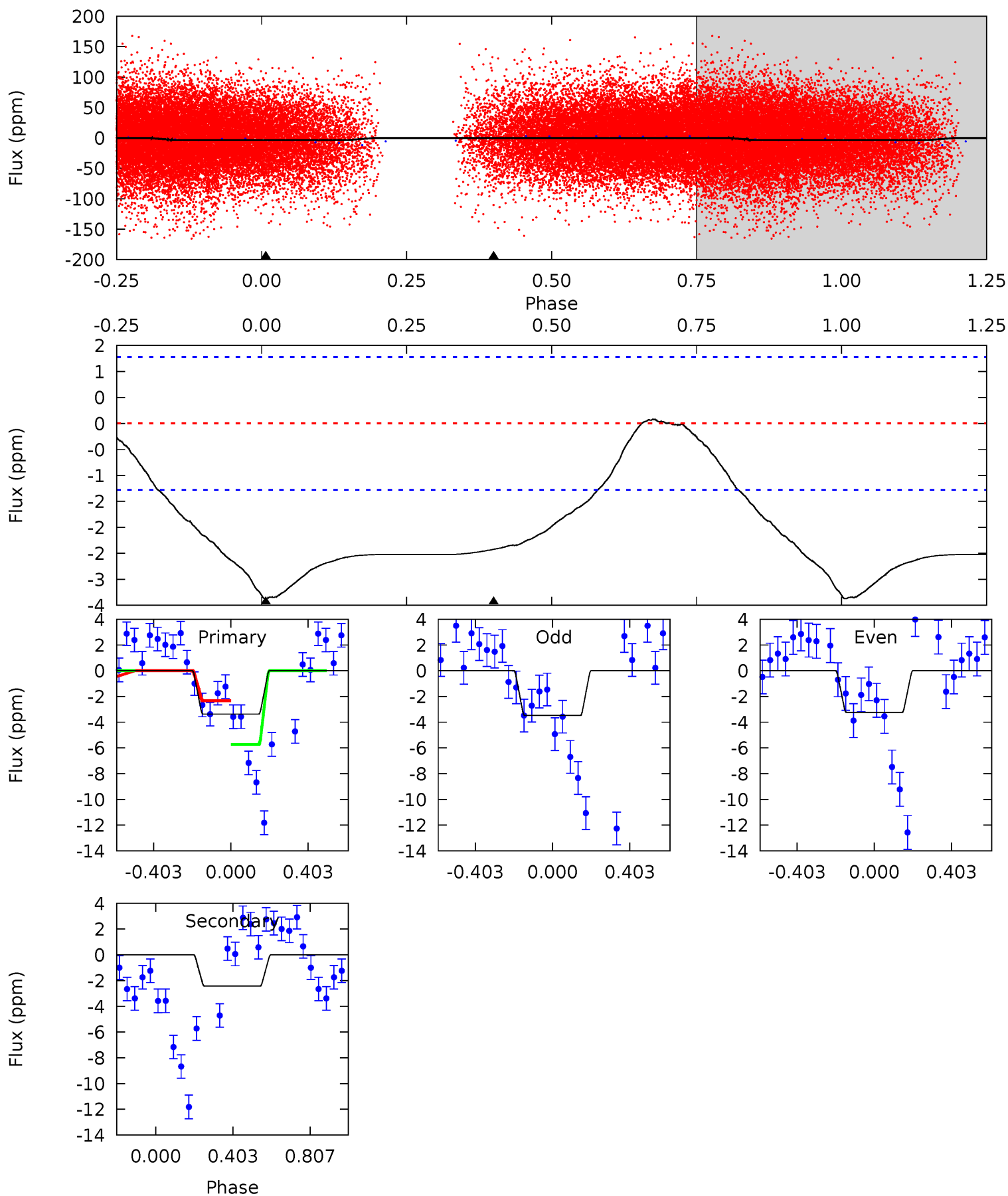
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.0	10.4	0	0	4.24	0.76	0.36	16.0	16.0	10.4	10.4	0.78	1.02	0.02	2.15



Alt Model-Shift Uniqueness Test

009204718-03, P = 1.826080 Days, E = 131.563223 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.3	8.08	0	0	4.26	0.84	0.13	11.3	11.3	8.08	8.08	0.40	2.09	0.02	4.42



Stellar Parameters For KIC 009204718

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7372^{+203}_{-330}	$3.889^{+0.301}_{-0.129}$	$-0.060^{+0.200}_{-0.350}$	$2.510^{+0.498}_{-0.995}$	$1.780^{+0.175}_{-0.409}$	$0.158^{+0.373}_{-0.060}$
	+3%/-4%	+8%/-3%	+333%/-583%	+20%/-40%	+10%/-23%	+236%/-38%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 009204718-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-2 ± 0	$0.53^{+0.18}_{-0.17}$	3766^{+253}_{-356}	5823^{+1021}_{-750}	$4.415^{+4.941}_{-1.949}$
Alt.	-2 ± 0	$0.43^{+0.17}_{-0.15}$	3772^{+263}_{-371}	6905^{+2062}_{-1039}	$8.732^{+11.866}_{-4.169}$

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

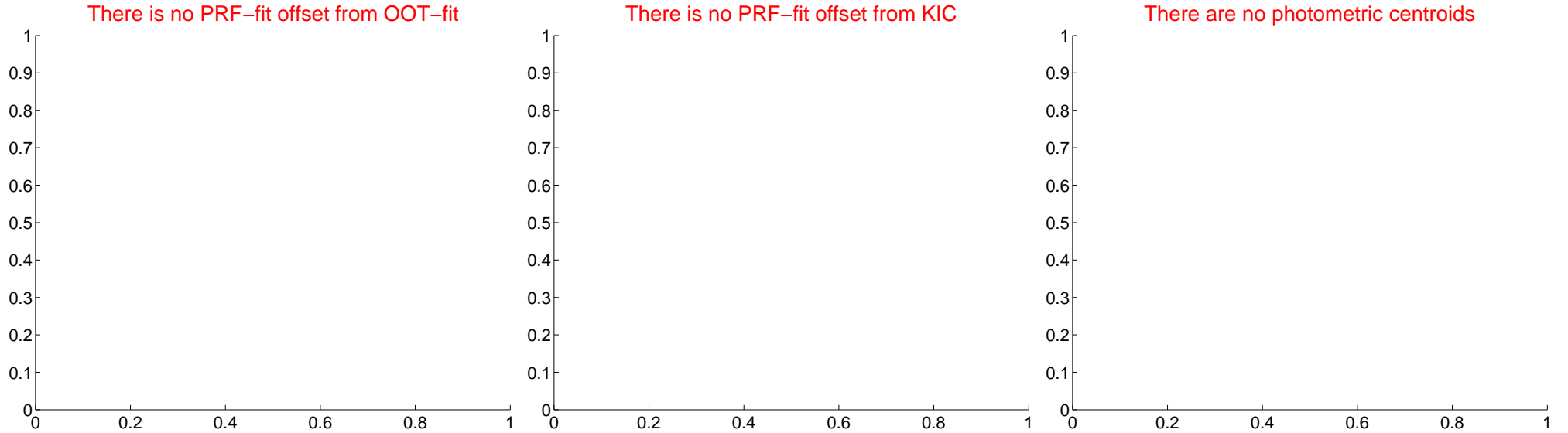
DV Centroid Data

Supplemental centroid analysis for 009204718-03. **Kepler magnitude: 8.79.** Transit SNR 8.42

There are 0 quarters with good PRF difference image offsets

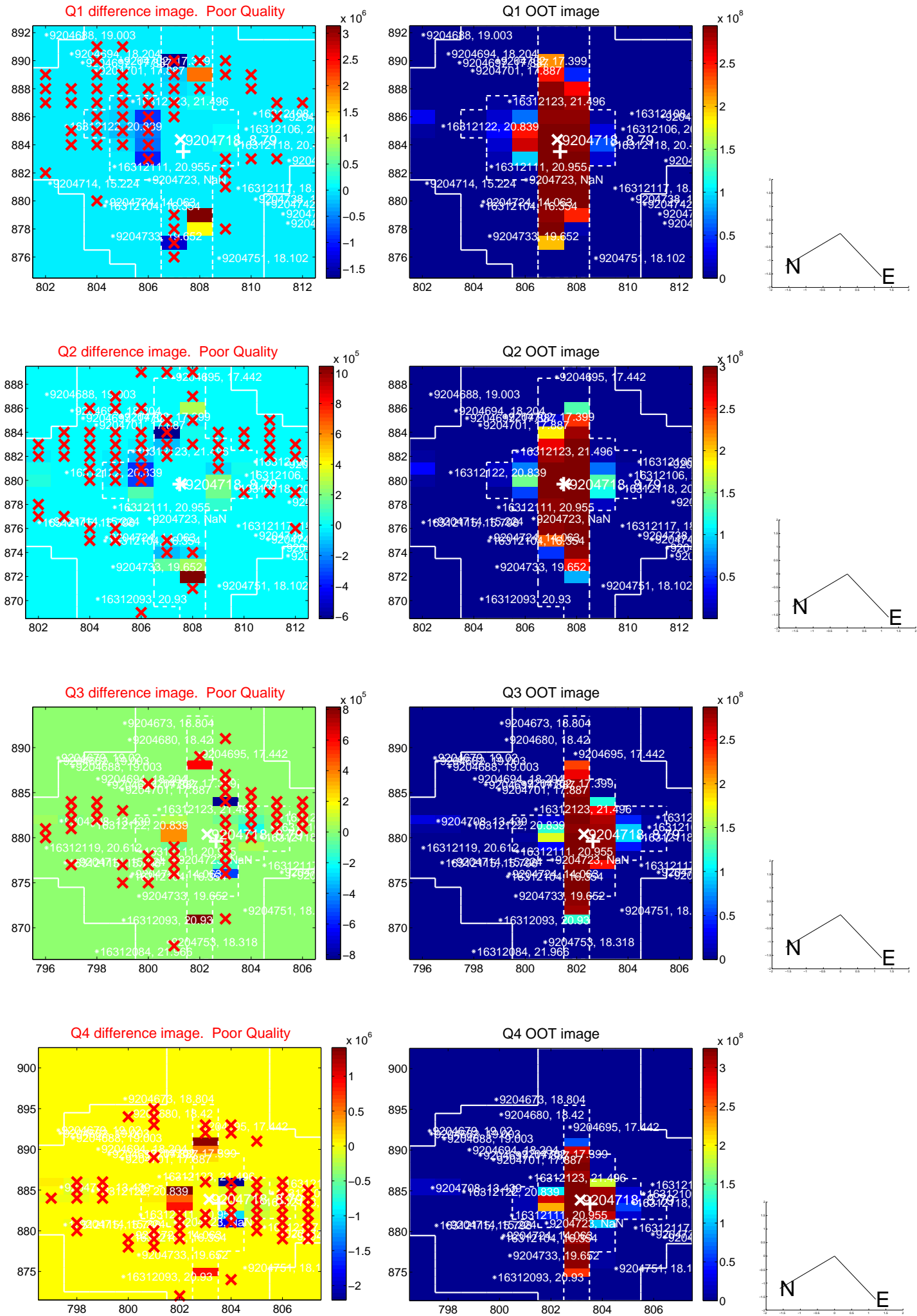
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	—	—	—	—

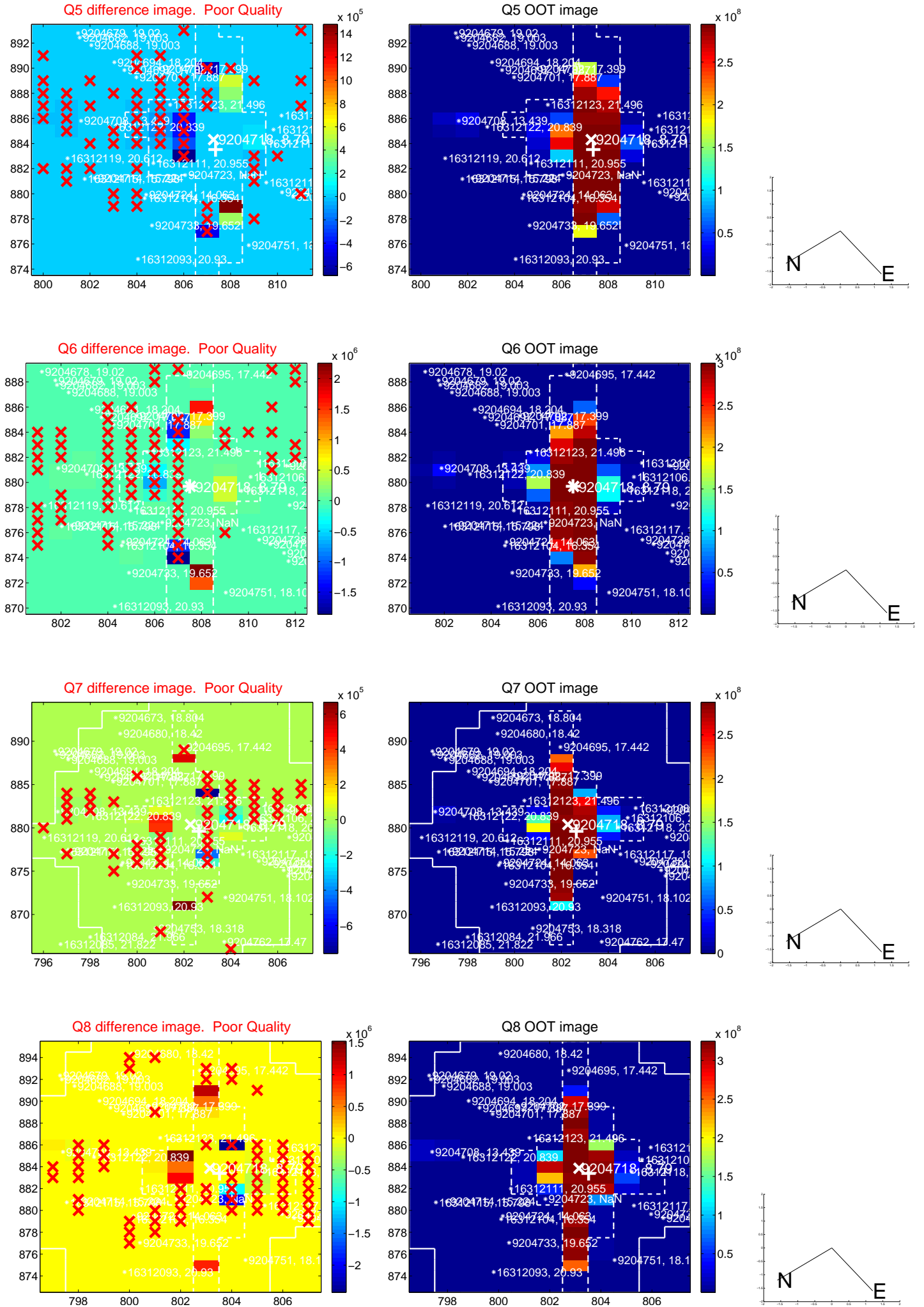


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

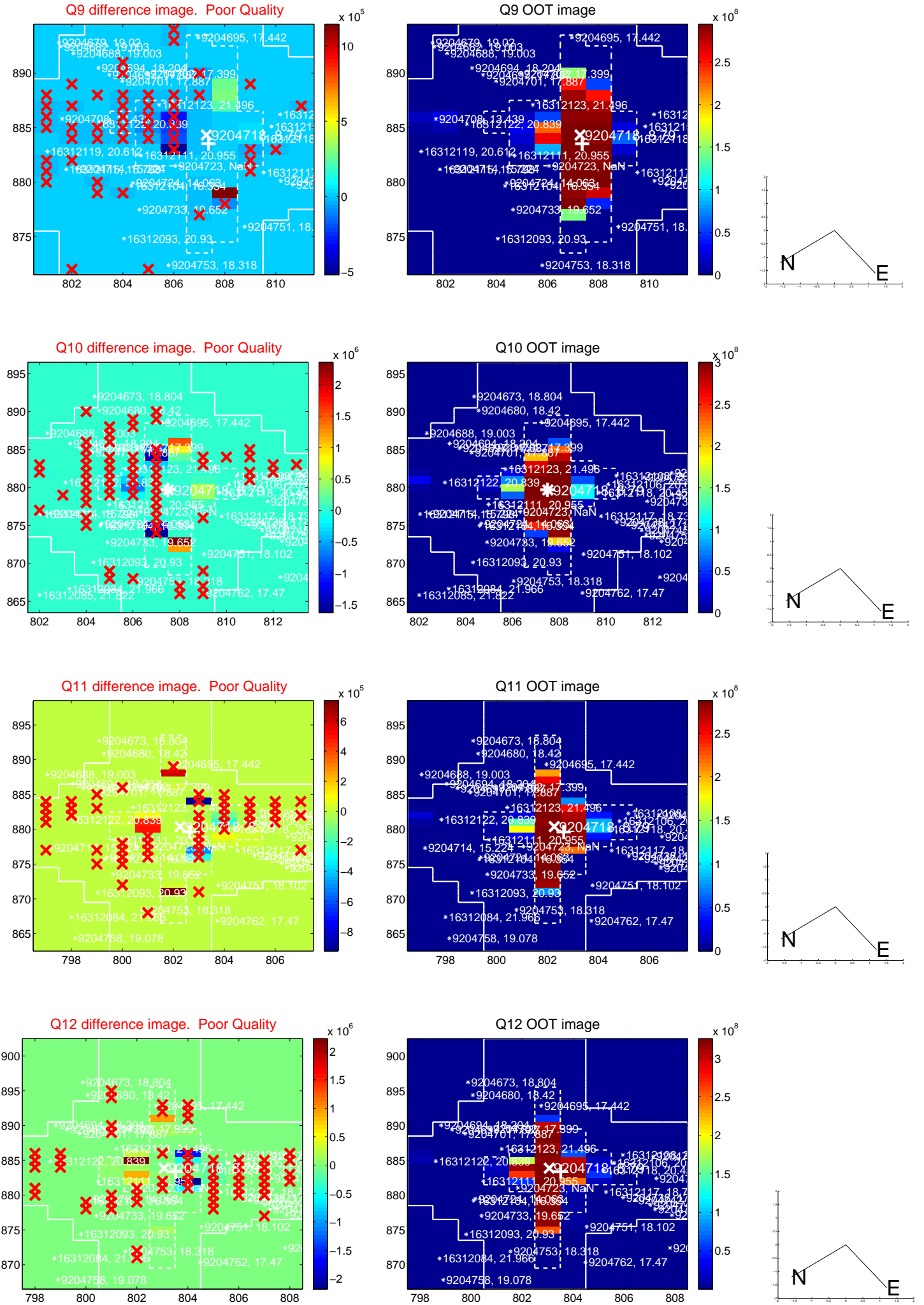
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



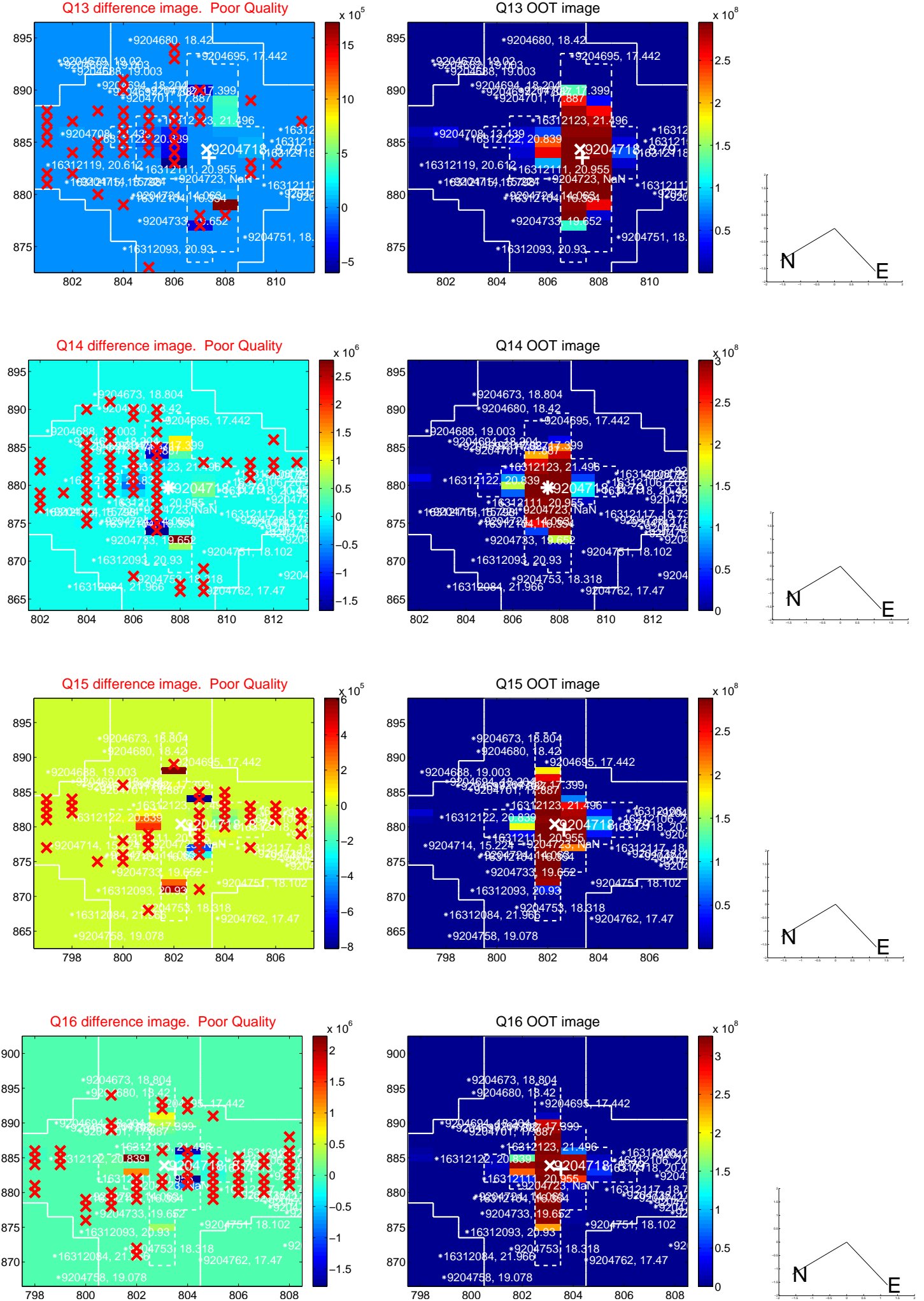
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



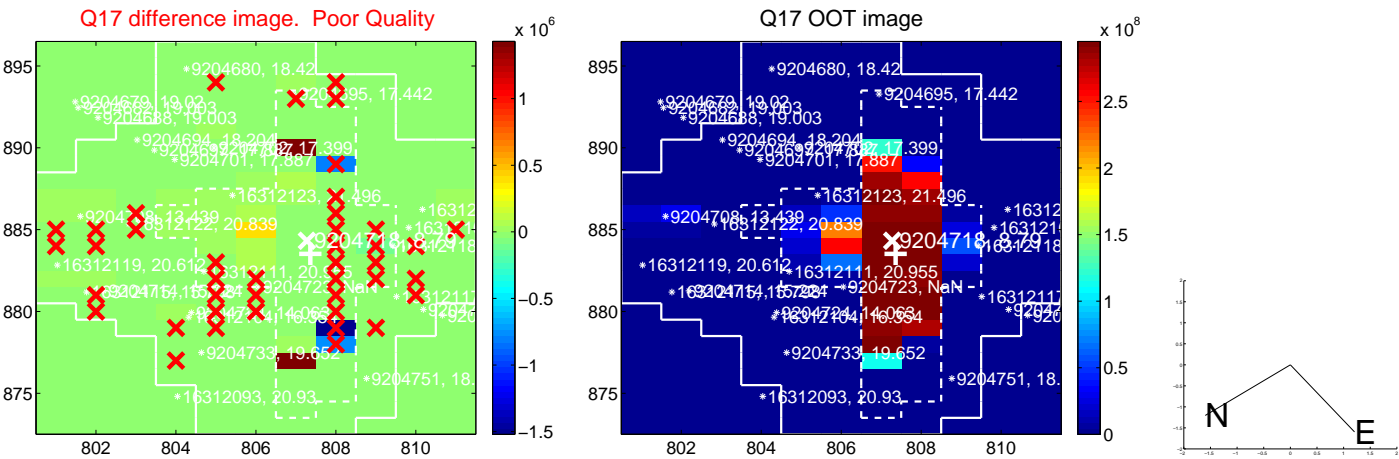
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

Declination

