

KIC 008552719

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})
008552719-01	OBS	1792.01	88.406788	176.273628	1716.6	12.432	153.9	160.6	1.07	5611	4.63	6.66
008552719-02	OBS	1792.03	9.109676	133.066227	132.1	5.583	30.5	34.1	1.07	5611	1.50	137.86
008552719-03	OBS	1792.02	1.546228	132.483612	34.6	7.785	18.8	22.3	1.07	5611	0.93	1466.98
008552719-04	OBS	No	123.841502	220.856241	228.2	6.915	13.4	11.1	1.07	5611	2.10	4.25
008552719-05	OBS	No	208.590876	215.658896	119.6	15.462	10.5	7.9	1.07	5611	1.41	2.12
008552719-06	OBS	No	97.053580	214.177885	100.9	6.172	8.3	8.0	1.07	5611	1.20	5.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008552719-01	OBS	PC	0.93	0	0	0	0	CENT_KIC_POS
008552719-02	OBS	PC	0.99	0	0	0	0	CENT_KIC_POS
008552719-03	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_KIC_POS
008552719-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_KIC_POS
008552719-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008552719-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_KIC_POS

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 008552719-01

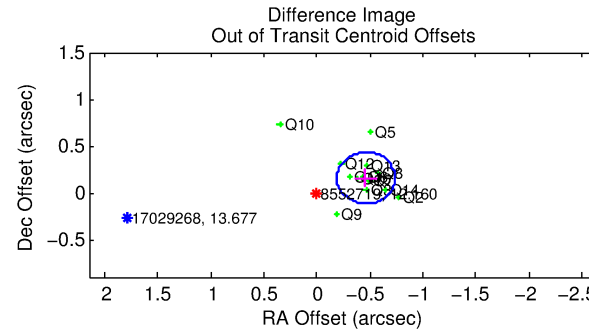
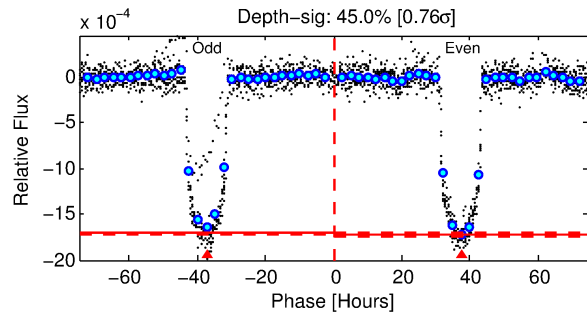
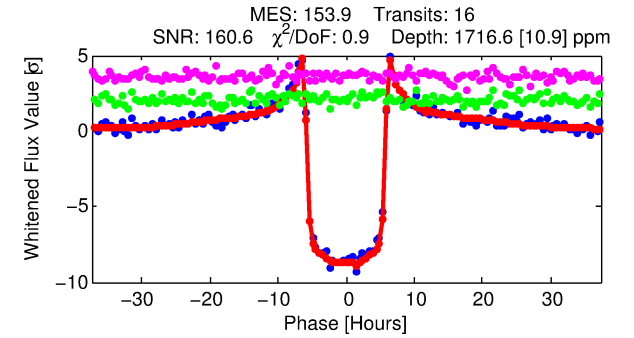
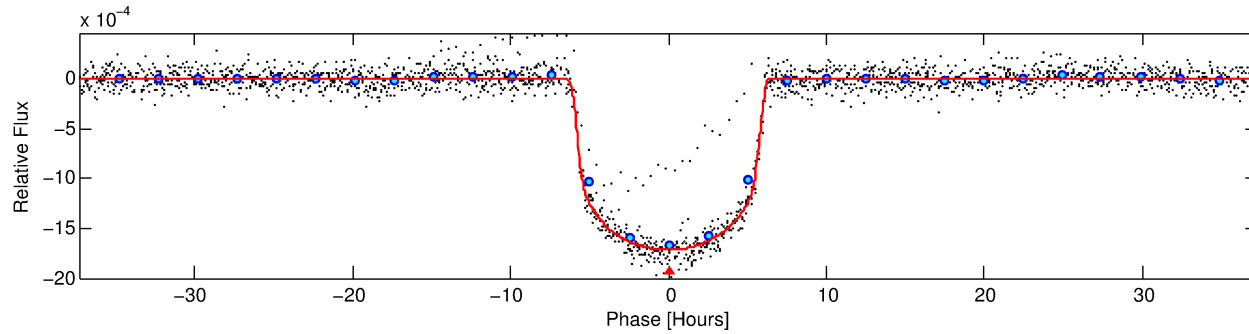
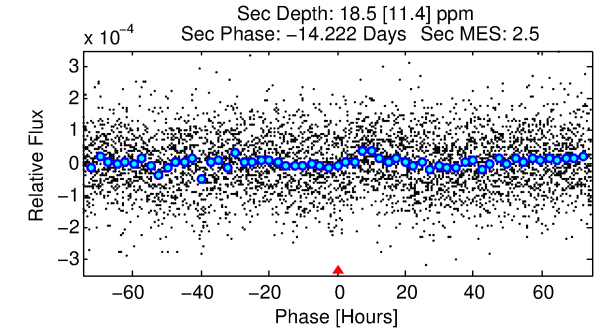
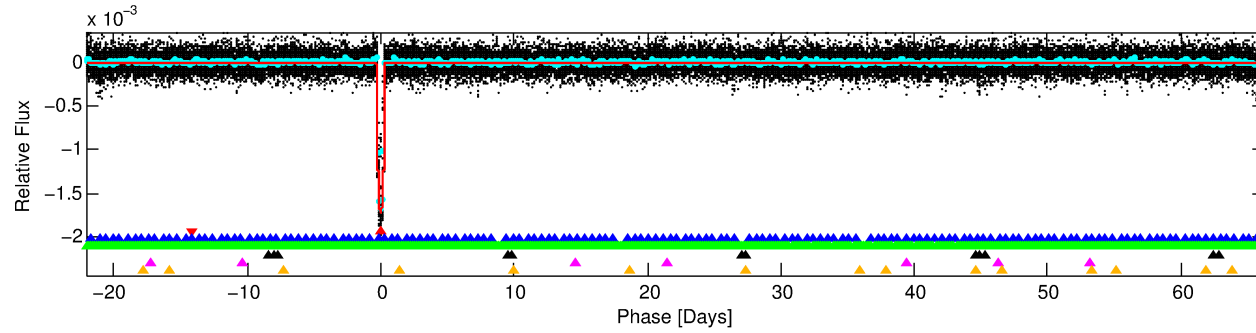
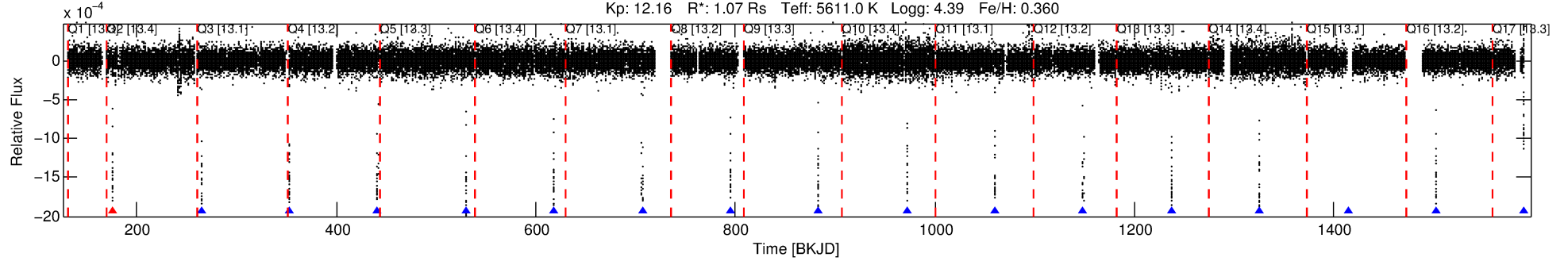
No Significant Match Found

DV One-Page Summary

KIC: 8552719 Candidate: 1 of 6 Period: 88.407 d

KOI: K01792.01 Corr: 0.995

Kp: 12.16 R*: 1.07 Rs Teff: 5611.0 K Logg: 4.39 Fe/H: 0.360



DV Fit Results:

Period = 88.40679 [0.00009] d
Epoch = 176.2736 [0.0008] BKJD
Rp/R* = 0.0395 [0.0004]
a/R* = 45.36 [1.76]
b = 0.62 [0.04]
Seff = 6.66 [1.52]
Teq = 410 [23] K
Rp = 4.63 [0.75] Re
a = 0.3918 [0.0555] AU
Ag = 72.74 [47.52] [1.51σ]
Teff = 1850 [288] K [4.98σ]

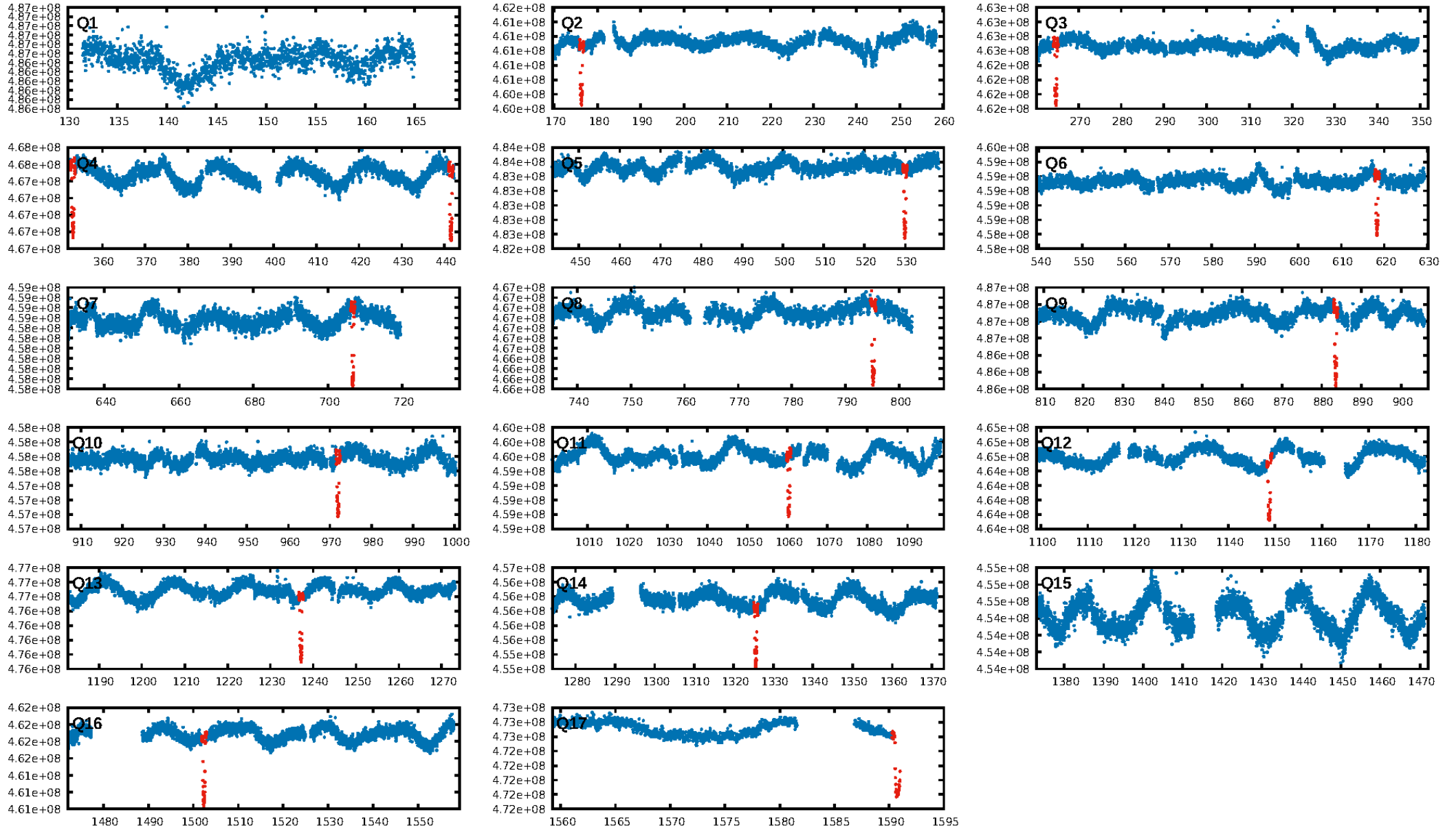
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [139.64σ]
LongPeriod-sig: 100.0% [14.95σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.93 [14/15]
GhostDiagnostic-chr: 6.58
Centroid-sig: 0.0%
Centroid-so: 0.377 arcsec [9.46σ]
OotOffset-rm: 0.487 arcsec [5.31σ]
KicOffset-rm: 0.454 arcsec [4.64σ]
OotOffset-st: 4/3/3/3 [13]
KicOffset-st: 4/3/3/3 [13]
DiffImageQuality-fgm: 1.00 [13/13]
DiffImageOverlap-fno: 0.00 [0/13]

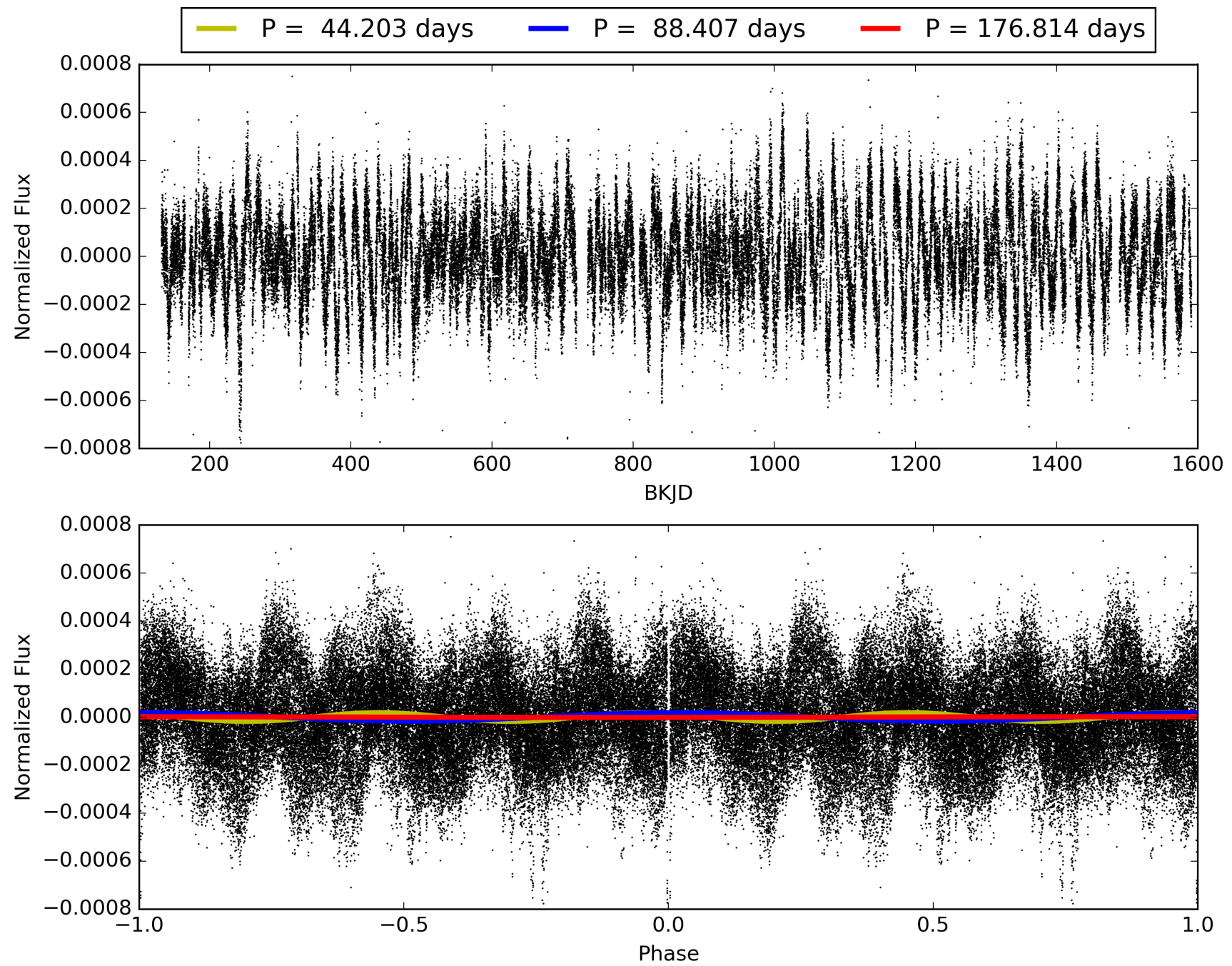
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:52:42 Z

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

TCE 008552719-01, PDC Light Curves

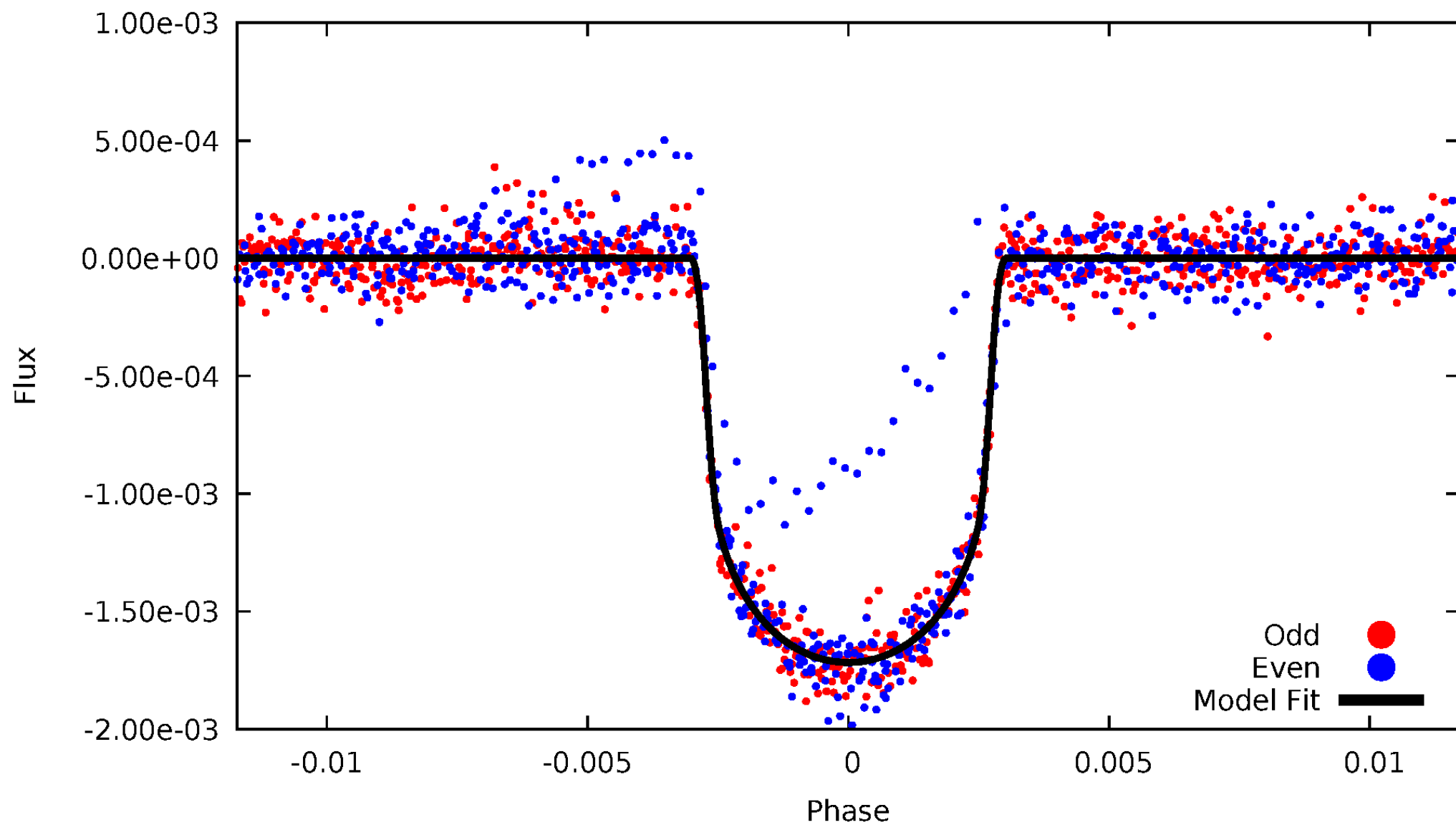


TCE 008552719-01



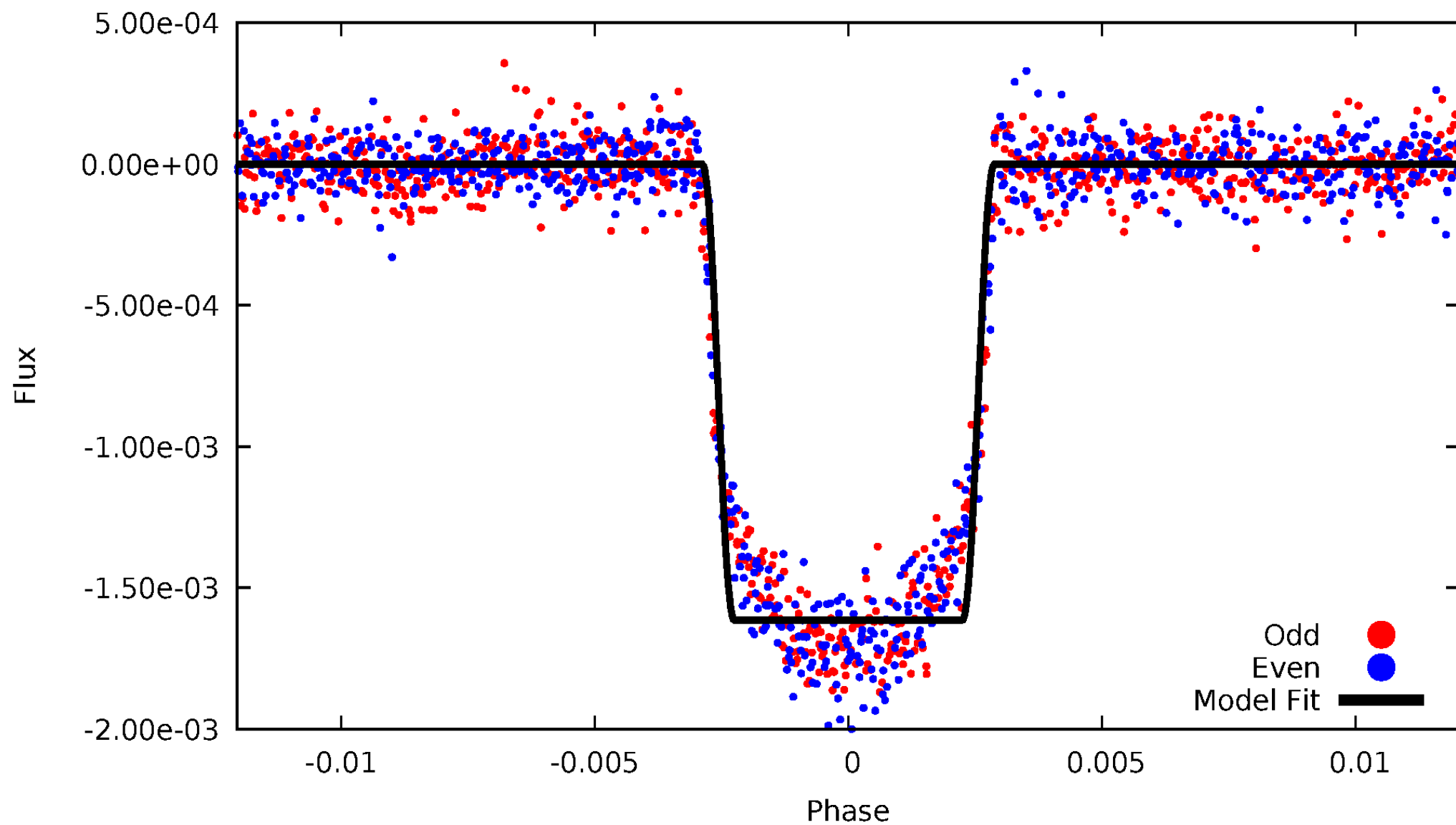
DV Odd/Even

TCE 008552719-01



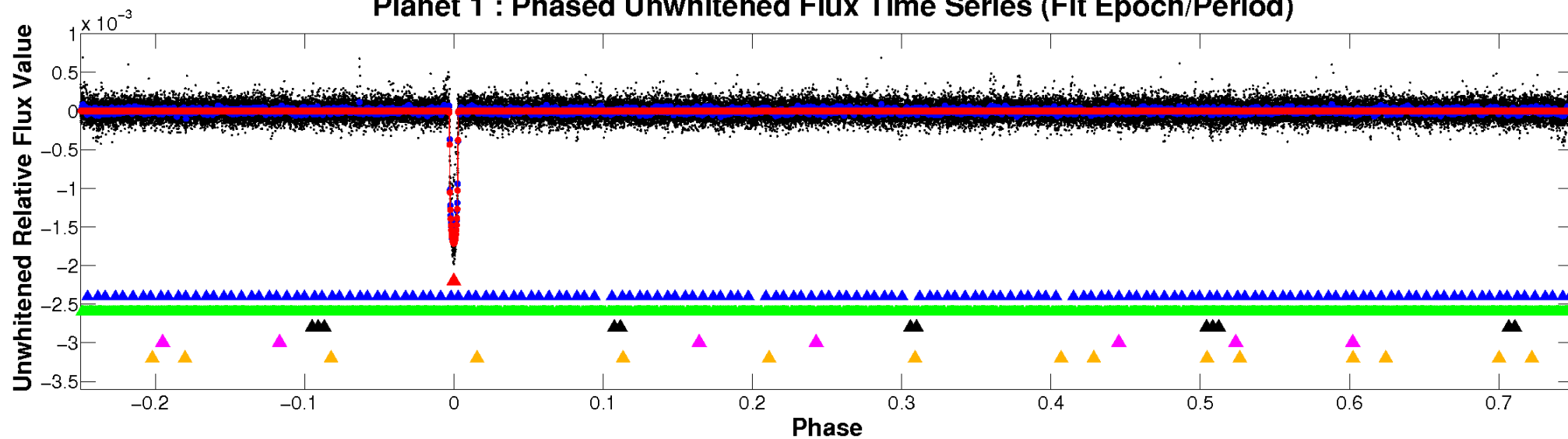
ALT Odd/Even

TCE 008552719-01

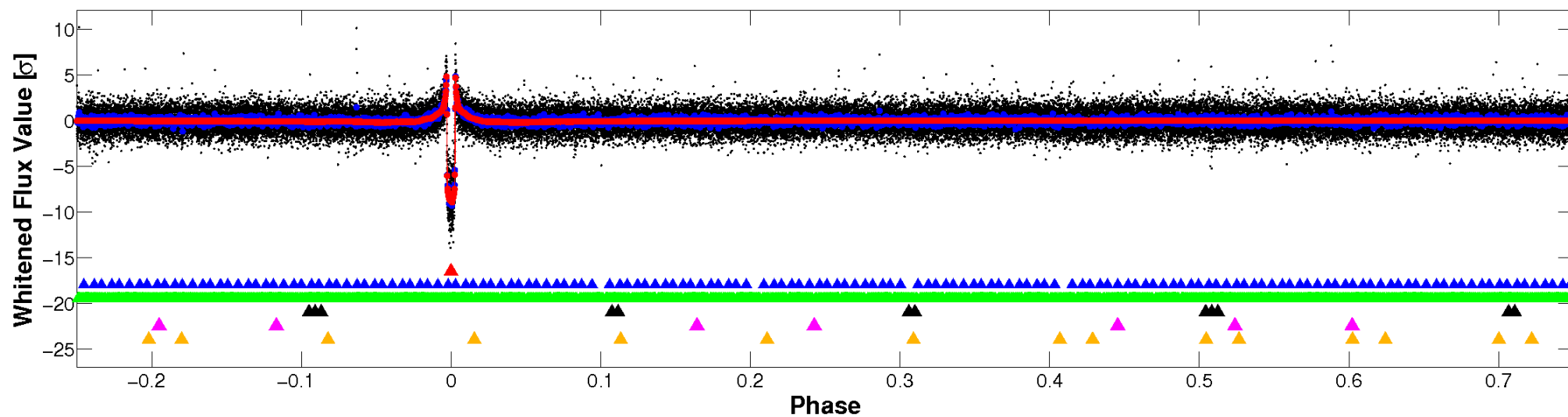


Non-Whitened Vs. Whitened Light Curve

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

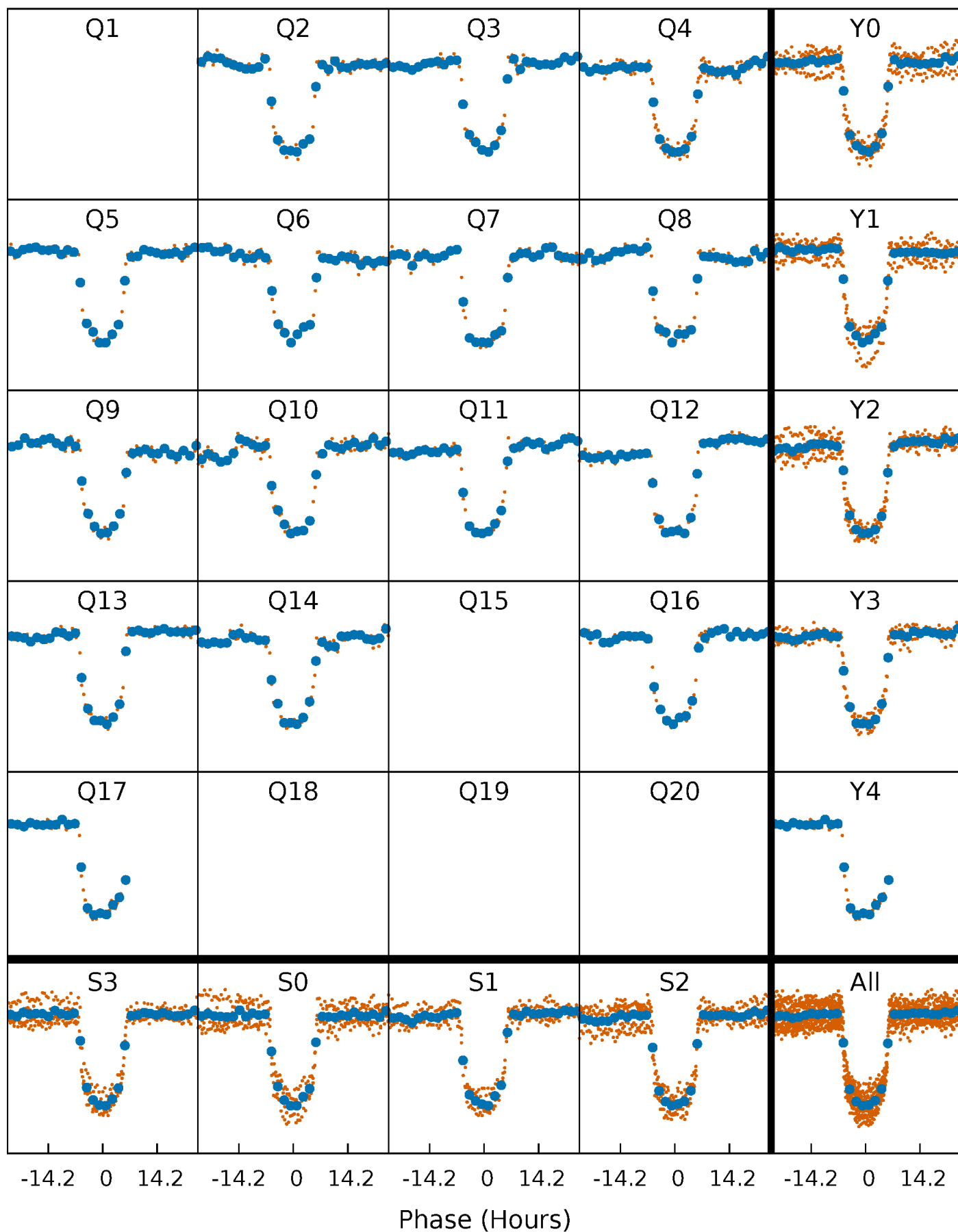


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



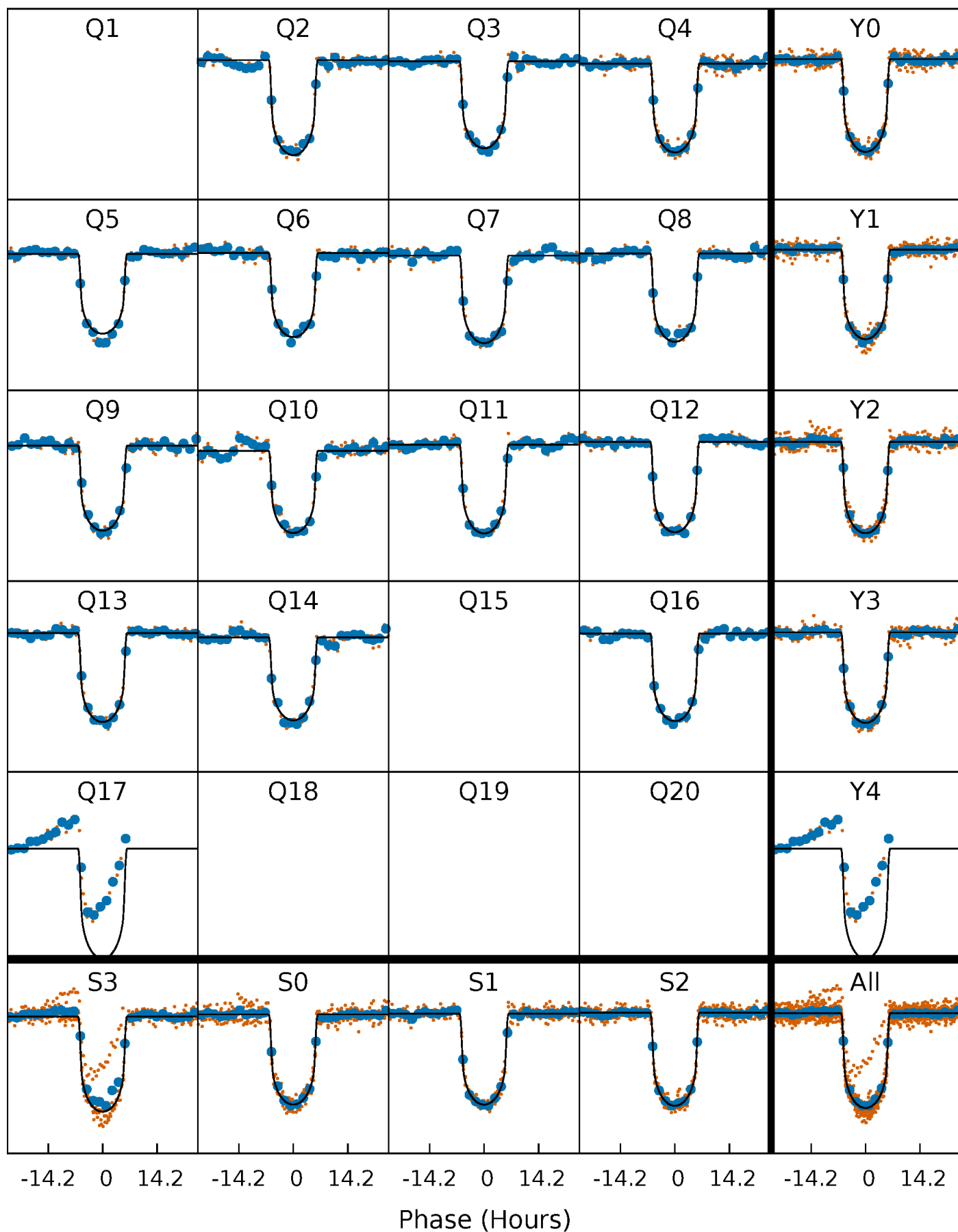
PDC Quarter-Phased Transit Curves

TCE 008552719-01 P= 88.406788 Days $T_0=176.273628$ (BKJD)



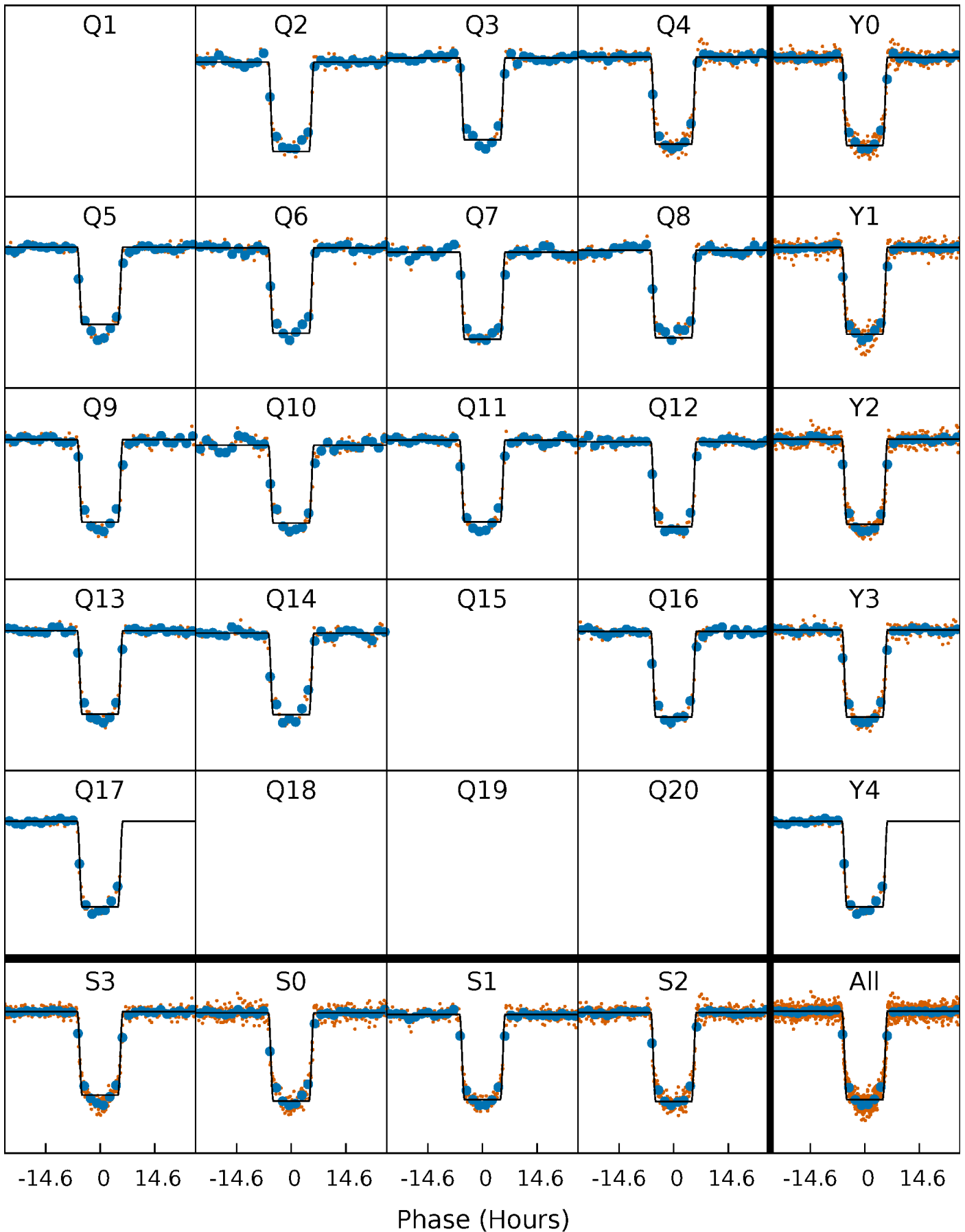
DV Quarter-Phased Transit Curves

TCE 008552719-01 P= 88.406788 Days $T_0=176.273628$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

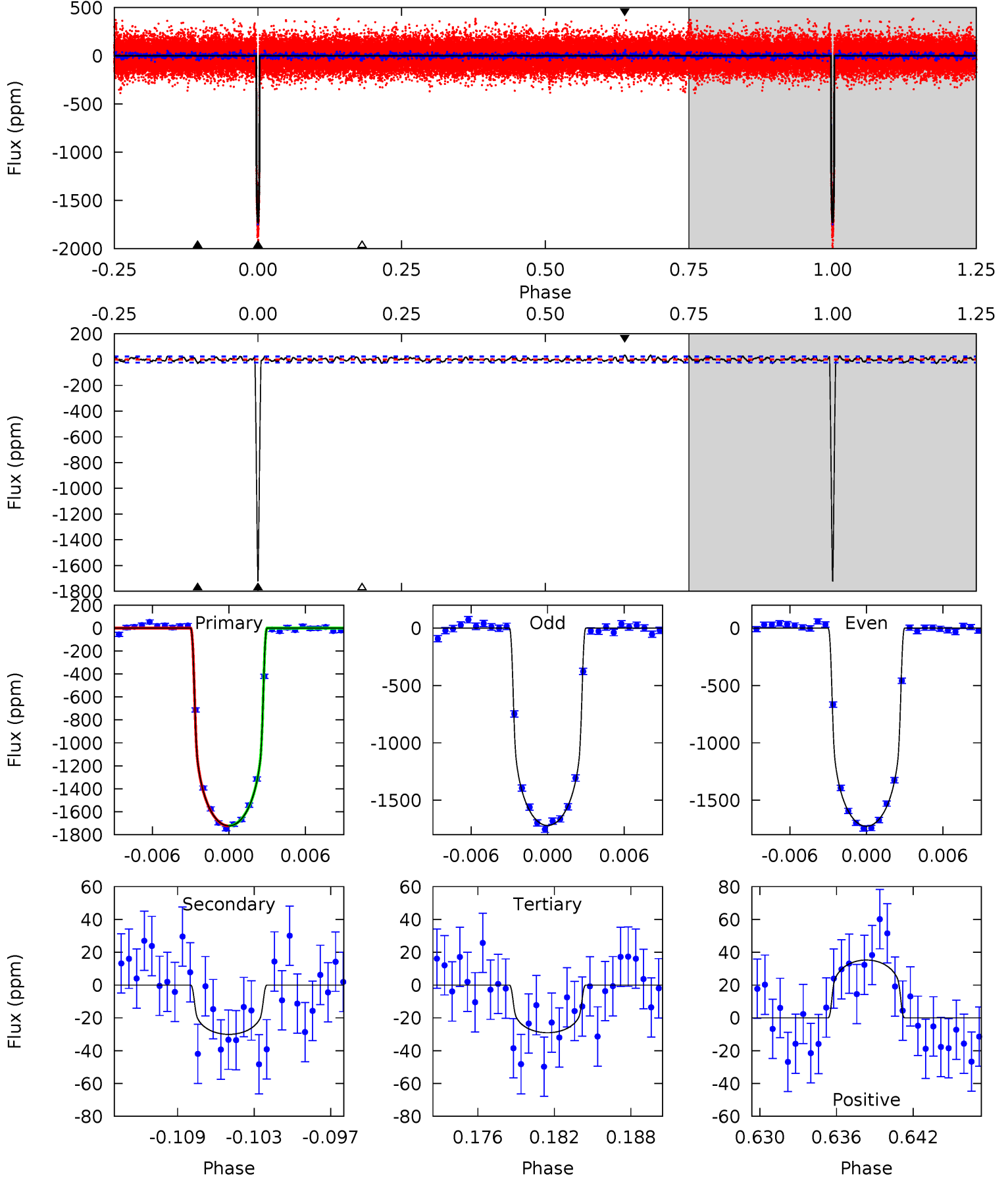
TCE 008552719-01 P= 88.406693 Days $T_0=176.274501$ (BKJD)



DV Model-Shift Uniqueness Test

008552719-01, P = 88.406788 Days, E = 87.866840 Days

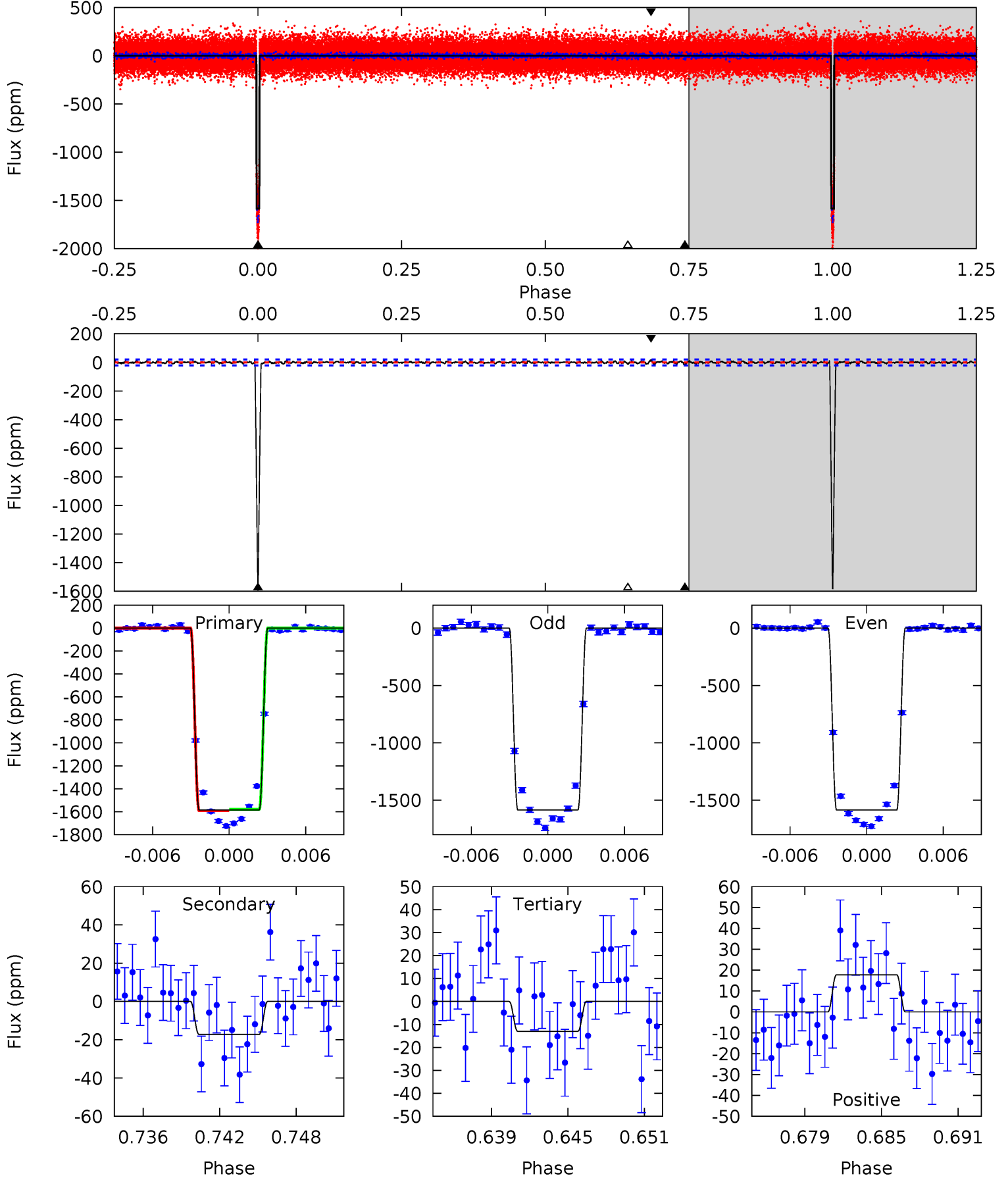
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
380.1	6.63	6.41	7.78	5.12	2.74	2.20	373.6	372.3	0.22	-1.15	0.72	0.97	0.02	0.23



Alt Model-Shift Uniqueness Test

008552719-01, P = 88.406693 Days, E = 87.867808 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
389.7	4.23	3.19	4.38	5.13	2.76	1.02	386.5	385.3	1.04	-0.15	0.24	0.99	0.01	1.42



Stellar Parameters For KIC 008552719

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5611^{+100}_{-112}	$4.388^{+0.080}_{-0.120}$	$0.360^{+0.100}_{-0.150}$	$1.073^{+0.173}_{-0.106}$	$1.026^{+0.057}_{-0.057}$	$1.170^{+0.391}_{-0.412}$
	+2%/-2%	+2%/-3%	+28%/-42%	+16%/-10%	+6%/-6%	+33%/-35%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 008552719-01 / KOI 1792.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-30 ± 5	$4.63^{+0.42}_{-0.27}$	573^{+26}_{-19}	2819^{+67}_{-68}	115^{+27}_{-23}
Alt.	-17 ± 4	$4.72^{+0.42}_{-0.28}$	573^{+27}_{-20}	2606^{+78}_{-93}	63^{+19}_{-17}

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 $A_{obs} \gg 1.0$

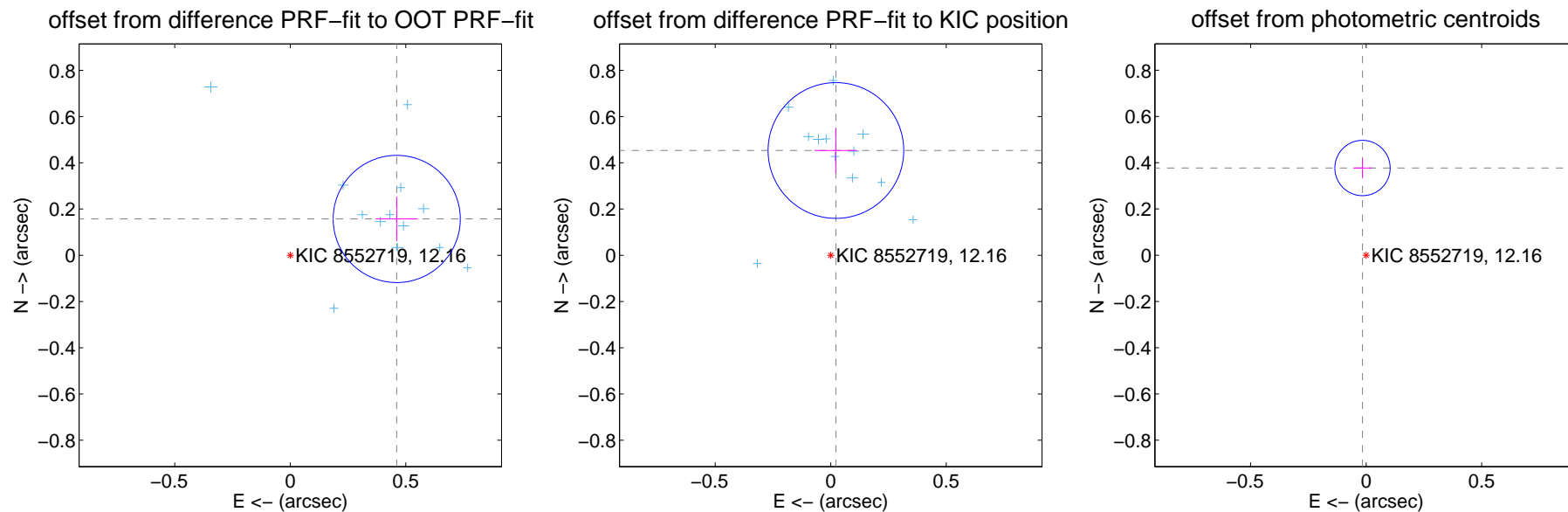
DV Centroid Data

Supplemental centroid analysis for 008552719-01. Kepler magnitude: 12.16. Transit SNR 160.55

There are 13 quarters with good PRF difference image offsets

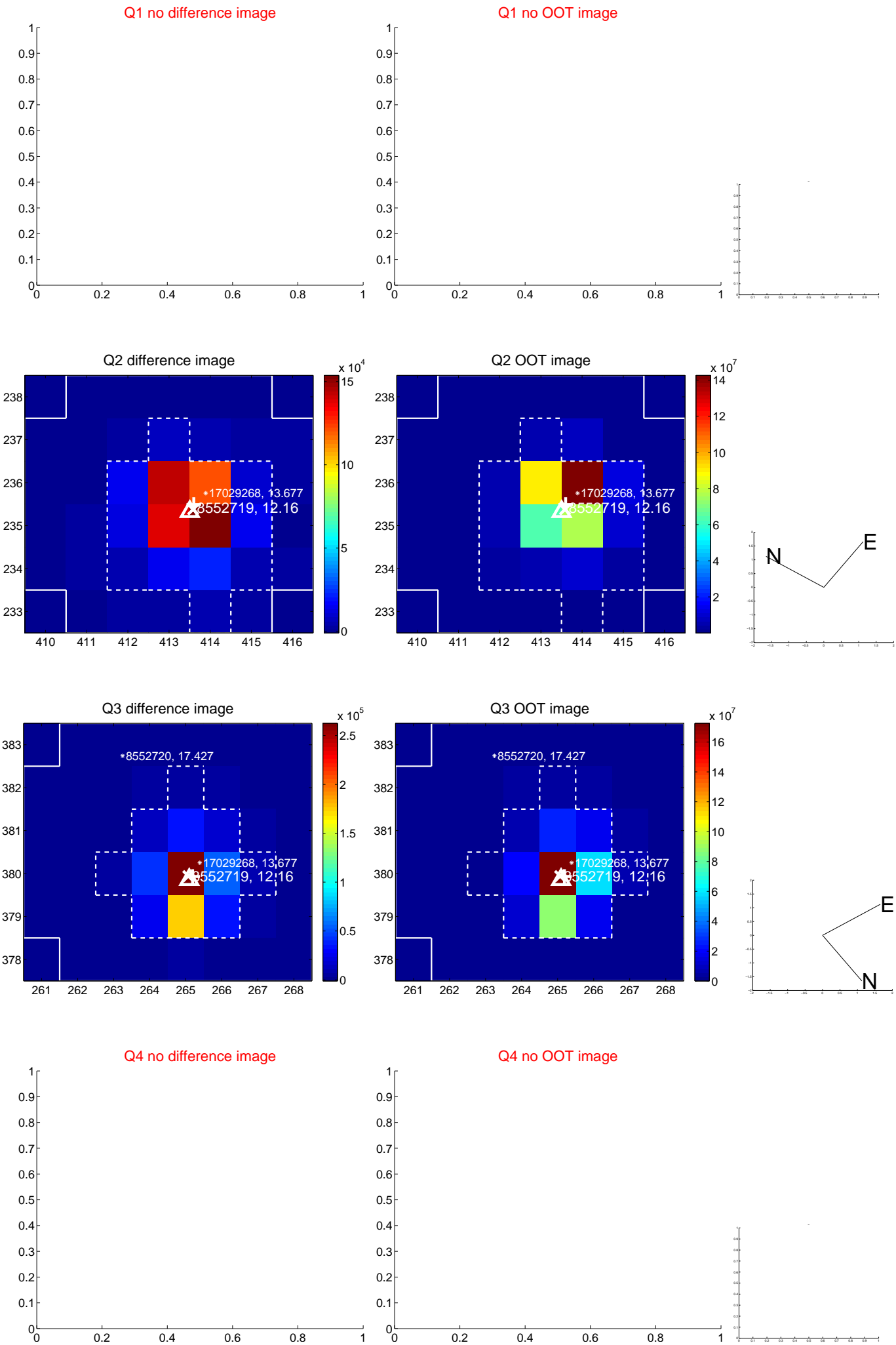
The direct PRF centroid is offset from the target star catalog position by about 0.57 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.487 ± 0.092	5.31	-0.461 ± 0.091	0.157 ± 0.096
PRF-fit source offset from KIC position	0.454 ± 0.098	4.64	-0.022 ± 0.093	0.453 ± 0.098
photometric centroid source offset	0.38 ± 0.04	9.46	0.02 ± 0.04	0.38 ± 0.04

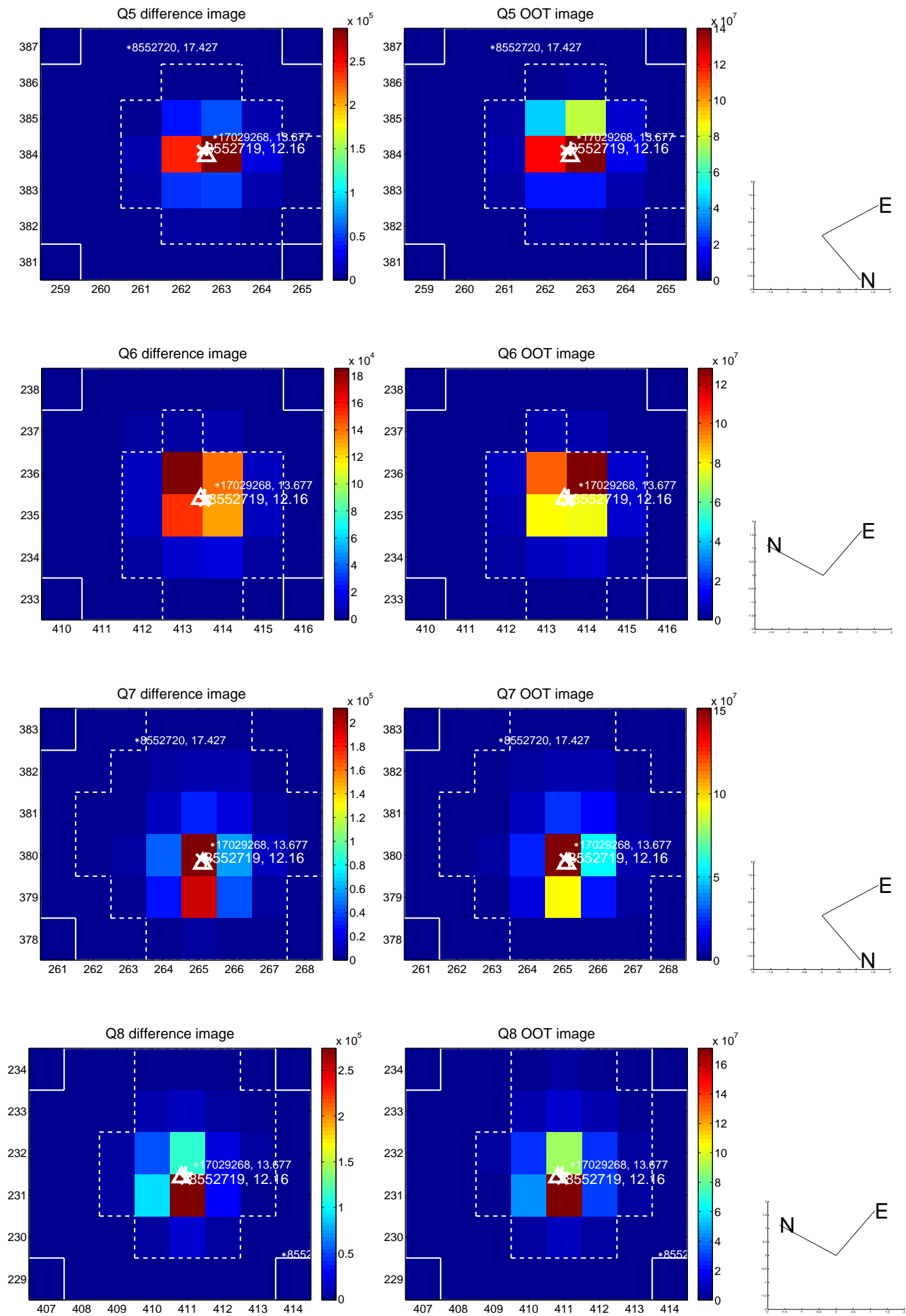


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

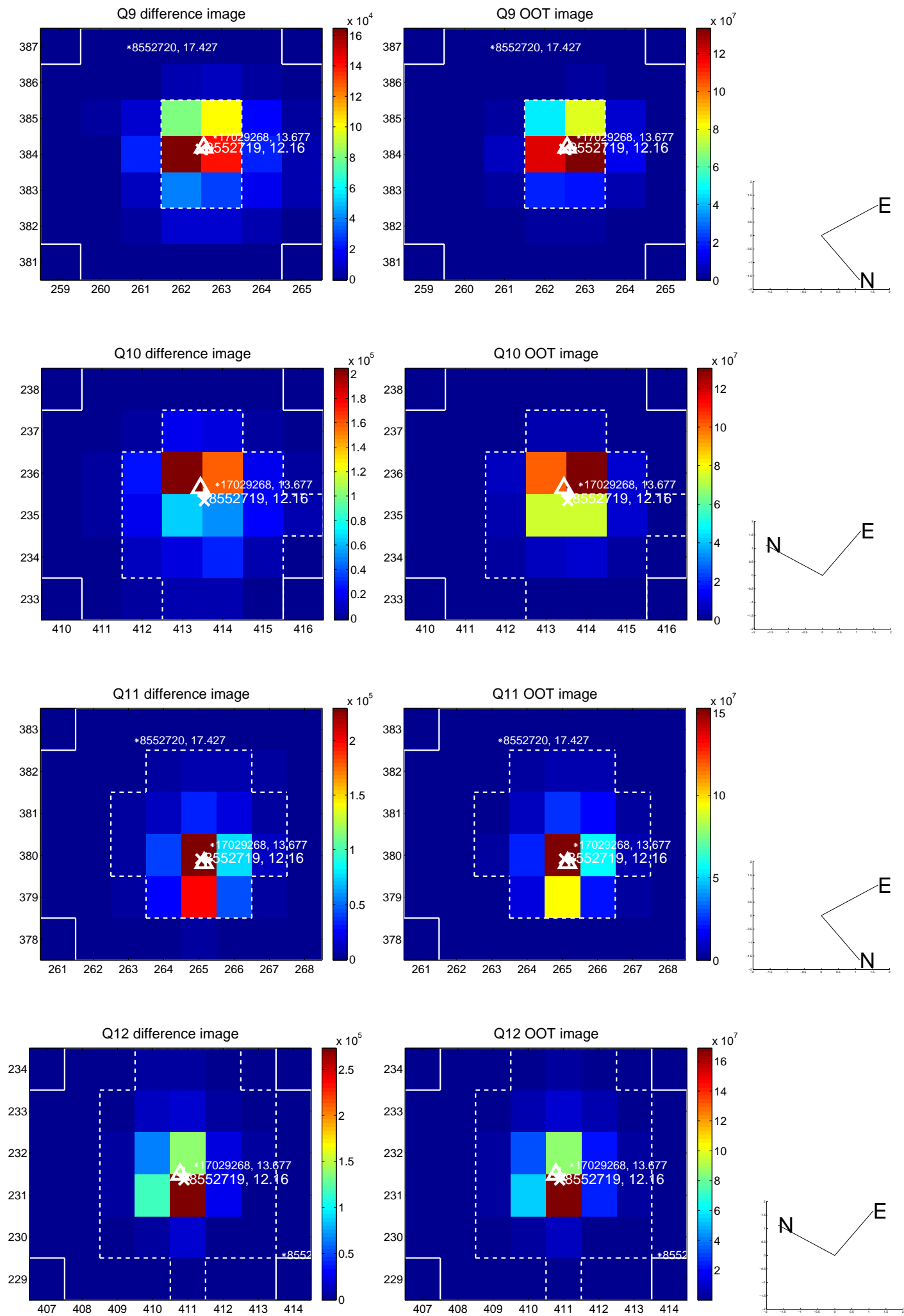
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



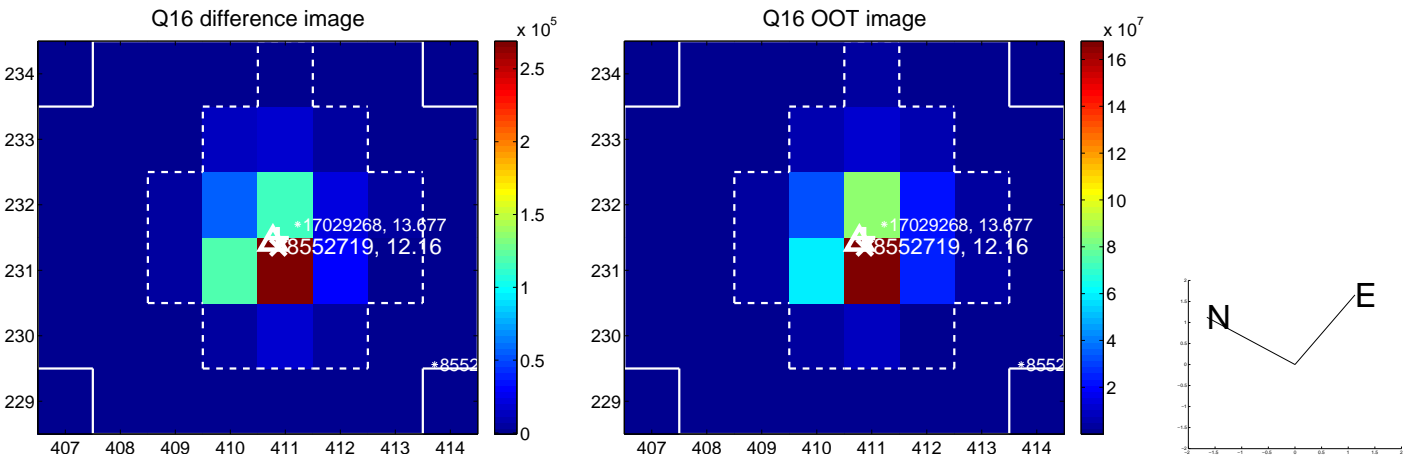
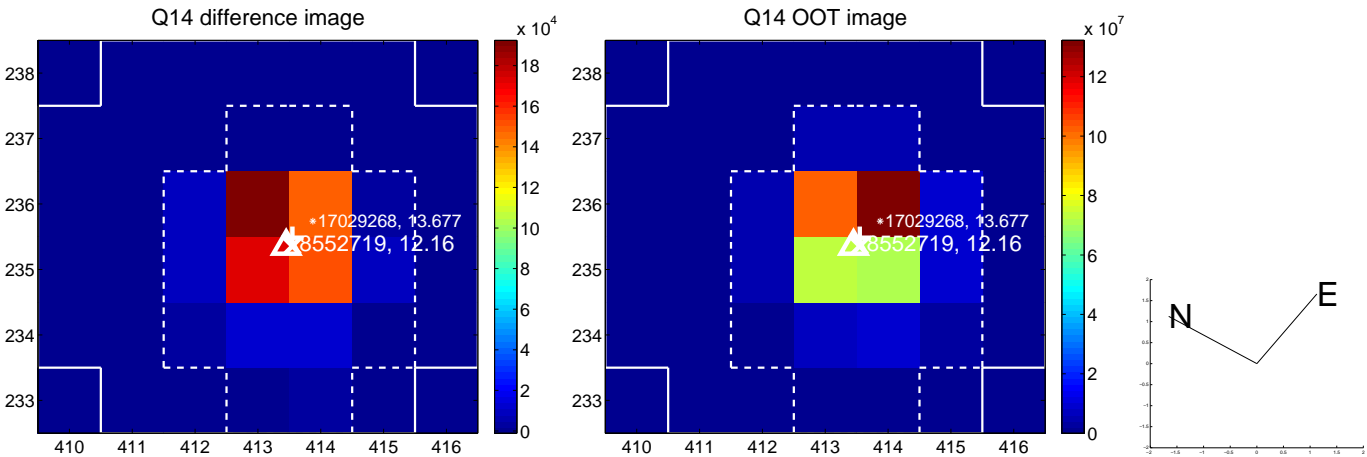
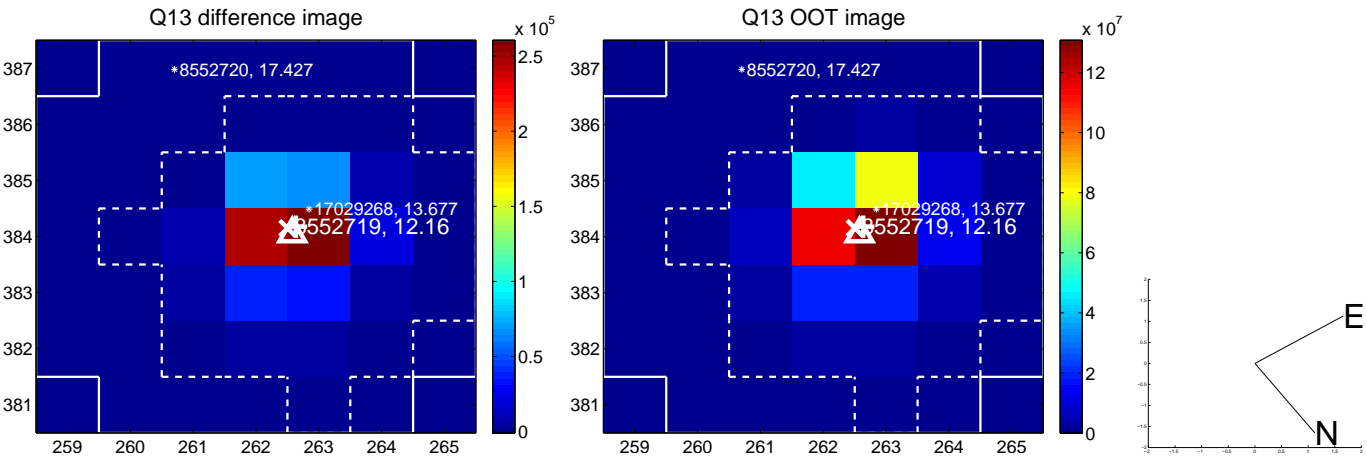
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



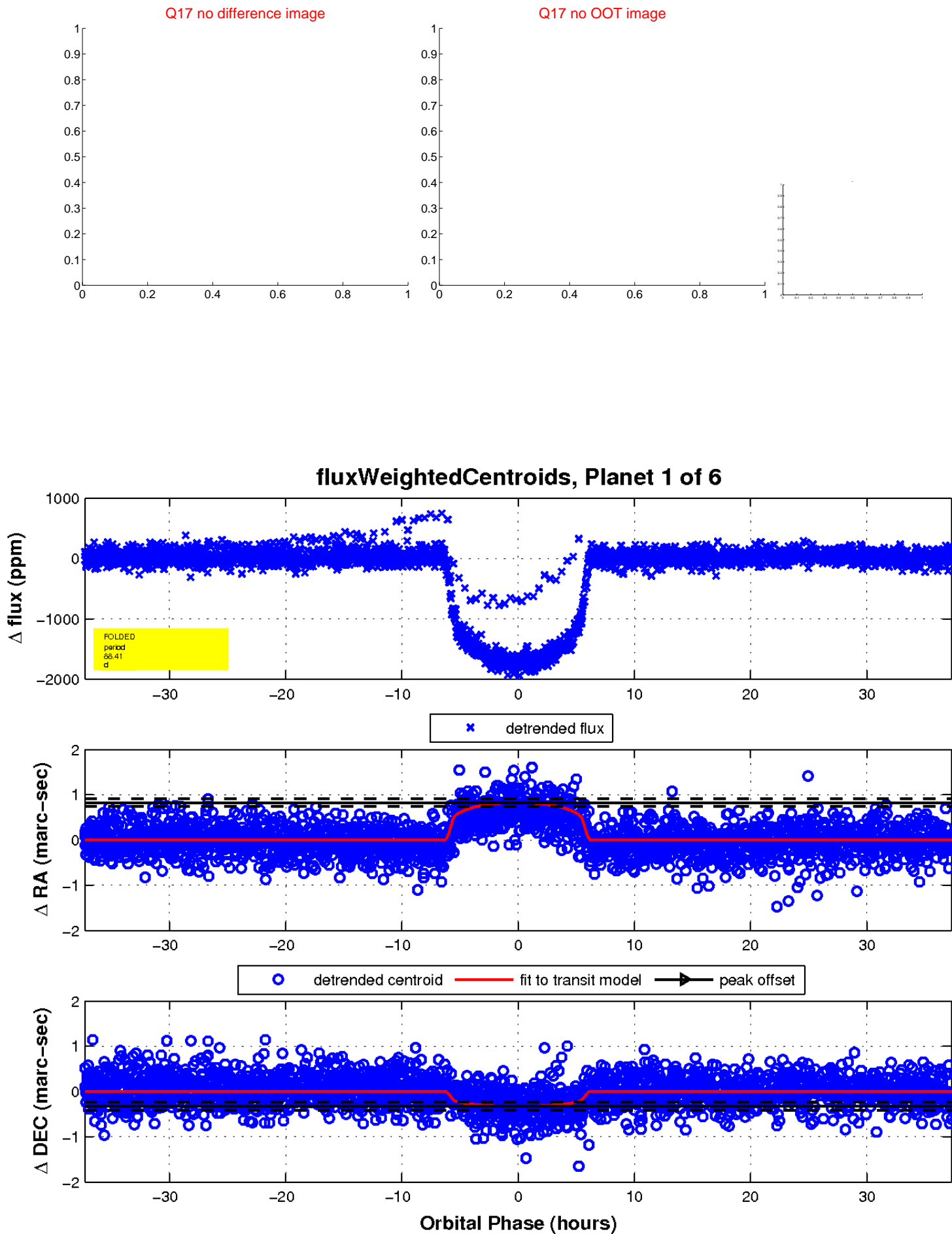
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



KIC 008552719

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})
008552719-01	OBS	1792.01	88.406788	176.273628	1716.6	12.432	153.9	160.6	1.07	5611	4.63	6.66
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008552719-01	OBS	PC	0.93	0	0	0	0	CENT_KIC_POS
008552719-02	OBS	PC	0.99	0	0	0	0	CENT_KIC_POS
008552719-03	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_KIC_POS
008552719-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQU_ALT—INCONSISTENT_TRANS—CENT_KIC_POS
008552719-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQU_DV—MOD_NONUNIQU_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008552719-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQU_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_KIC_POS

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

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

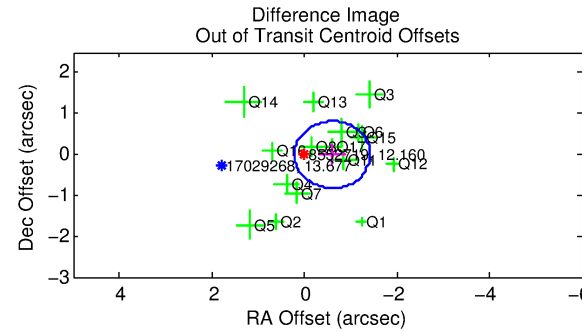
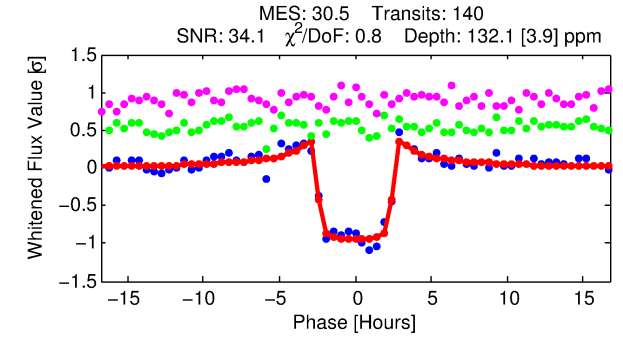
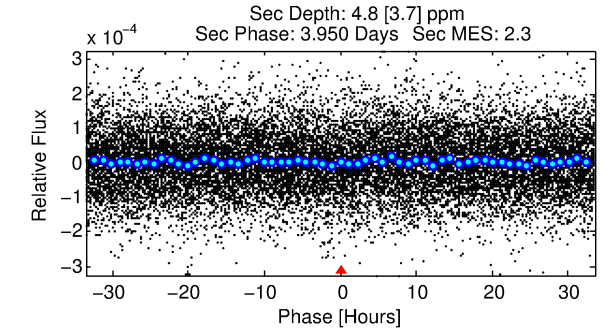
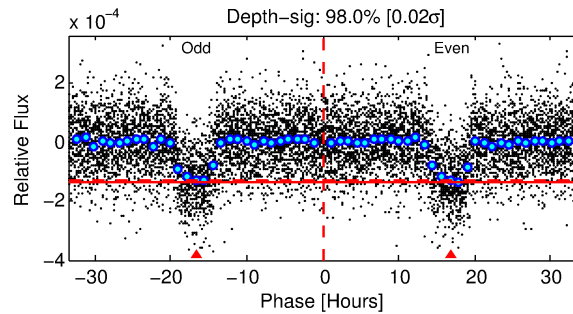
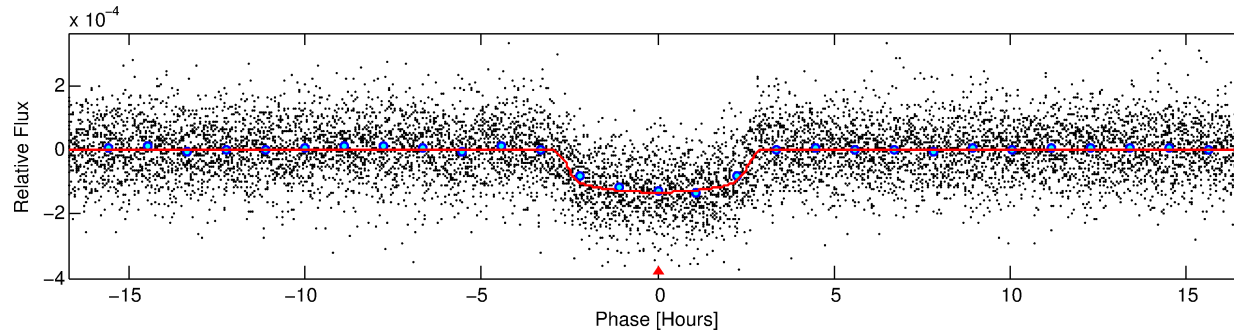
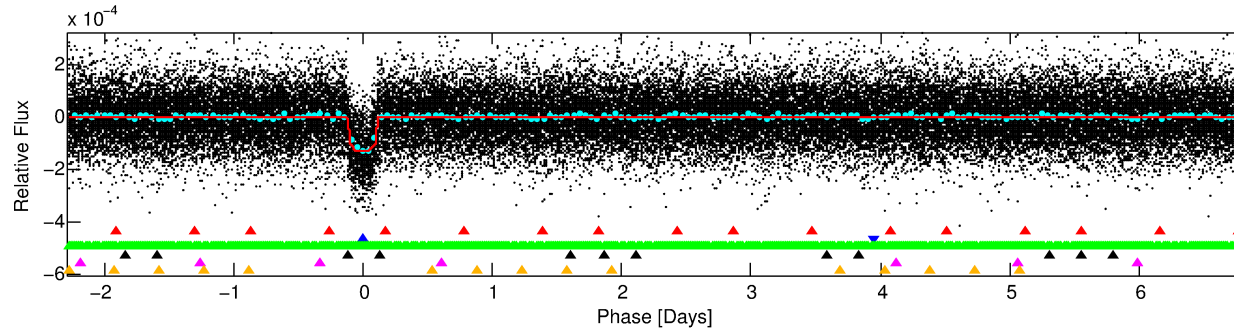
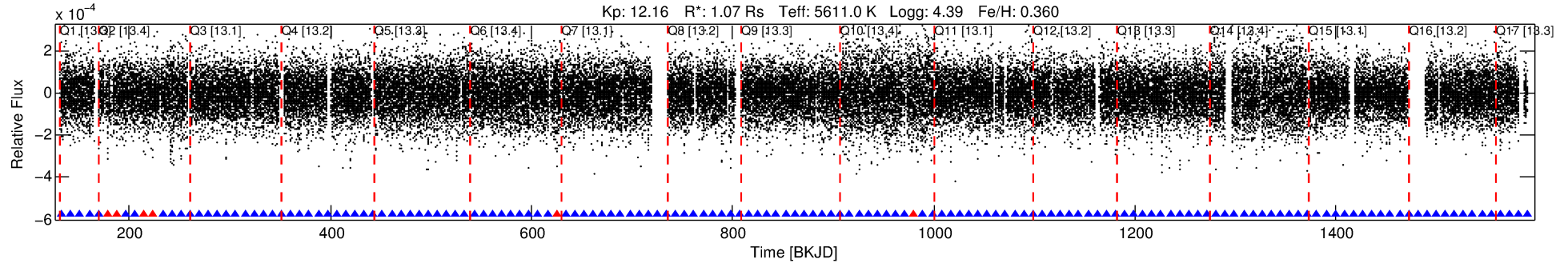
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008552719-02

No Significant Match Found

DV One-Page Summary

KIC: 8552719 Candidate: 2 of 6 Period: 9.110 d
KOI: K01792.03 Corr: 0.974



DV Fit Results:

Period = 9.10968 [0.00002] d
Epoch = 133.0662 [0.0020] BKJD
Rp/R* = 0.0128 [0.0009]
a/R* = 5.63 [1.63]
b = 0.91 [0.06]
Seff = 137.86 [31.40]
Teq = 874 [50] K
Rp = 1.50 [0.26] Re
a = 0.0861 [0.0122] AU
Ag = 8.71 [7.09] [1.09 σ]
Teffp = 2321 [458] K [3.14 σ]

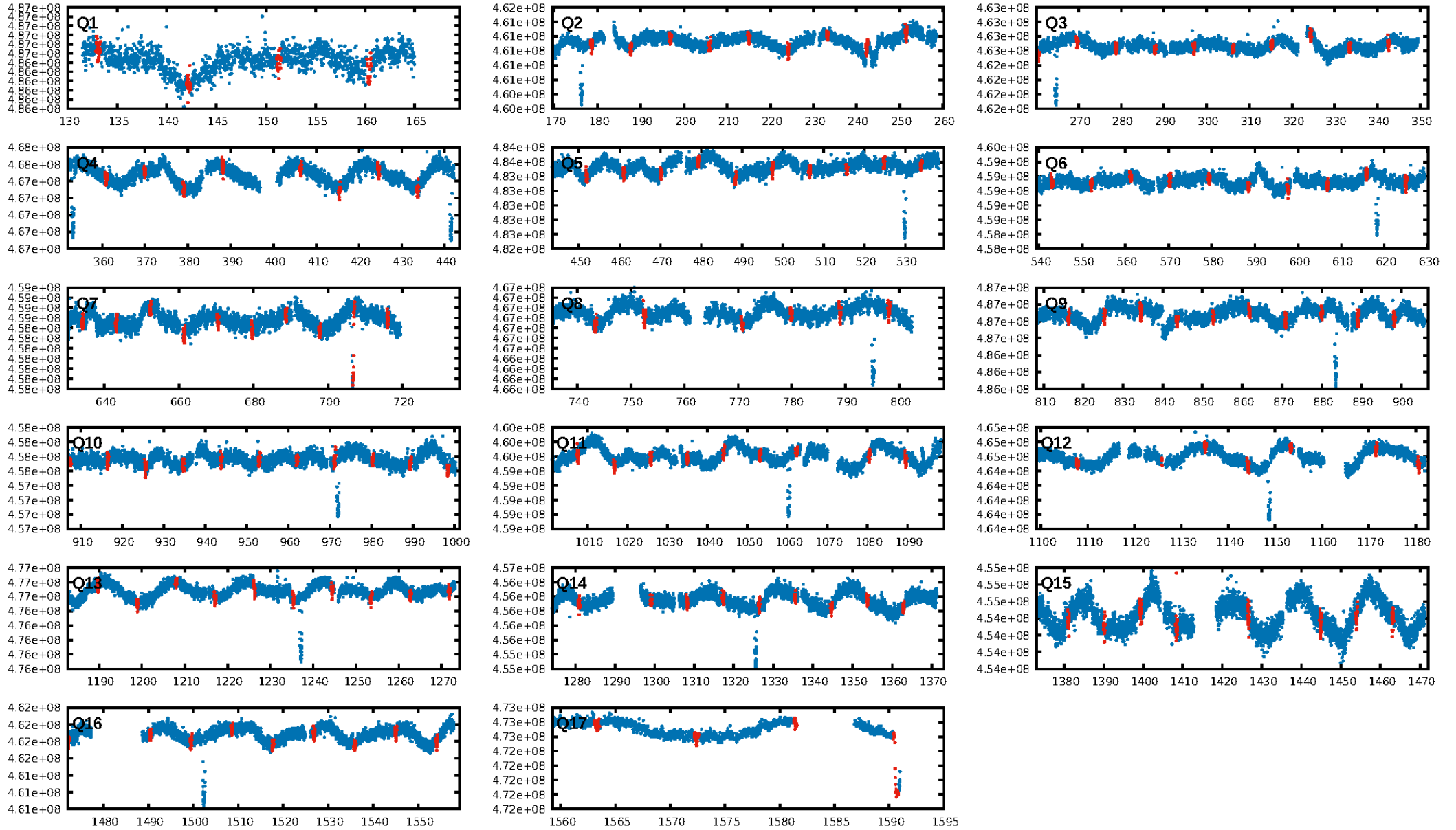
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [18.95 σ]
LongPeriod-sig: 100.0% [139.64 σ]
ModelChiSquare2-sig: 99.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.50e-112
RollingBand-fgt: 0.95 [127/133]
GhostDiagnostic-chr: 98.81
Centroid-sig: 30.4%
Centroid-so: 0.573 arcsec [2.73 σ]
OotOffset-rm: 0.601 arcsec [2.20 σ]
KicOffset-rm: 0.338 arcsec [1.09 σ]
OotOffset-st: 3/4/4/5 [16]
KicOffset-st: 3/4/4/5 [16]
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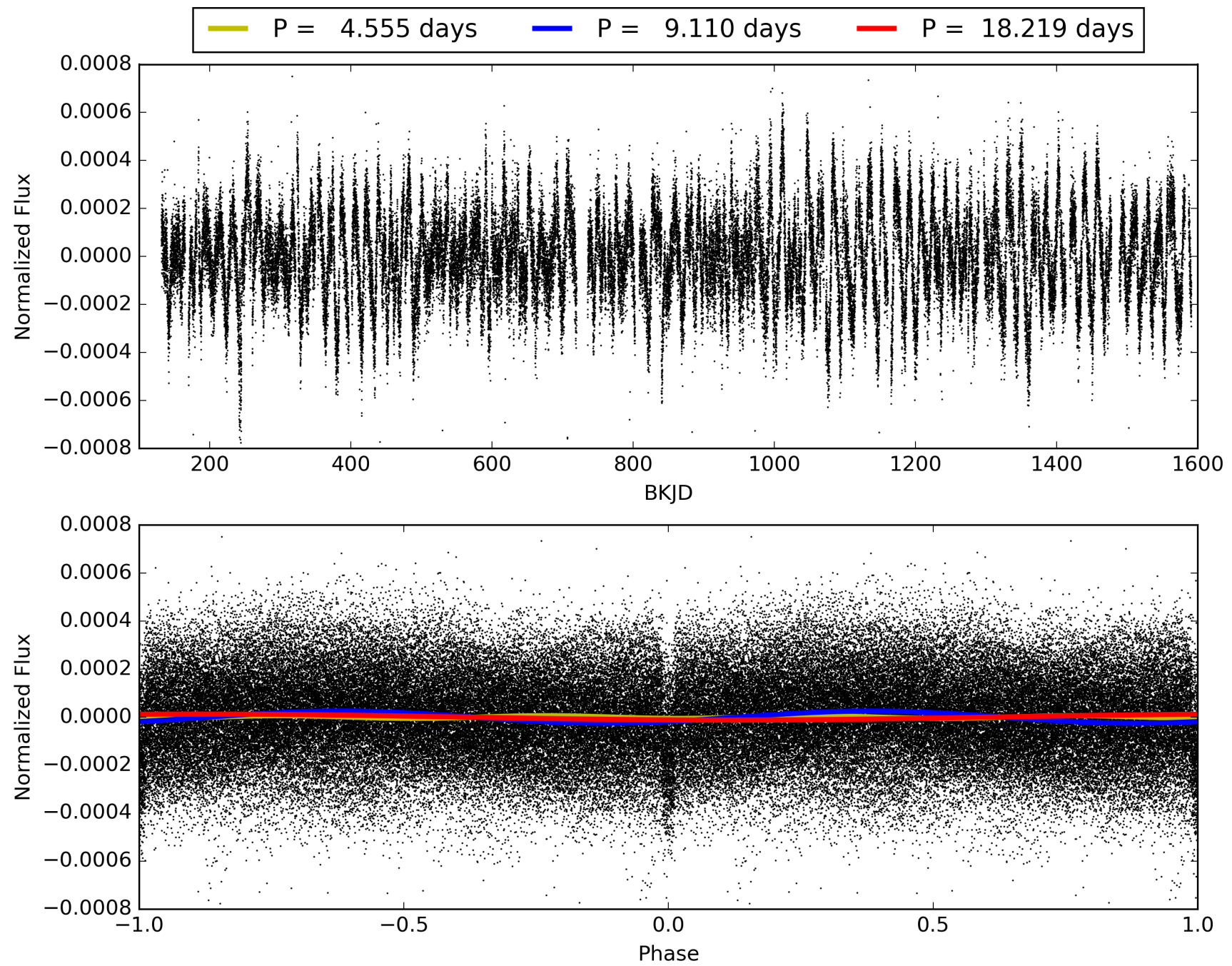
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:52:48 Z

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

TCE 008552719-02, PDC Light Curves

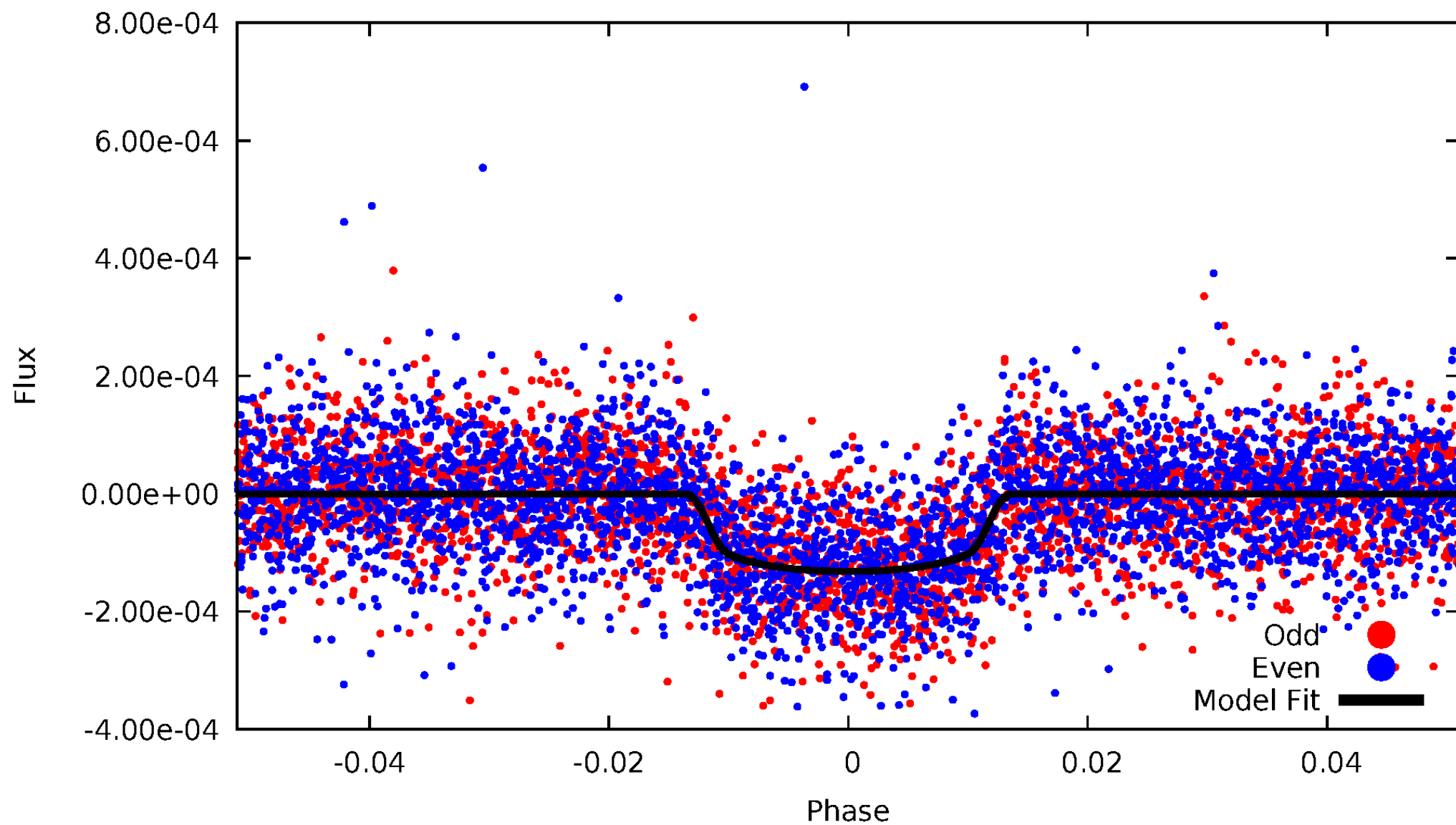


TCE 008552719-02



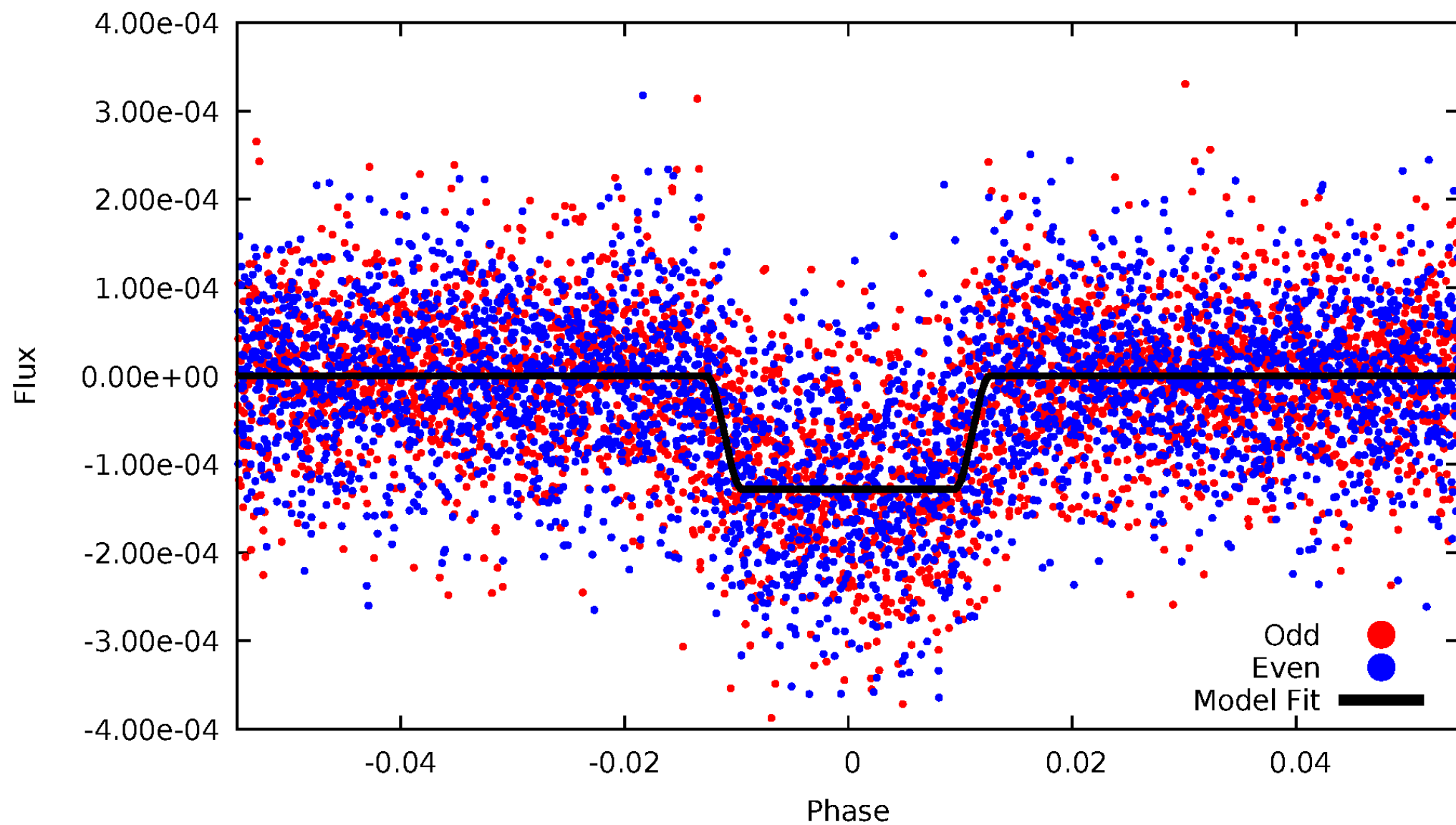
DV Odd/Even

TCE 008552719-02



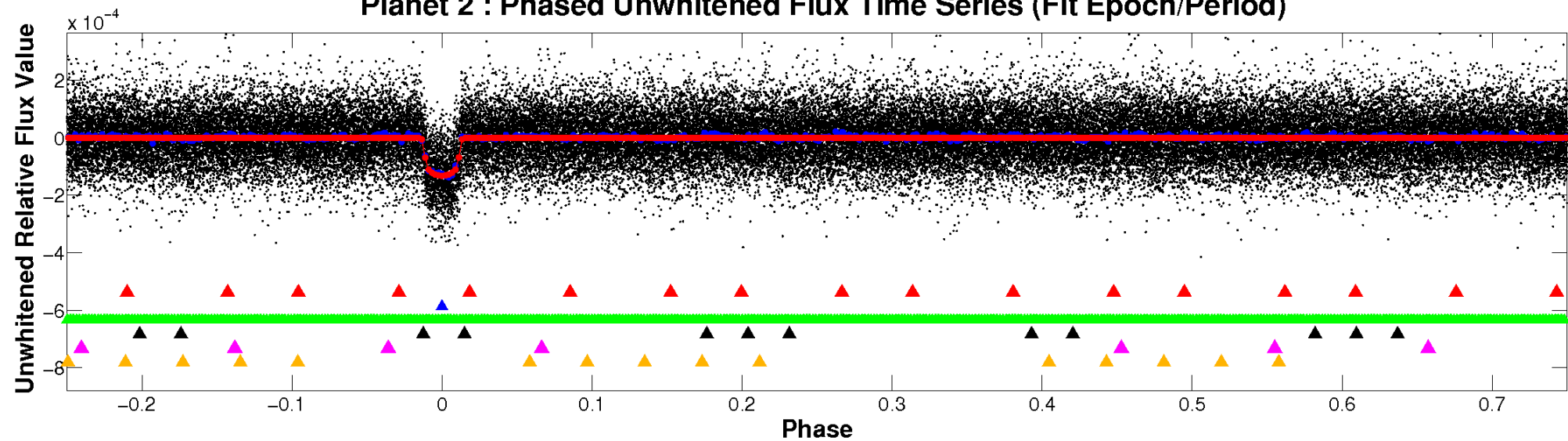
ALT Odd/Even

TCE 008552719-02

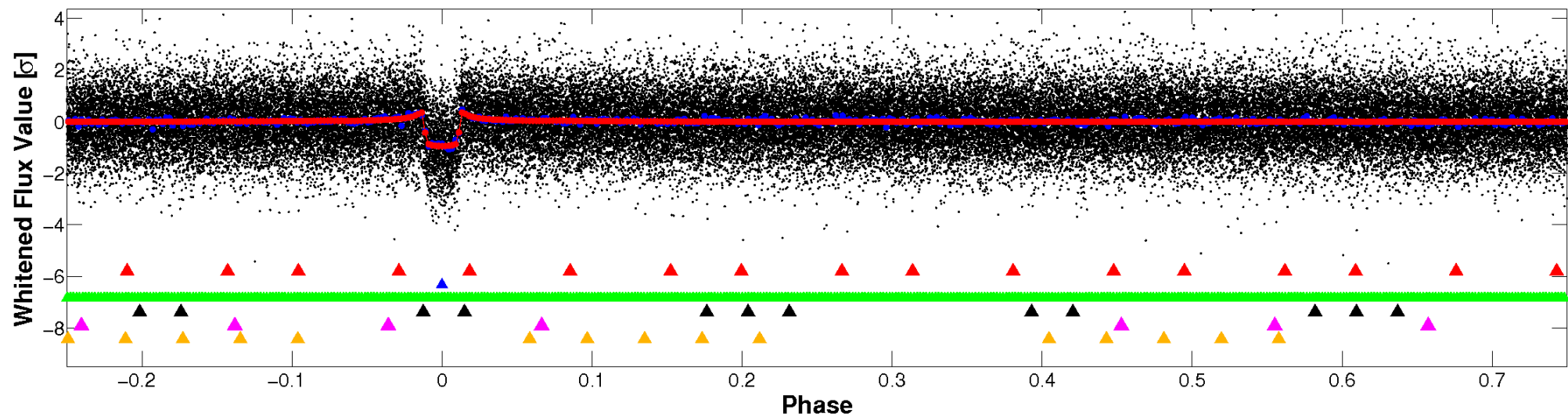


Non-Whitened Vs. Whitened Light Curve

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

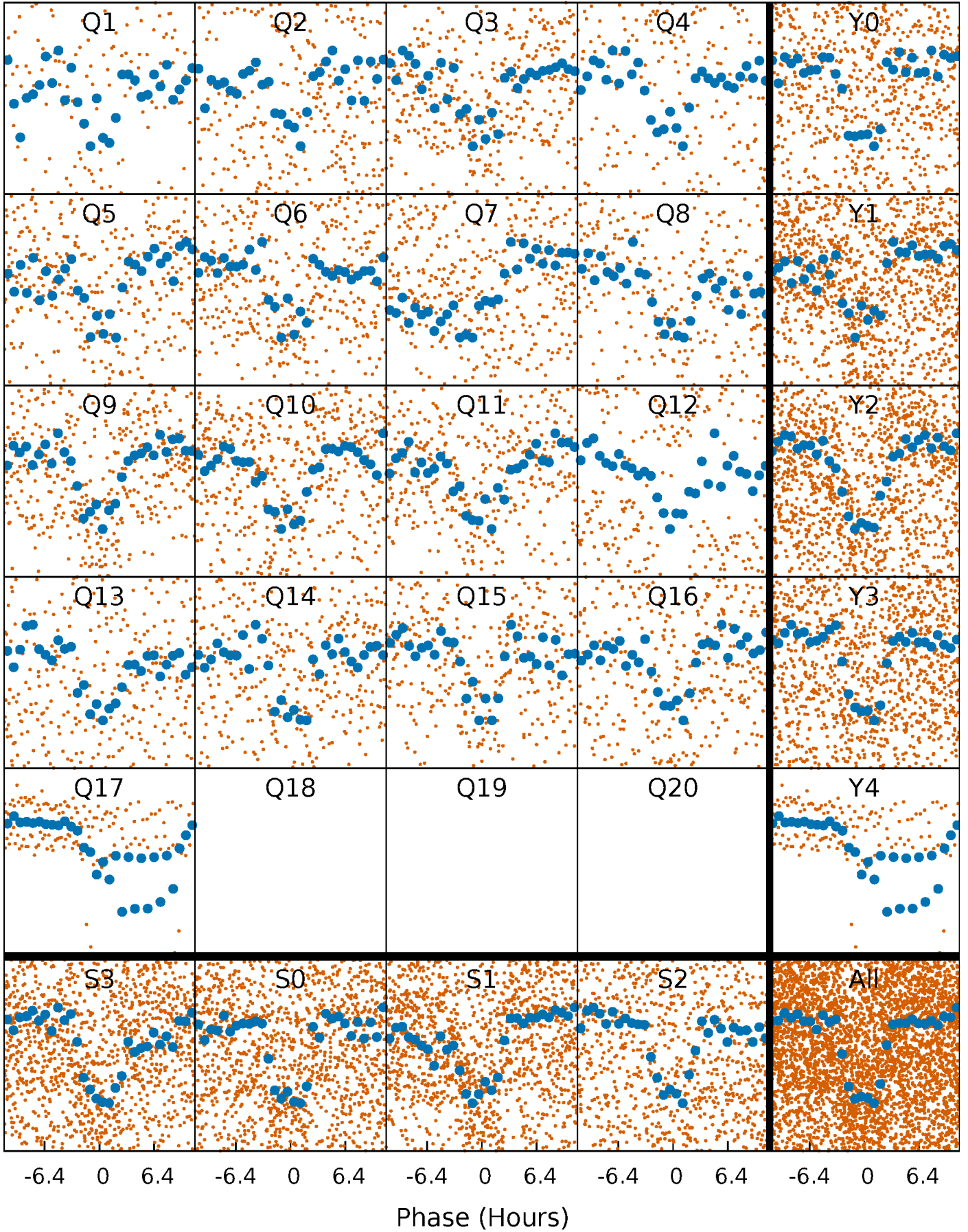


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



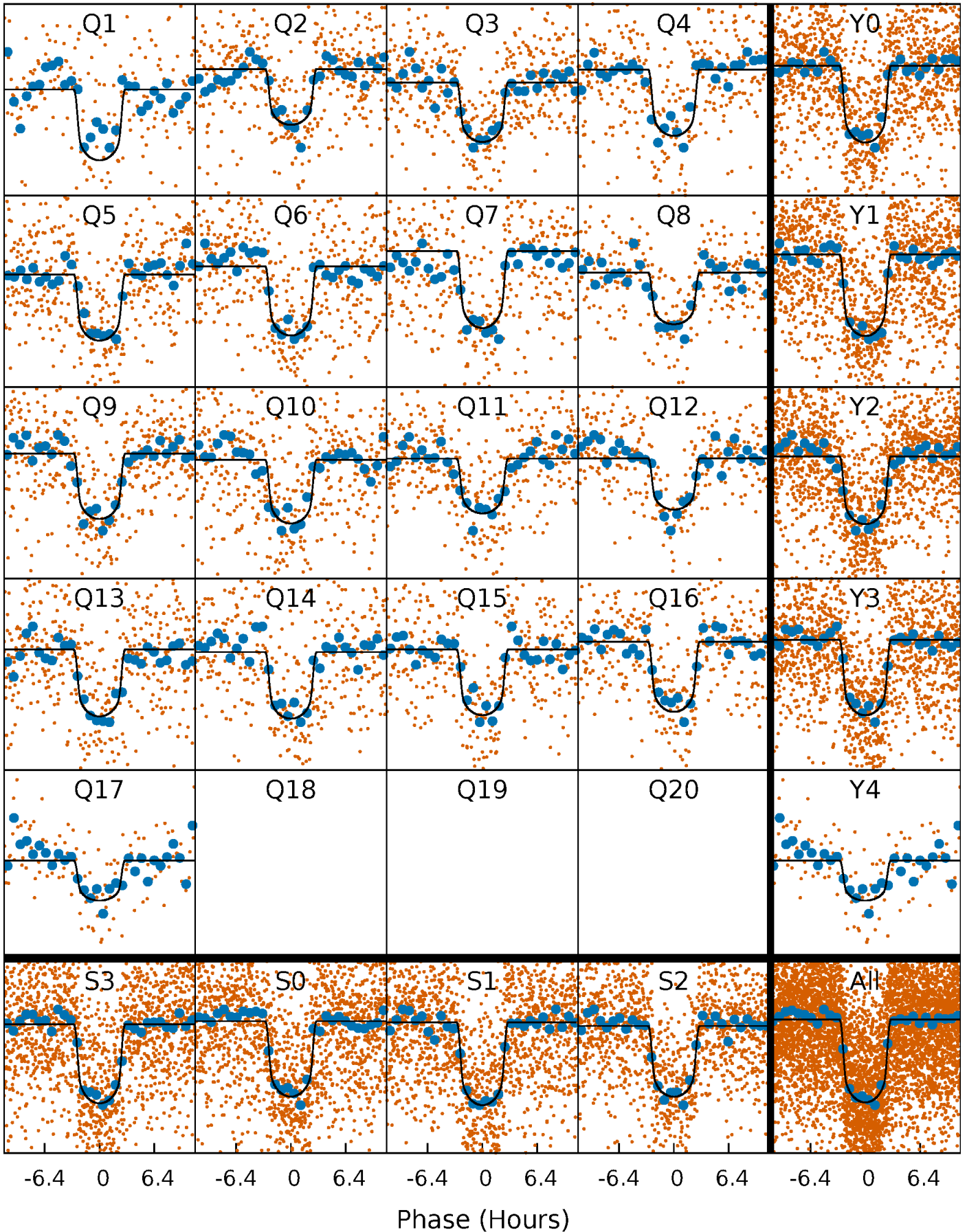
PDC Quarter-Phased Transit Curves

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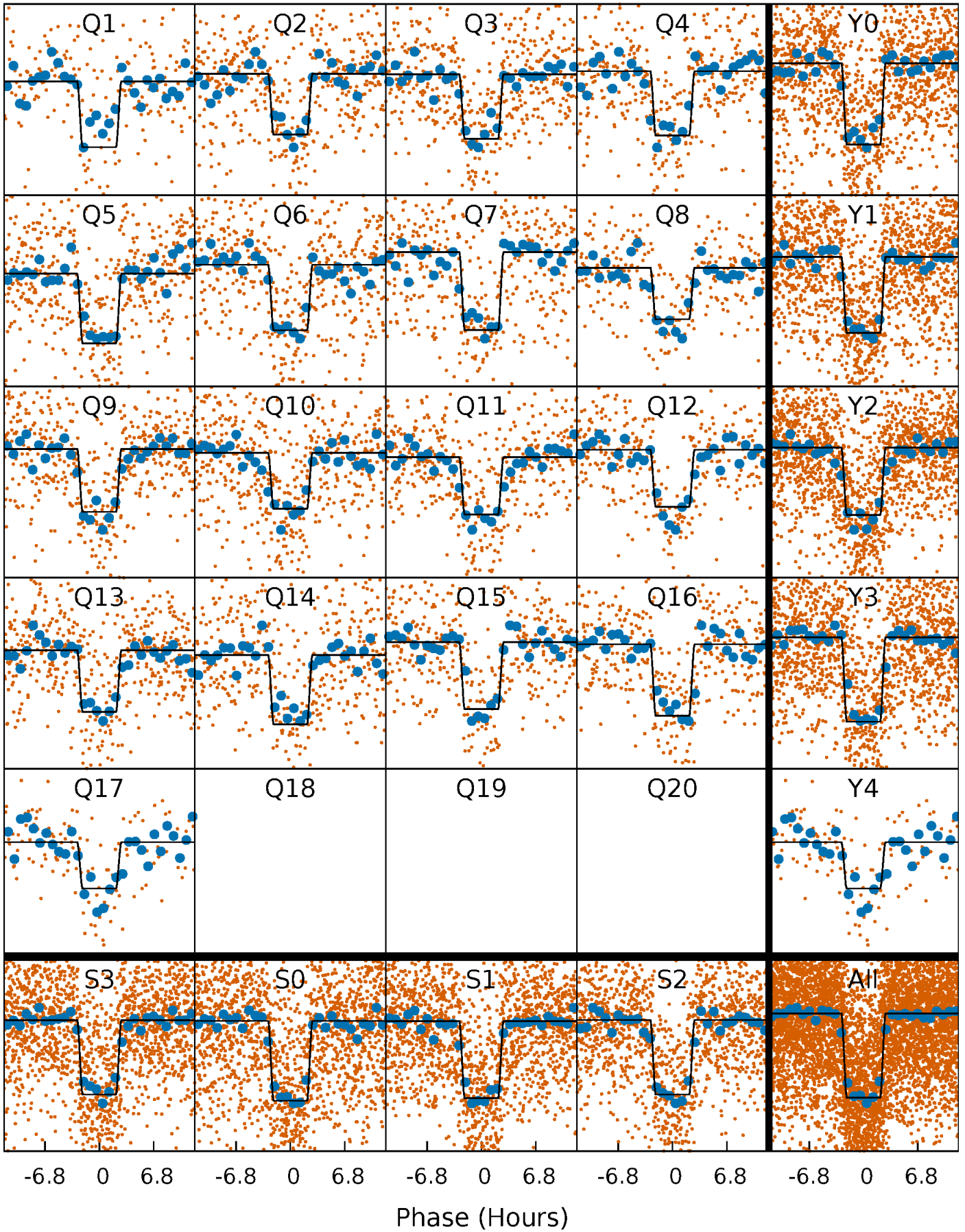
DV Quarter-Phased Transit Curves

TCE 008552719-02 P= 9.109676 Days $T_0=133.066227$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

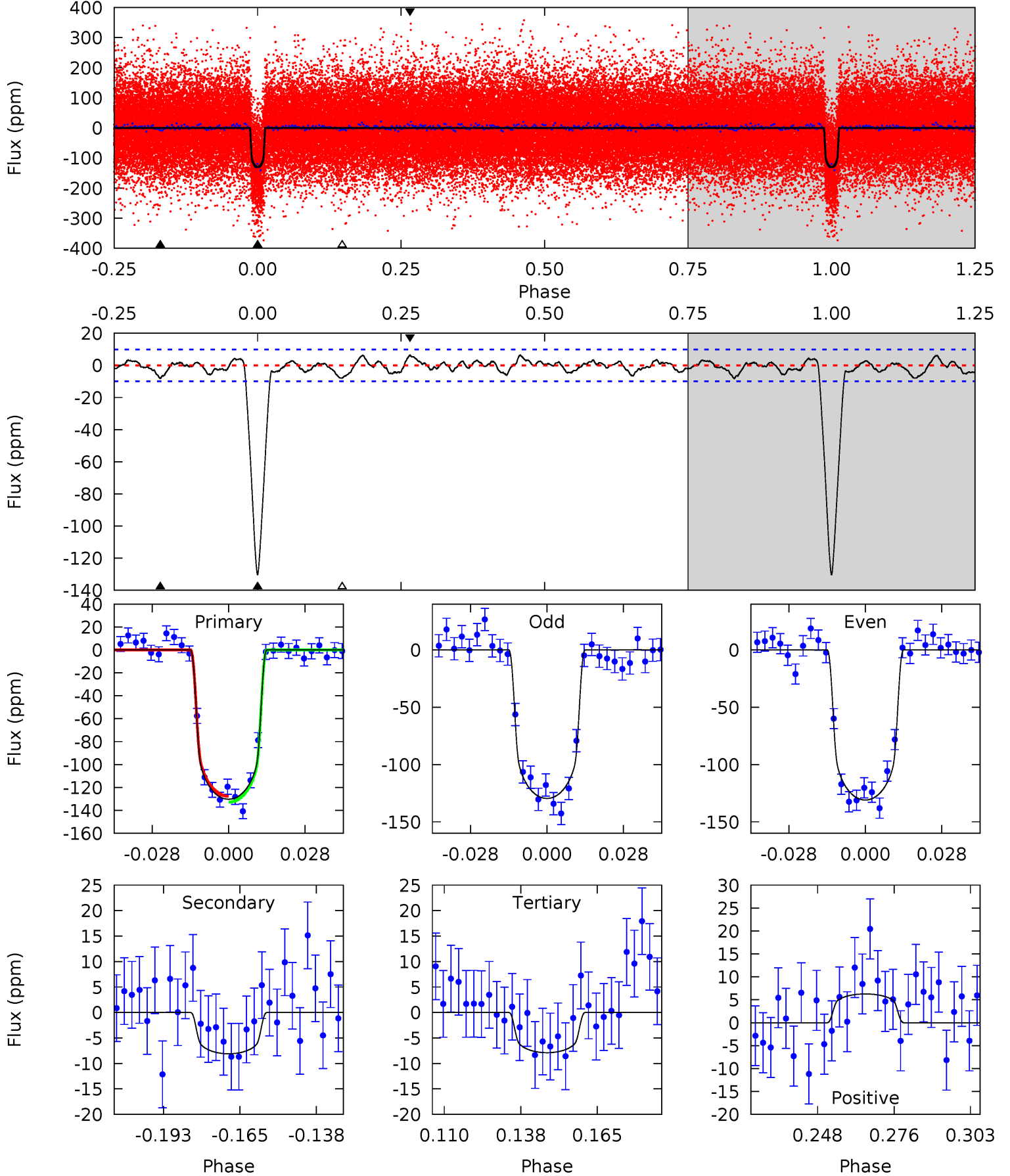
TCE 008552719-02 P= 9.109541 Days $T_0=133.075764$ (BKJD)



DV Model-Shift Uniqueness Test

008552719-02, P = 9.109676 Days, E = 123.956551 Days

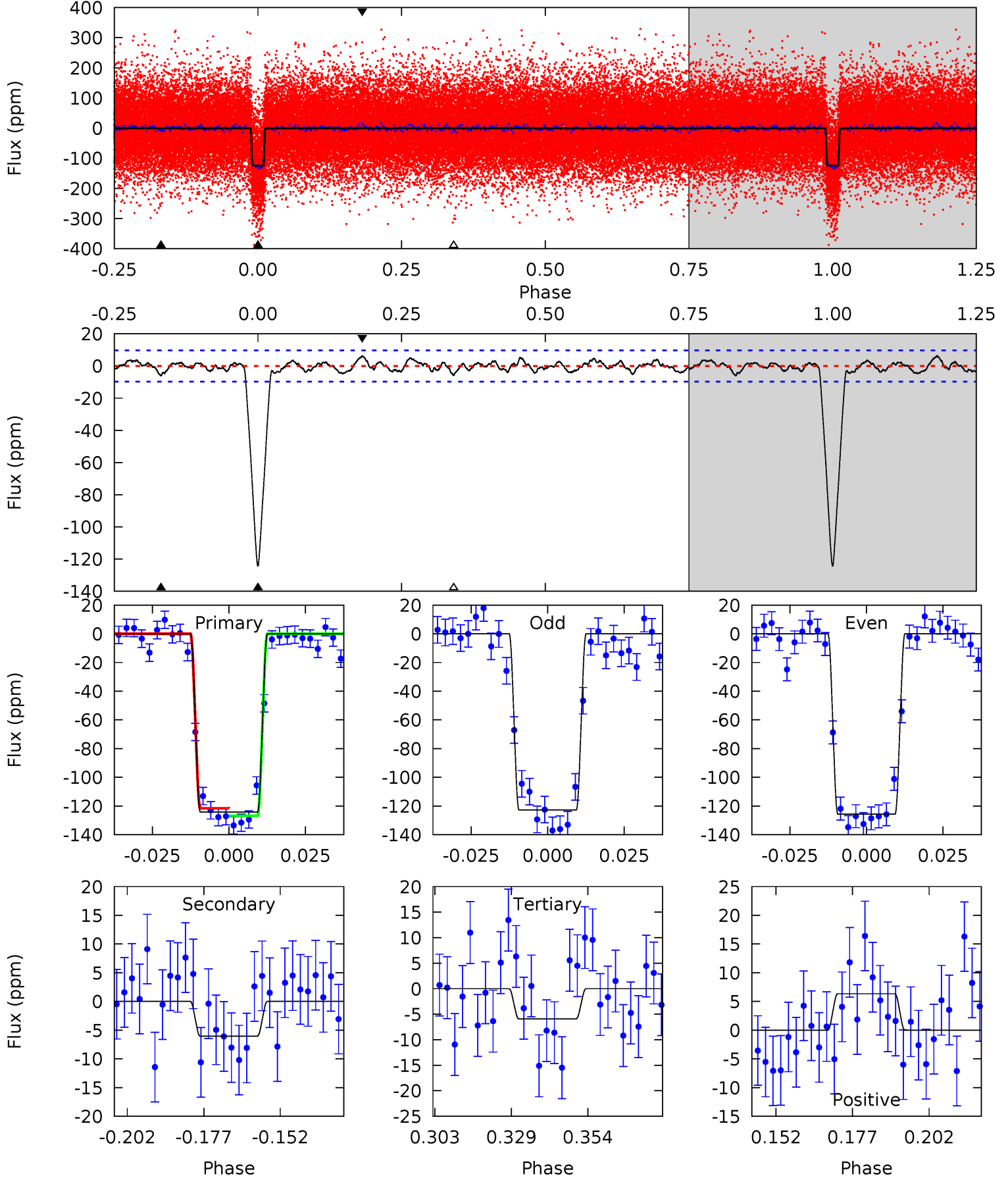
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
63.7	3.96	3.86	3.06	4.83	2.20	1.37	59.8	60.6	0.10	0.90	0.34	1.00	0.05	1.26



Alt Model-Shift Uniqueness Test

008552719-02, P = 9.109541 Days, E = 123.966223 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
62.0	3.01	2.95	3.16	4.85	2.24	1.16	59.1	58.9	0.06	-0.15	0.71	0.94	0.05	1.29



Stellar Parameters For KIC 008552719

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5611^{+100}_{-112}	$4.388^{+0.080}_{-0.120}$	$0.360^{+0.100}_{-0.150}$	$1.073^{+0.173}_{-0.106}$	$1.026^{+0.057}_{-0.057}$	$1.170^{+0.391}_{-0.412}$
	+2%/-2%	+2%/-3%	+28%/-42%	+16%/-10%	+6%/-6%	+33%/-35%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 008552719-02 / KOI 1792.03

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-8 ± 2	$1.51^{+0.16}_{-0.14}$	1227^{+51}_{-47}	3209^{+139}_{-155}	14^{+5}_{-5}
Alt.	-6 ± 2	$1.34^{+0.14}_{-0.14}$	1223^{+59}_{-43}	3188^{+167}_{-183}	14^{+6}_{-5}

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

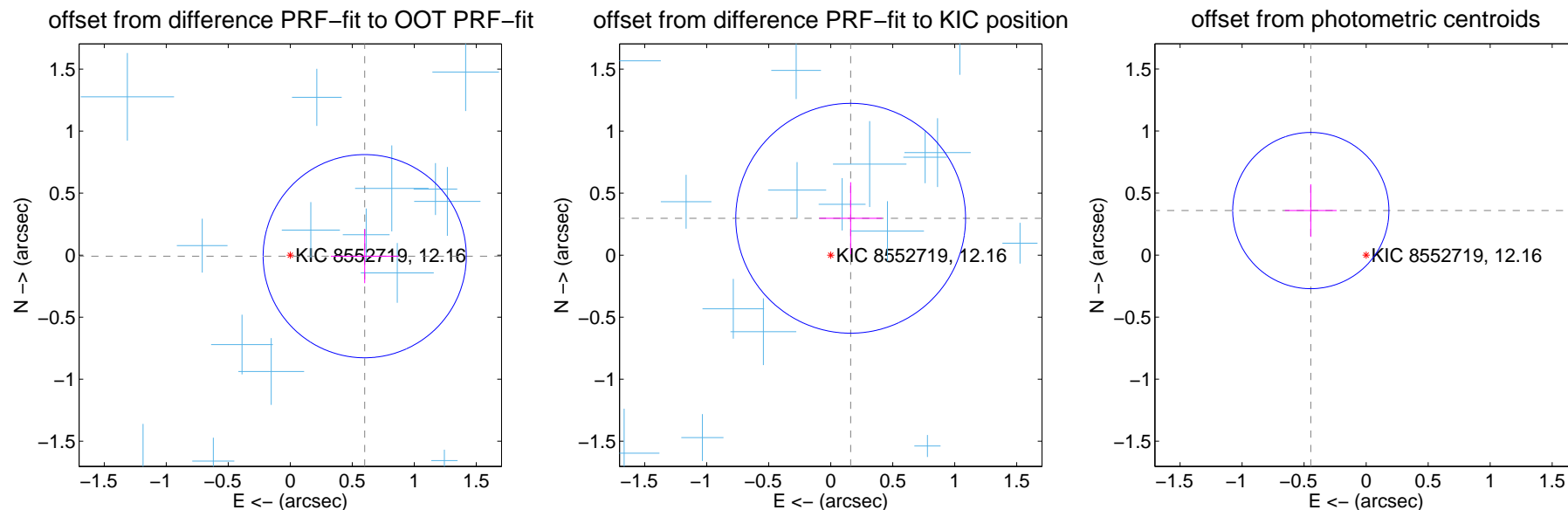
DV Centroid Data

Supplemental centroid analysis for 008552719-02. Kepler magnitude: 12.16. Transit SNR 34.14

There are 16 quarters with good PRF difference image offsets

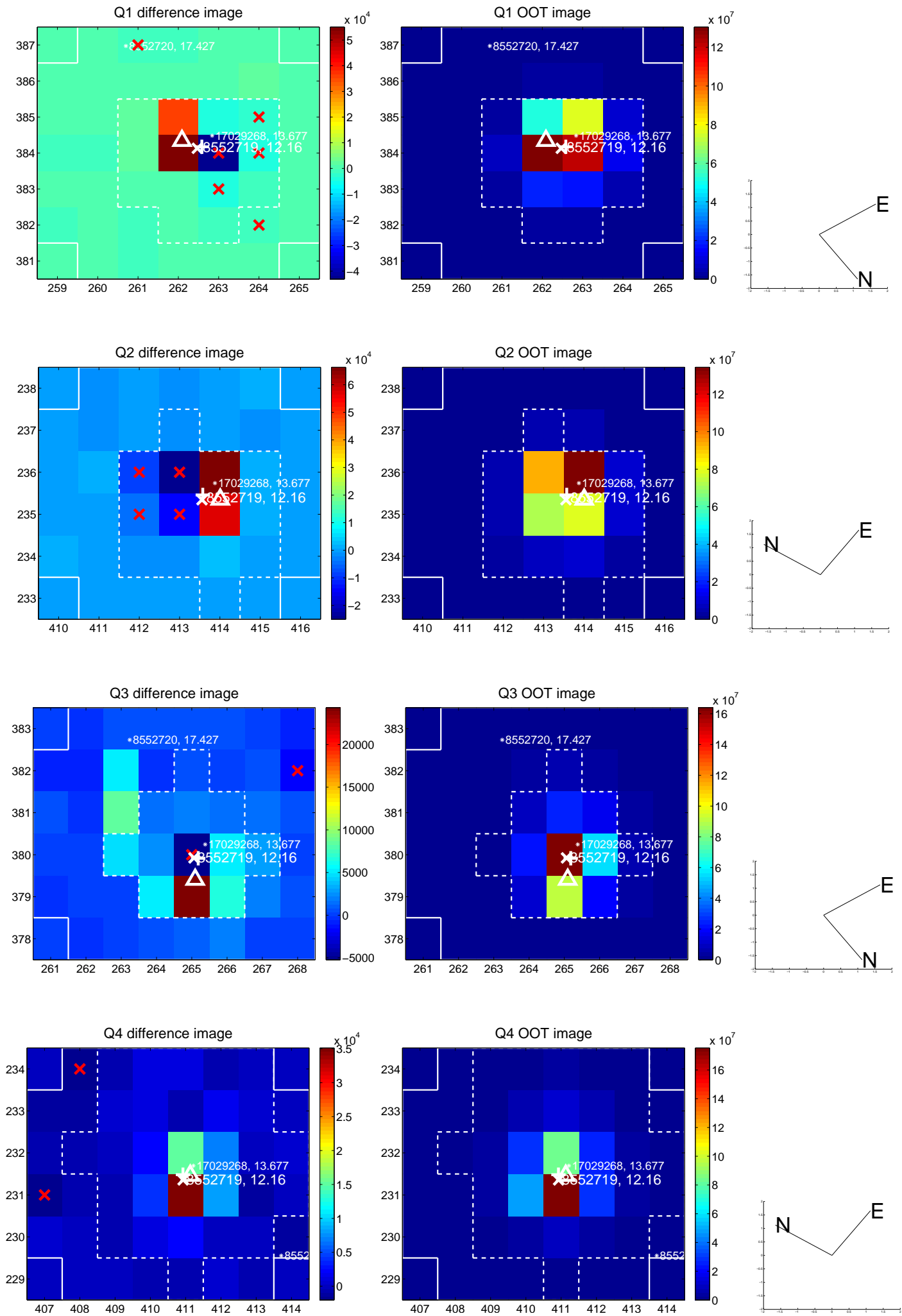
The direct PRF centroid is offset from the target star catalog position by about 0.58 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.601 ± 0.273	2.20	-0.601 ± 0.273	-0.008 ± 0.218
PRF-fit source offset from KIC position	0.338 ± 0.309	1.09	-0.161 ± 0.254	0.297 ± 0.291
photometric centroid source offset	0.57 ± 0.21	2.73	0.45 ± 0.21	0.36 ± 0.21

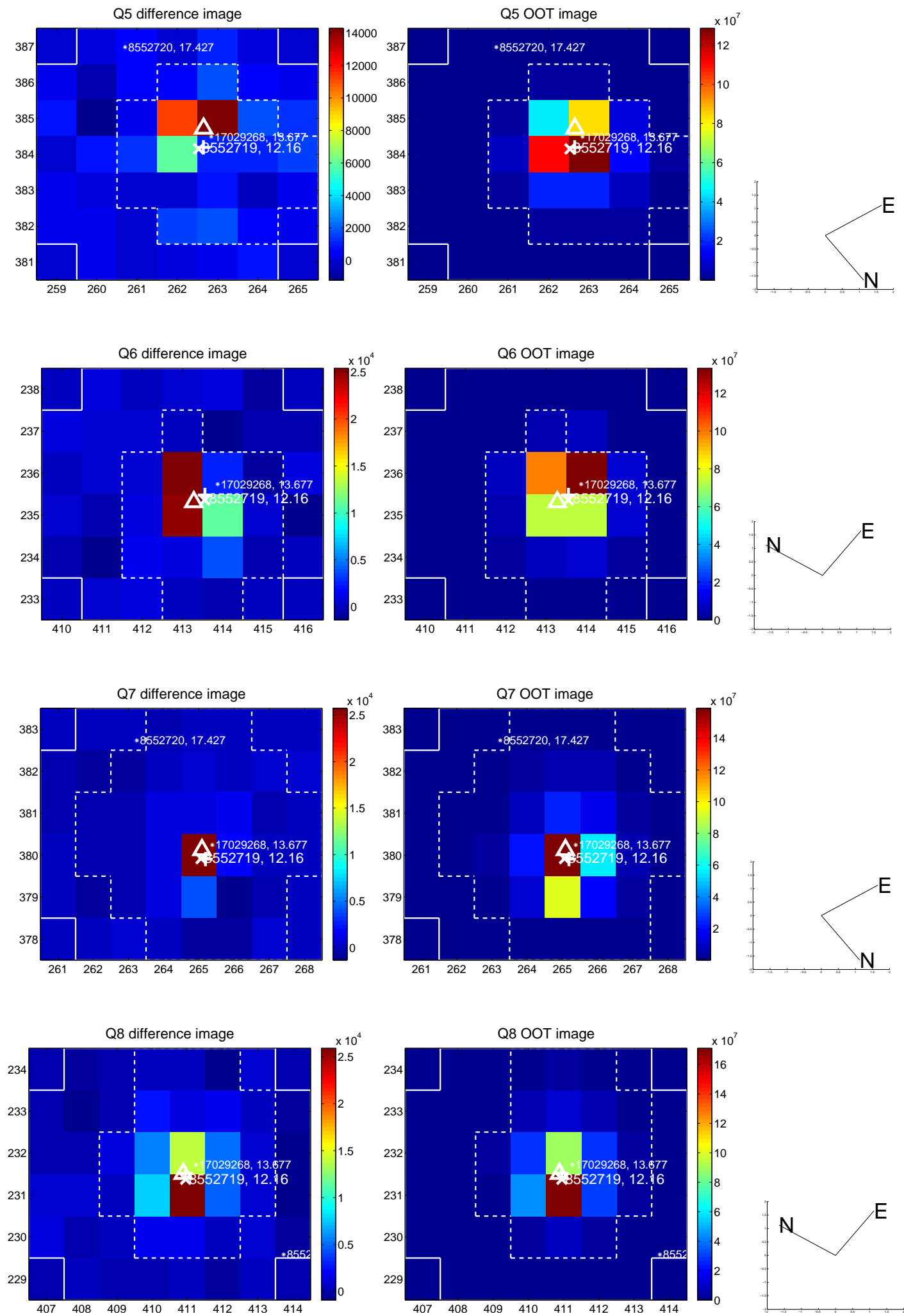


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

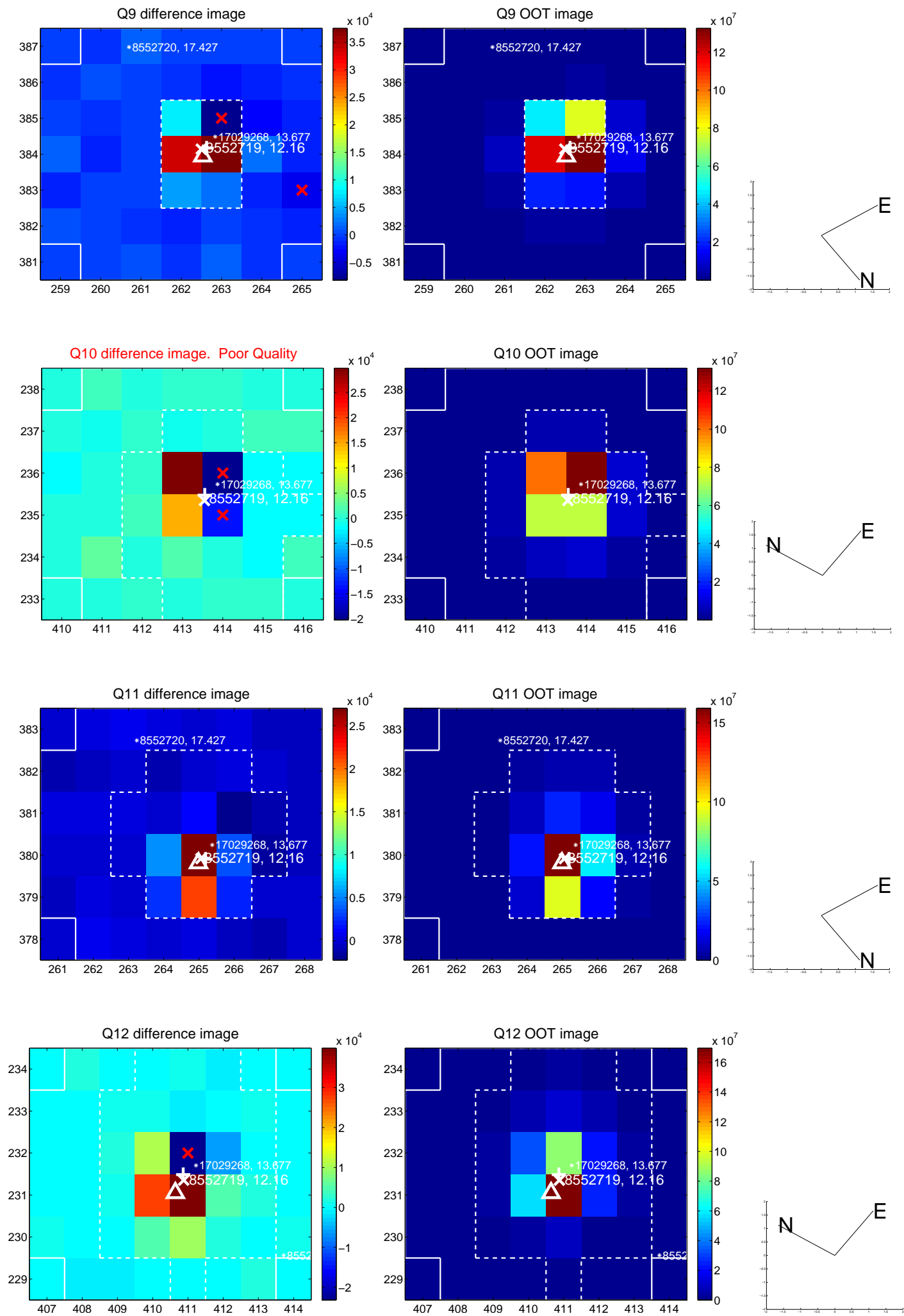
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



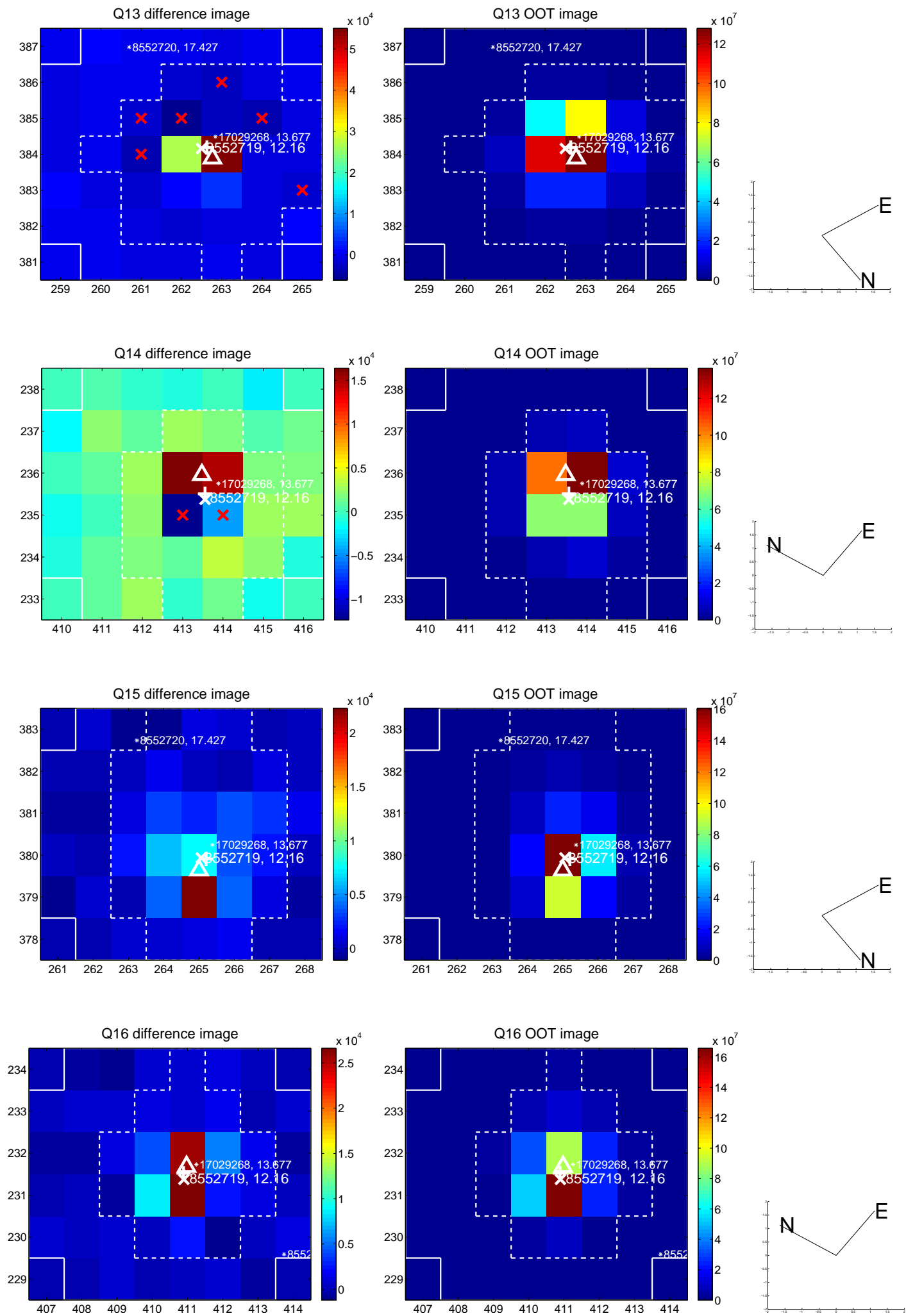
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



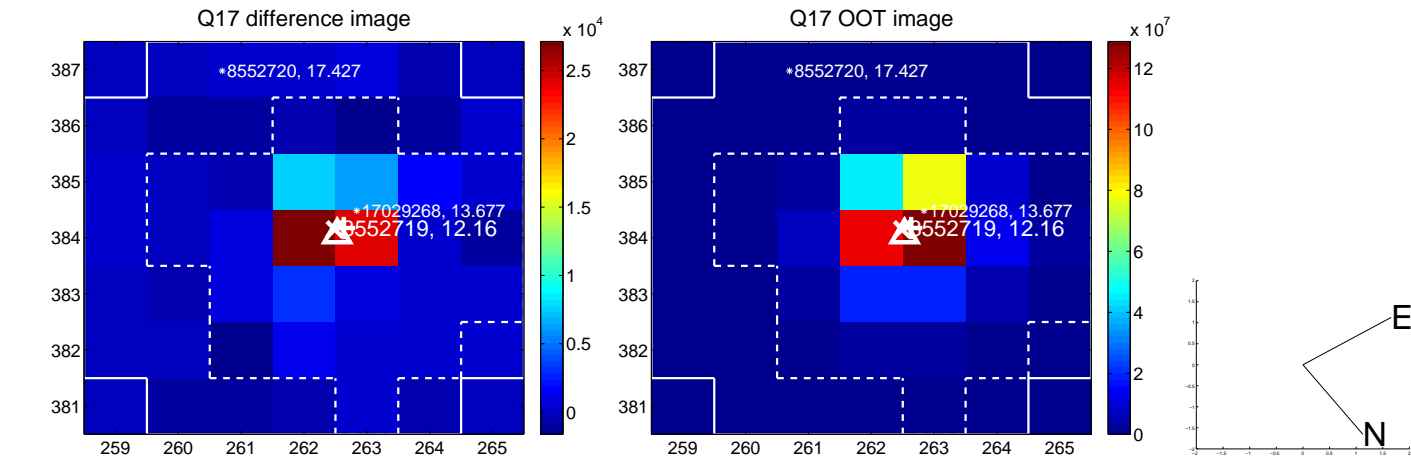
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



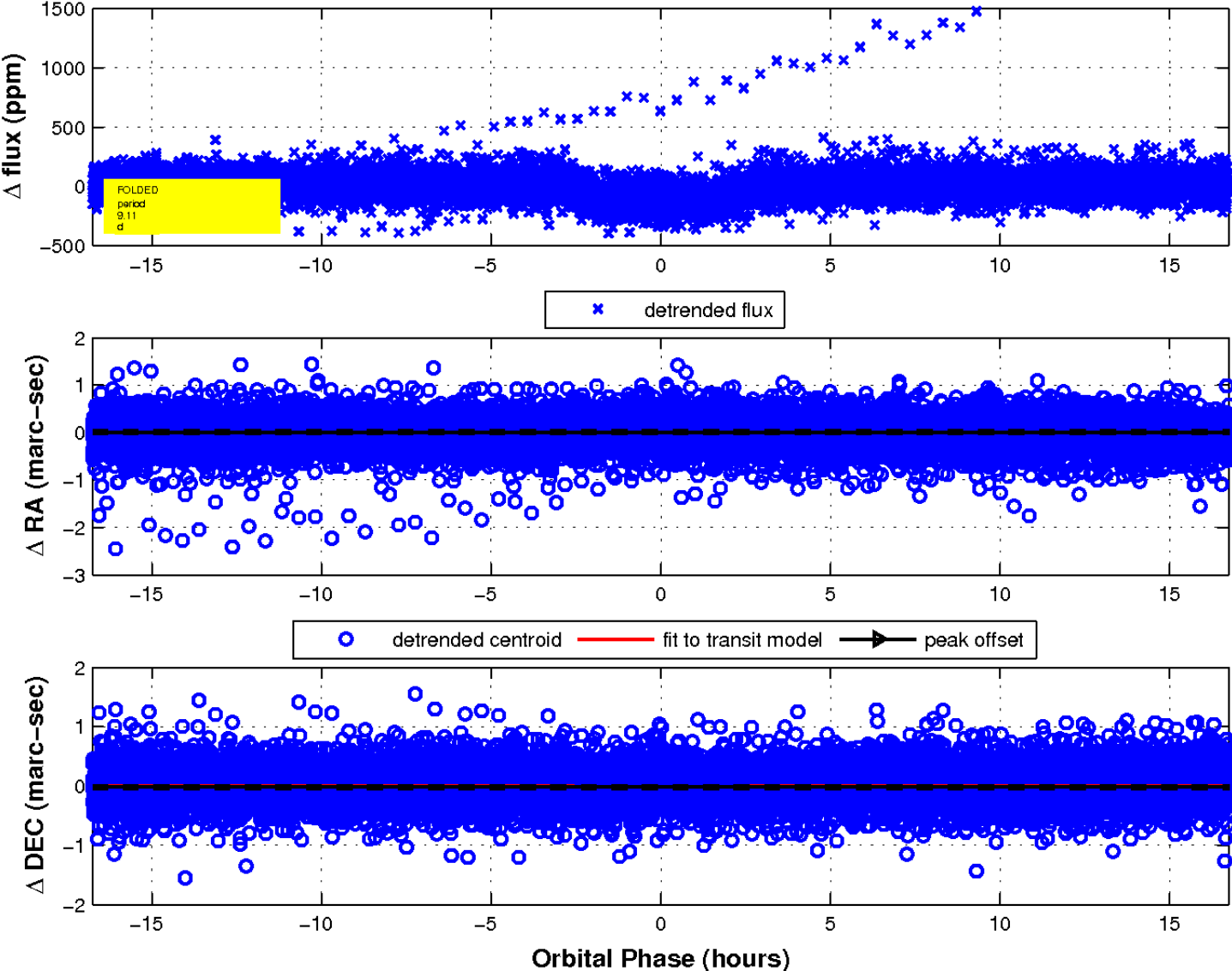
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

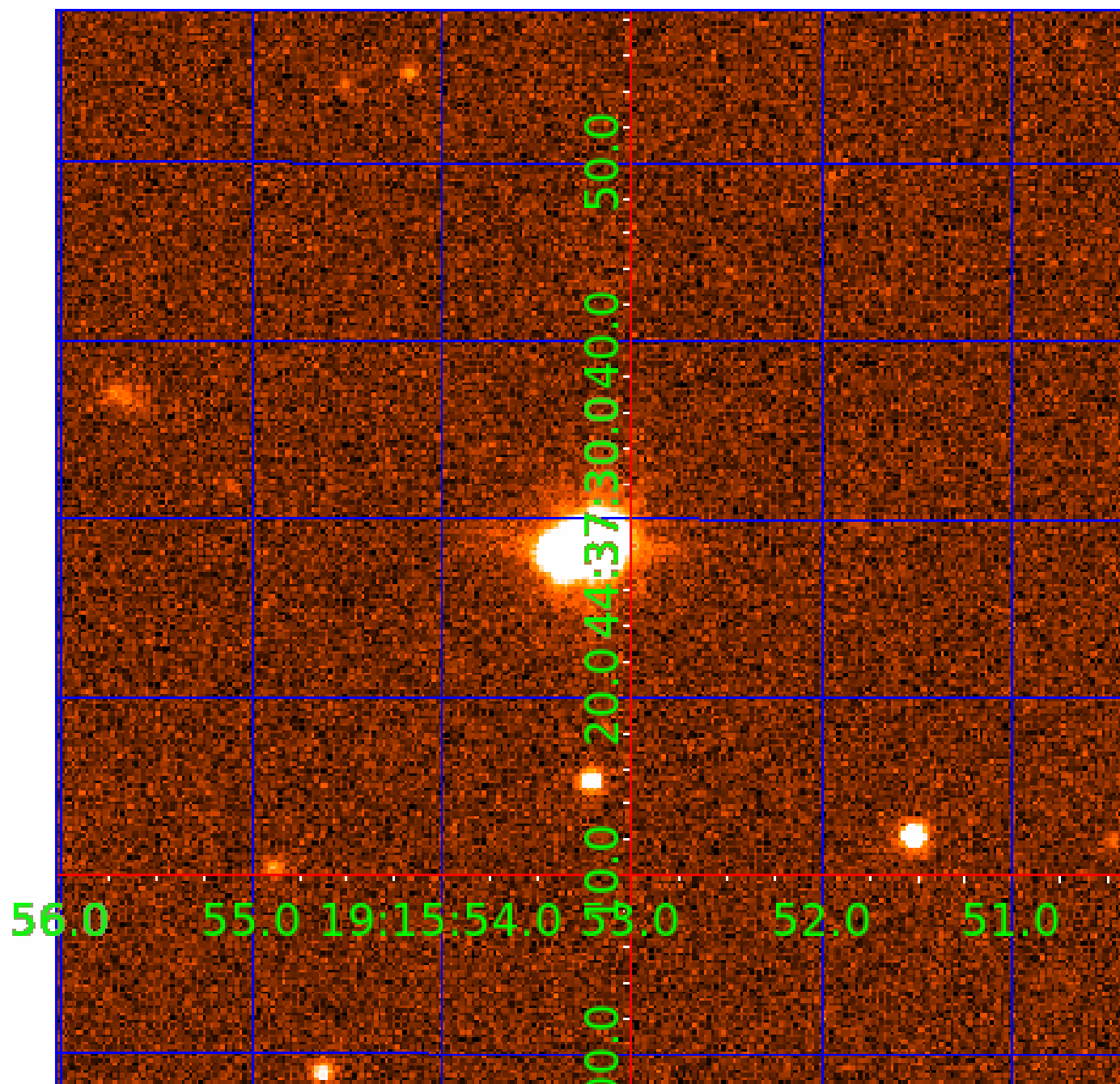


fluxWeightedCentroids, Planet 2 of 6



UKIRT Image

Declination



KIC 008552719

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})
008552719-01	OBS	1792.01	88.406788	176.273628	1716.6	12.432	153.9	160.6	1.07	5611	4.63	6.66
008552719-02	OBS	1792.03	9.109676	133.066227	132.1	5.583	30.5	34.1	1.07	5611	1.50	137.86
008552719-03	OBS	1792.02	1.546228	132.483612	34.6	7.785	18.8	22.3	1.07	5611	0.93	1466.98
008552719-04	OBS	No	123.841502	220.856241	228.2	6.915	13.4	11.1	1.07	5611	2.10	4.25
008552719-05	OBS	No	208.590876	215.658896	119.6	15.462	10.5	7.9	1.07	5611	1.41	2.12
008552719-06	OBS	No	97.053580	214.177885	100.9	6.172	8.3	8.0	1.07	5611	1.20	5.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008552719-01	OBS	PC	0.93	0	0	0	0	CENT_KIC_POS
008552719-02	OBS	PC	0.99	0	0	0	0	CENT_KIC_POS
008552719-03	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_KIC_POS
008552719-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_KIC_POS
008552719-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008552719-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_KIC_POS

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

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

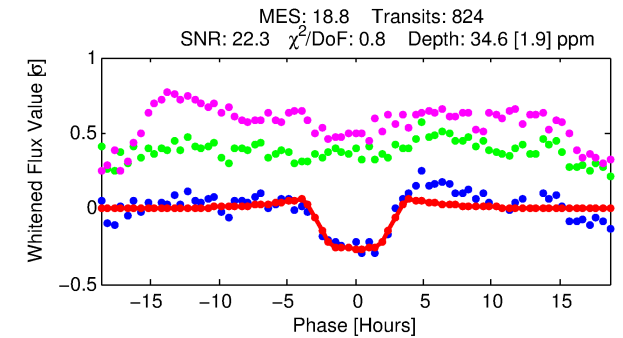
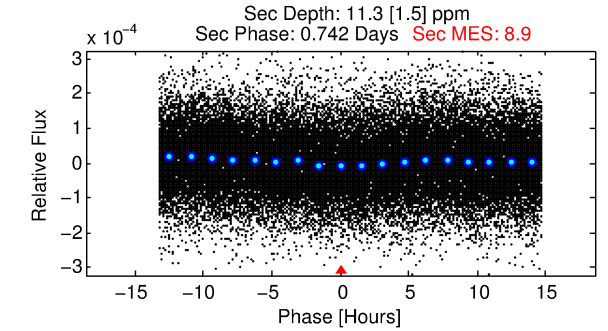
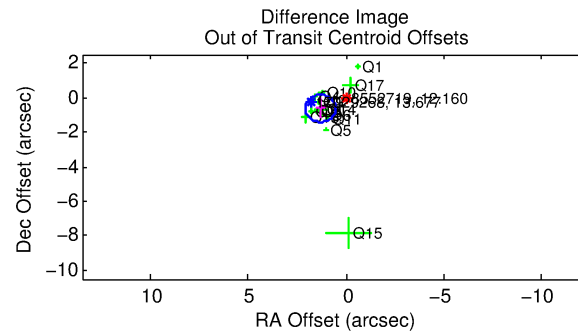
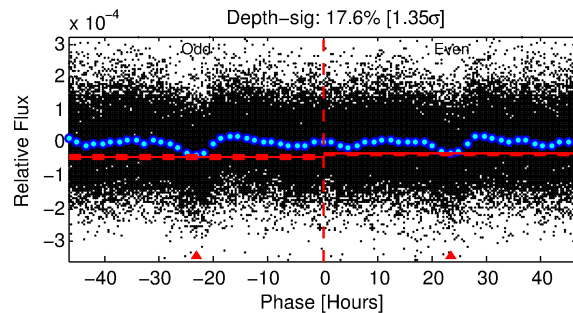
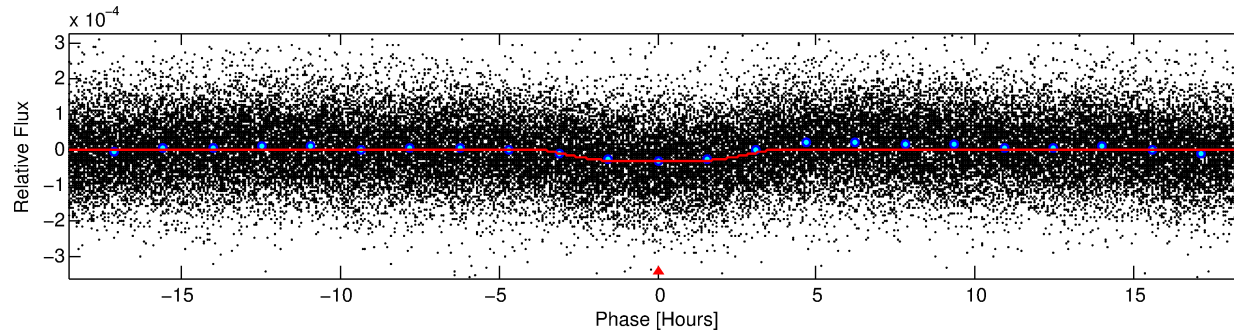
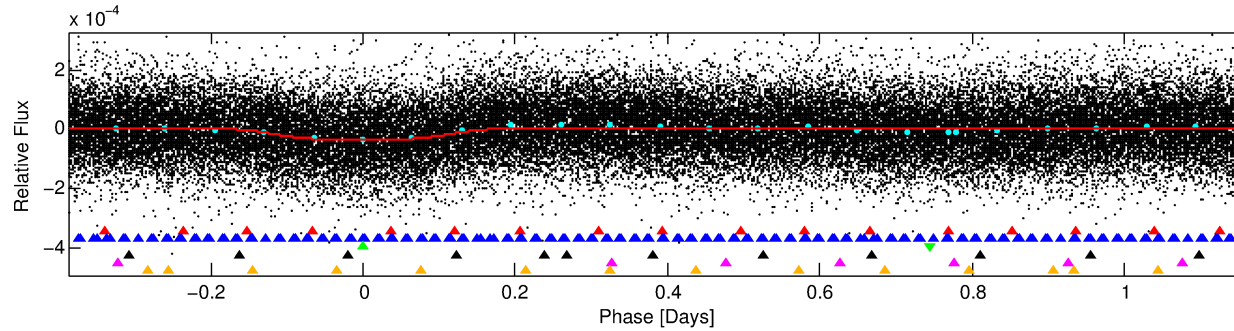
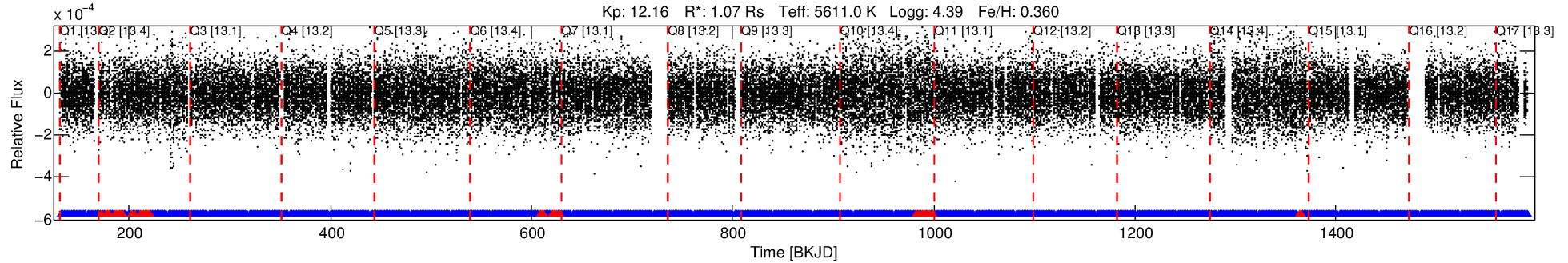
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008552719-03

No Significant Match Found

DV One-Page Summary

KIC: 8552719 Candidate: 3 of 6 Period: 1.546 d
KOI: K01792.02 Corr: 0.925



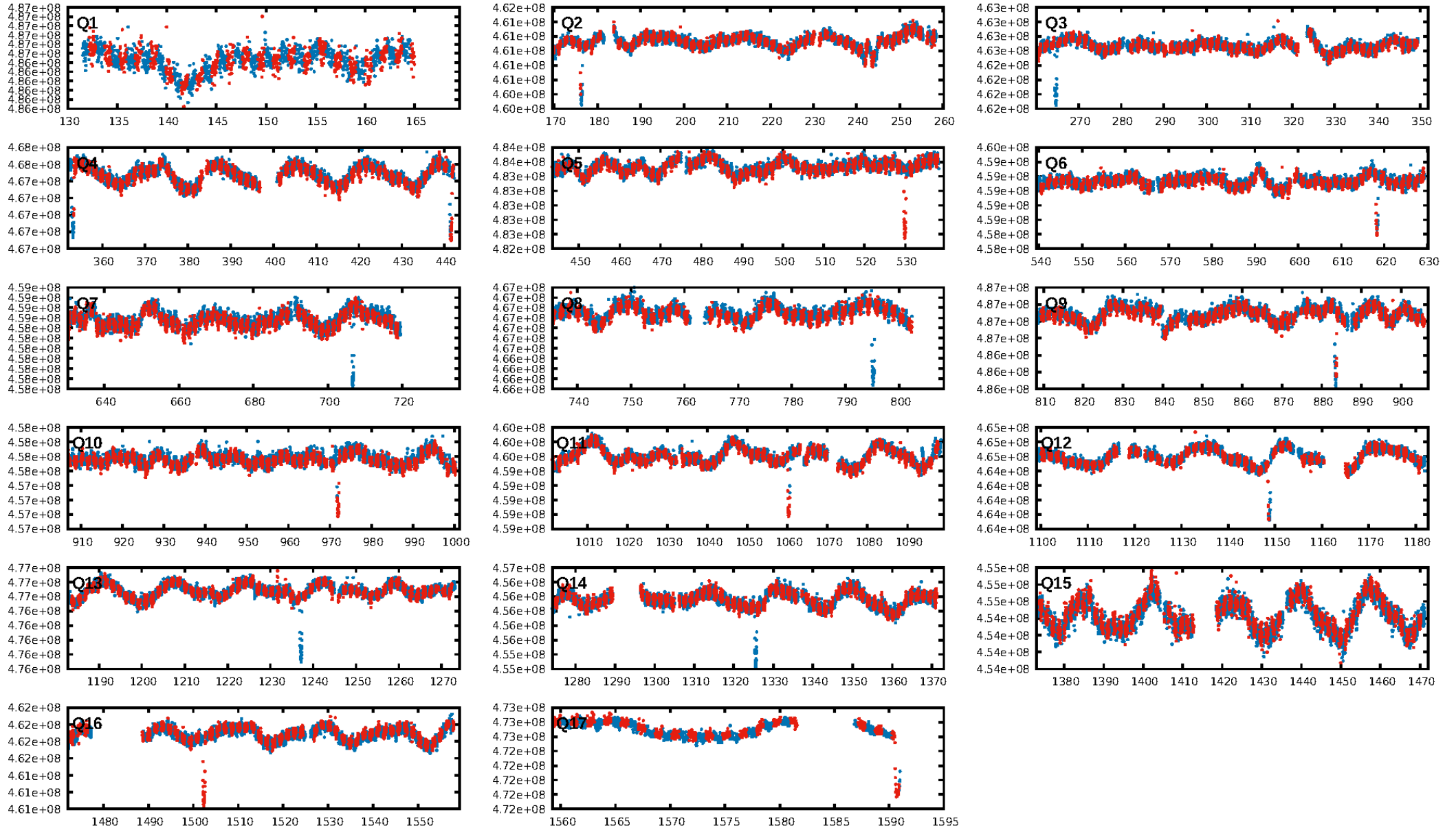
DV Fit Results:

Period = 1.54623 [0.00001] d
Epoch = 132.4836 [0.0047] BKJD
Rp/R* = 0.0080 [0.0003]
a/R* = 1.04 [0.01]
b = 0.99 [0.00]
Seff = 1466.98 [334.07]
Teq = 1578 [90] K
Rp = 0.93 [0.15] Re
a = 0.0264 [0.0037] AU
Ag = 5.00 [1.30] [3.07 σ]
Teffp = 3649 [155] K [11.58 σ]

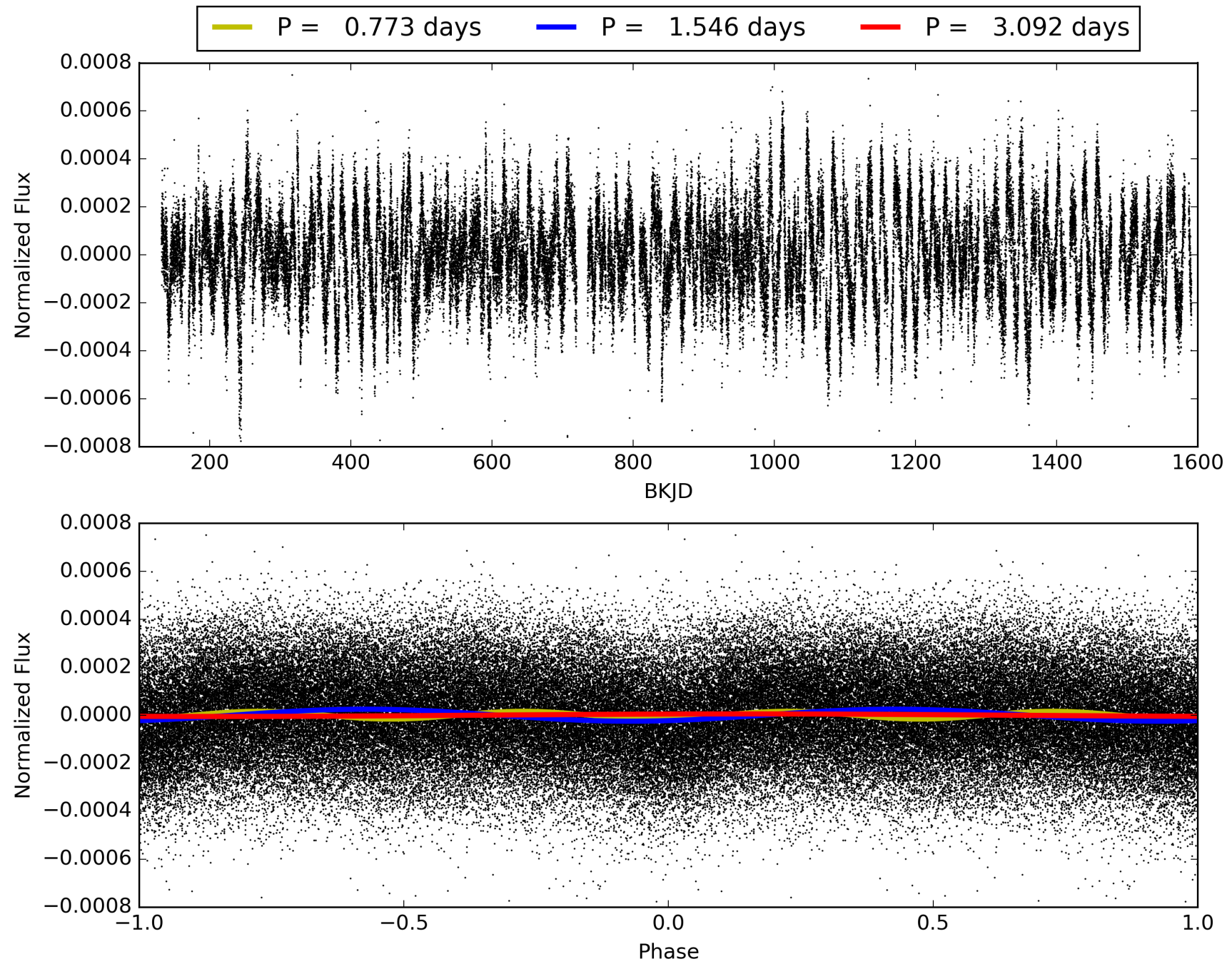
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [18.95 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.15e-44
RollingBand-fgt: 0.95 [749/786]
GhostDiagnostic-chr: 8.036
Centroid-sig: 0.0%
Centroid-so: 2.052 arcsec [6.61 σ]
OotOffset-rm: 1.479 arcsec [5.66 σ]
KicOffset-rm: 1.788 arcsec [9.63 σ]
OotOffset-st: 3/4/3/5 [15]
KicOffset-st: 3/4/3/5 [15]
DiffImageQuality-fgm: 0.87 [13/15]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 008552719-03, PDC Light Curves

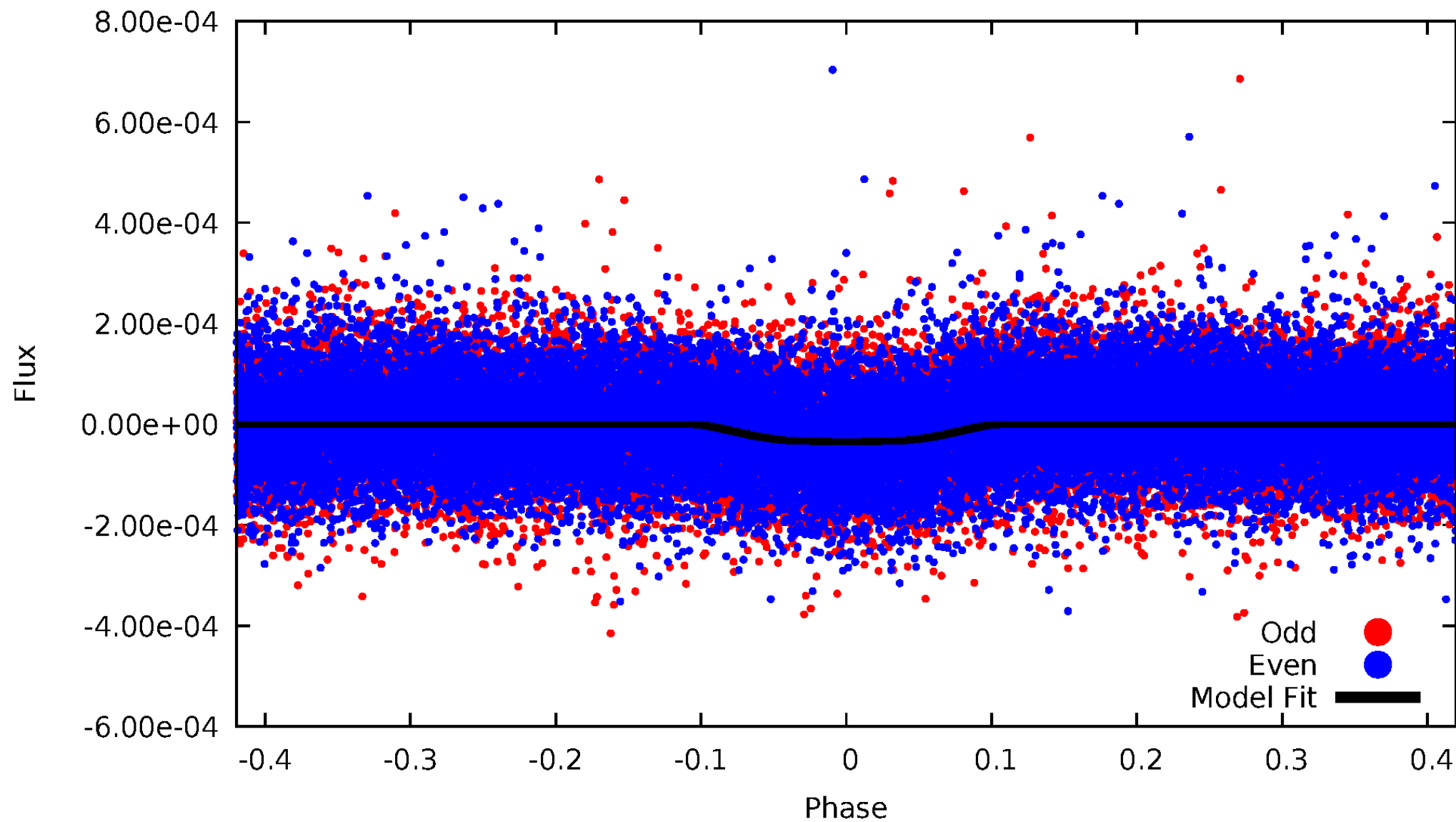


TCE 008552719-03



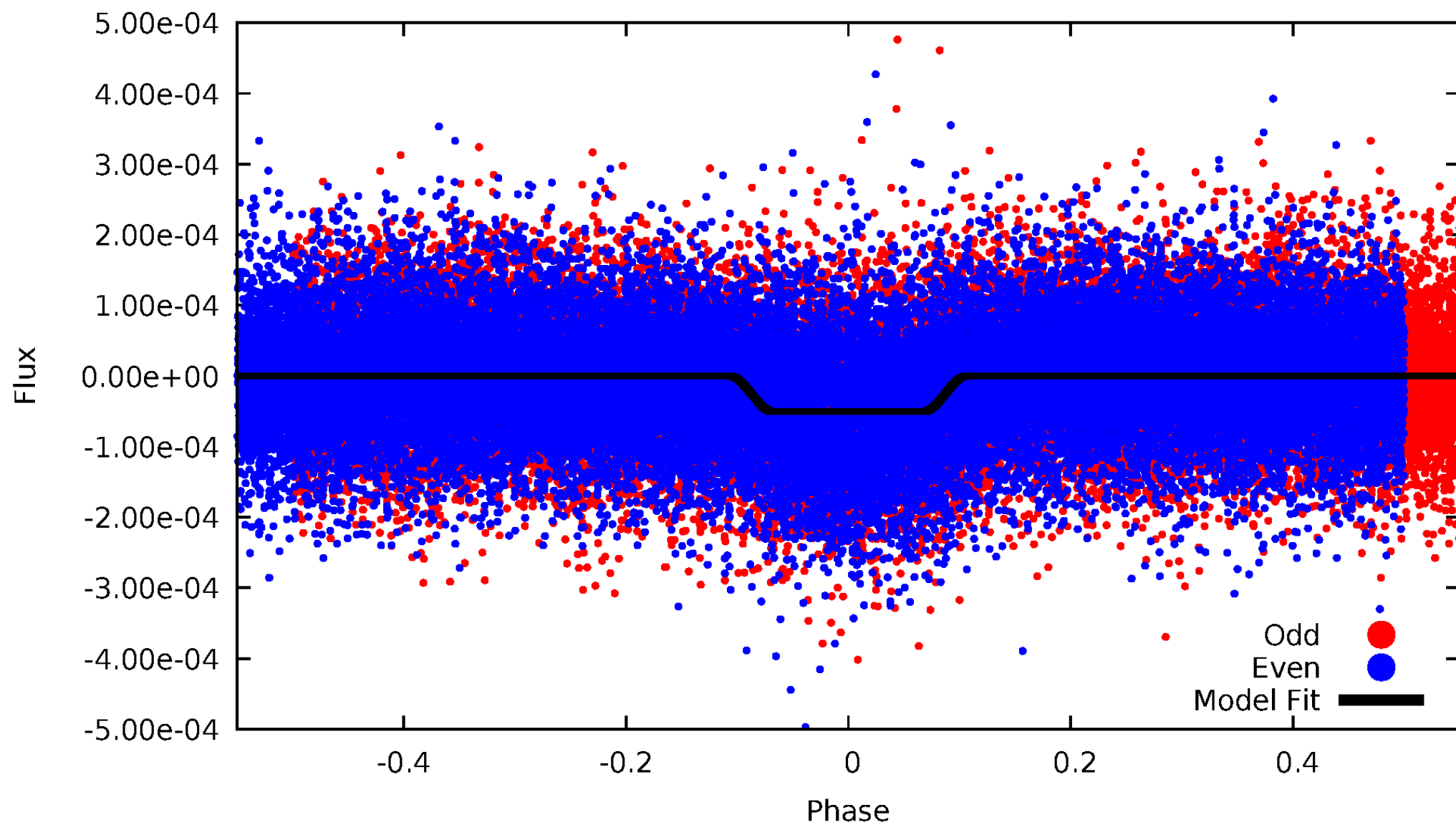
DV Odd/Even

TCE 008552719-03



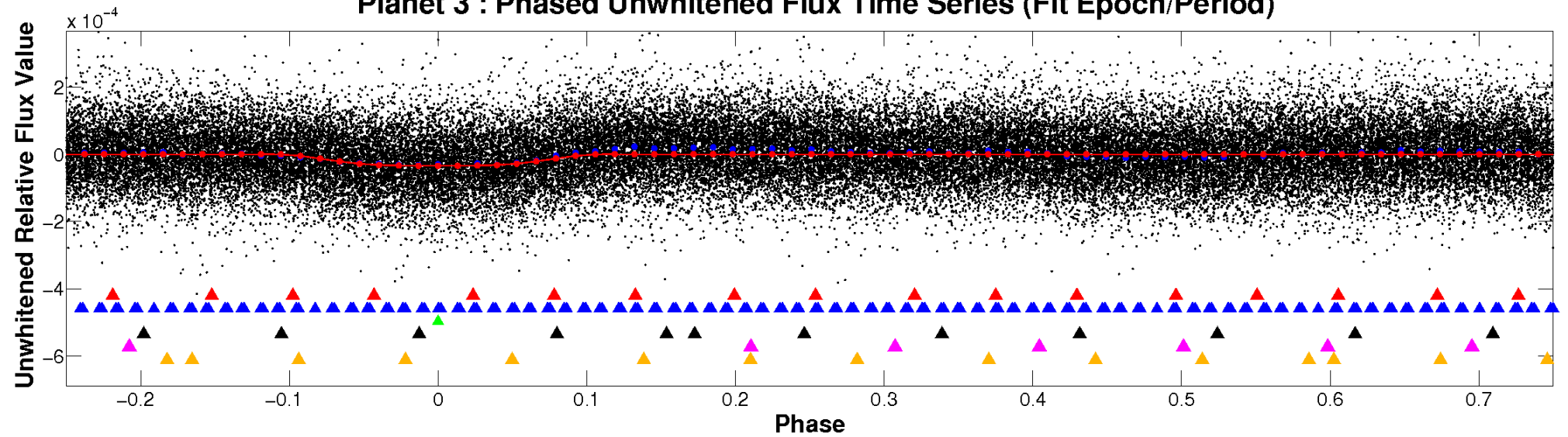
ALT Odd/Even

TCE 008552719-03

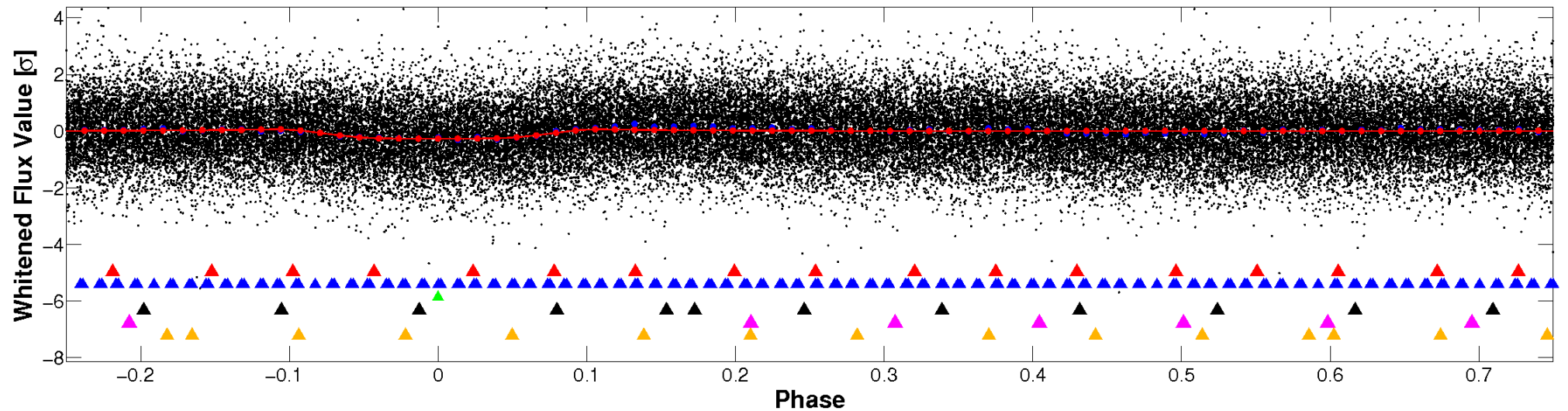


Non-Whitened Vs. Whitened Light Curve

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

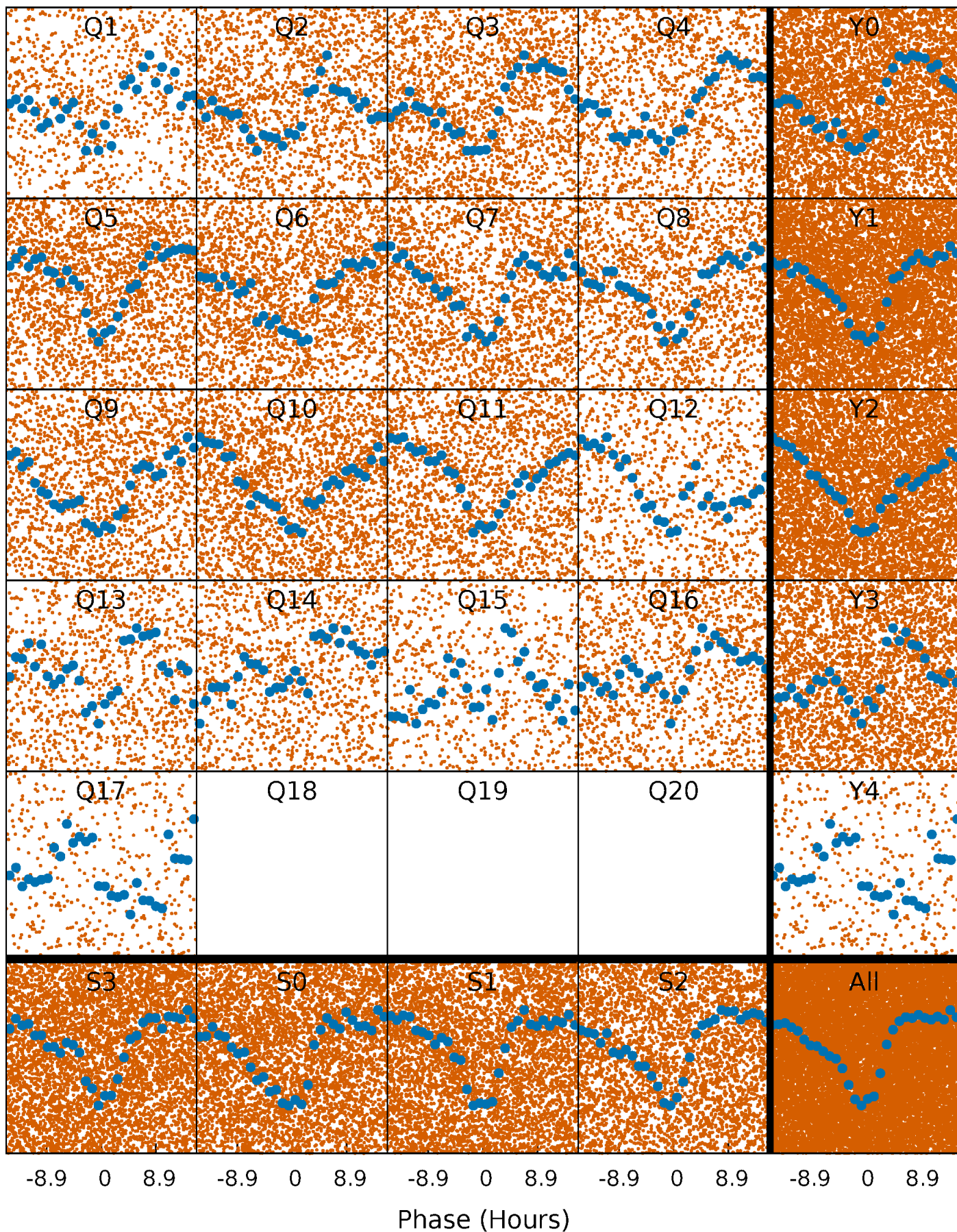


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



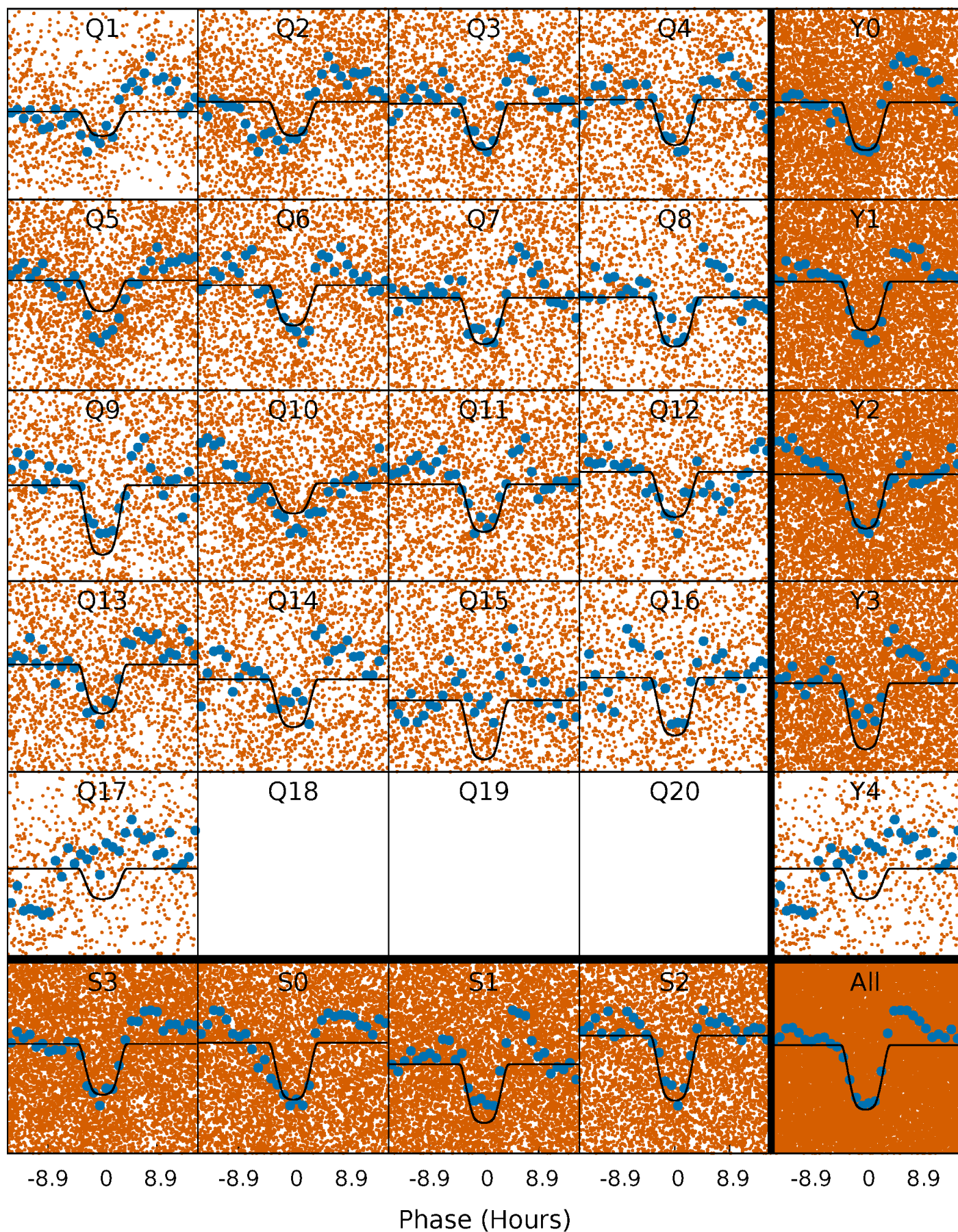
PDC Quarter-Phased Transit Curves

TCE 008552719-03 P= 1.546228 Days $T_0=132.483612$ (BKJD)



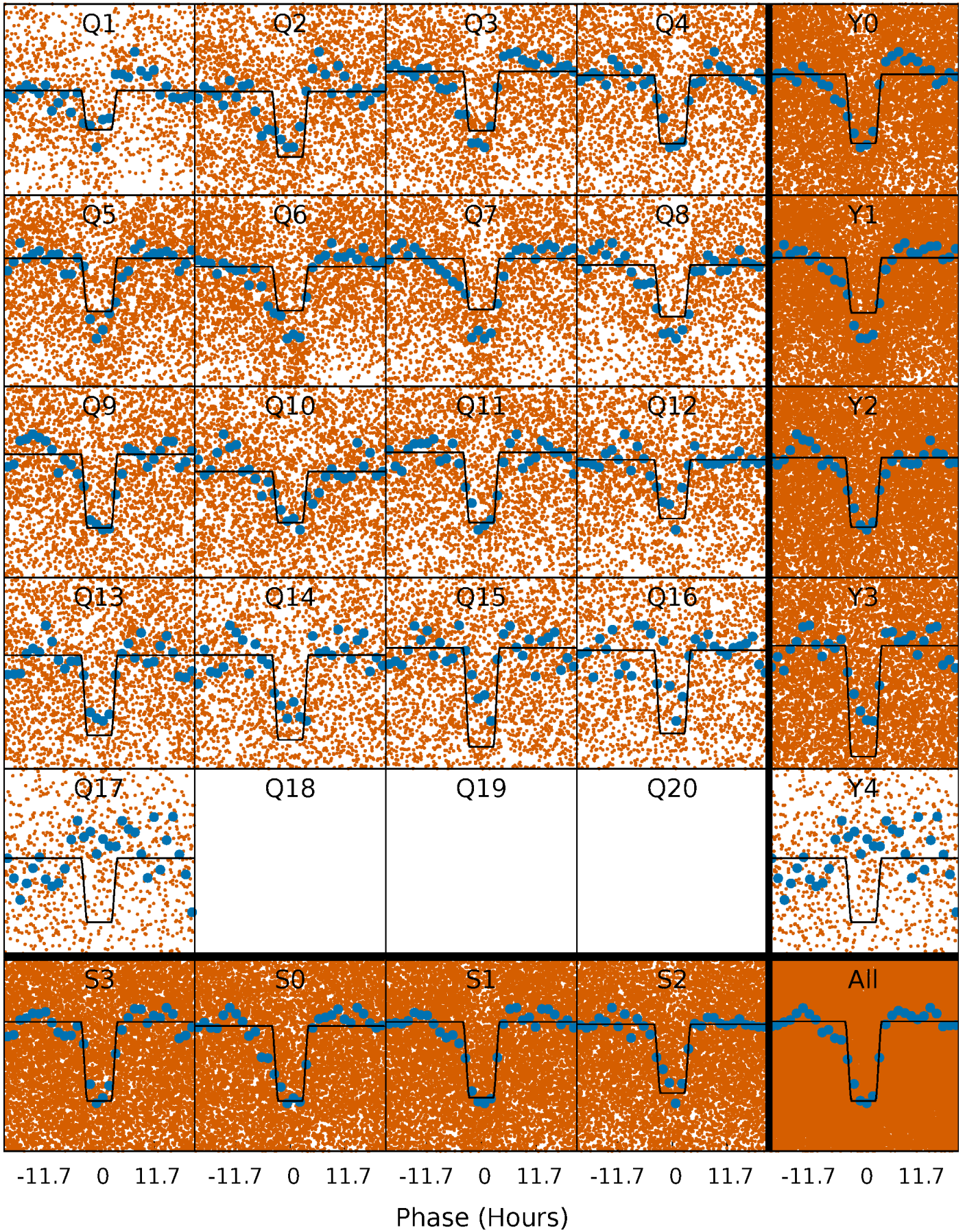
DV Quarter-Phased Transit Curves

TCE 008552719-03 P= 1.546228 Days $T_0=132.483612$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

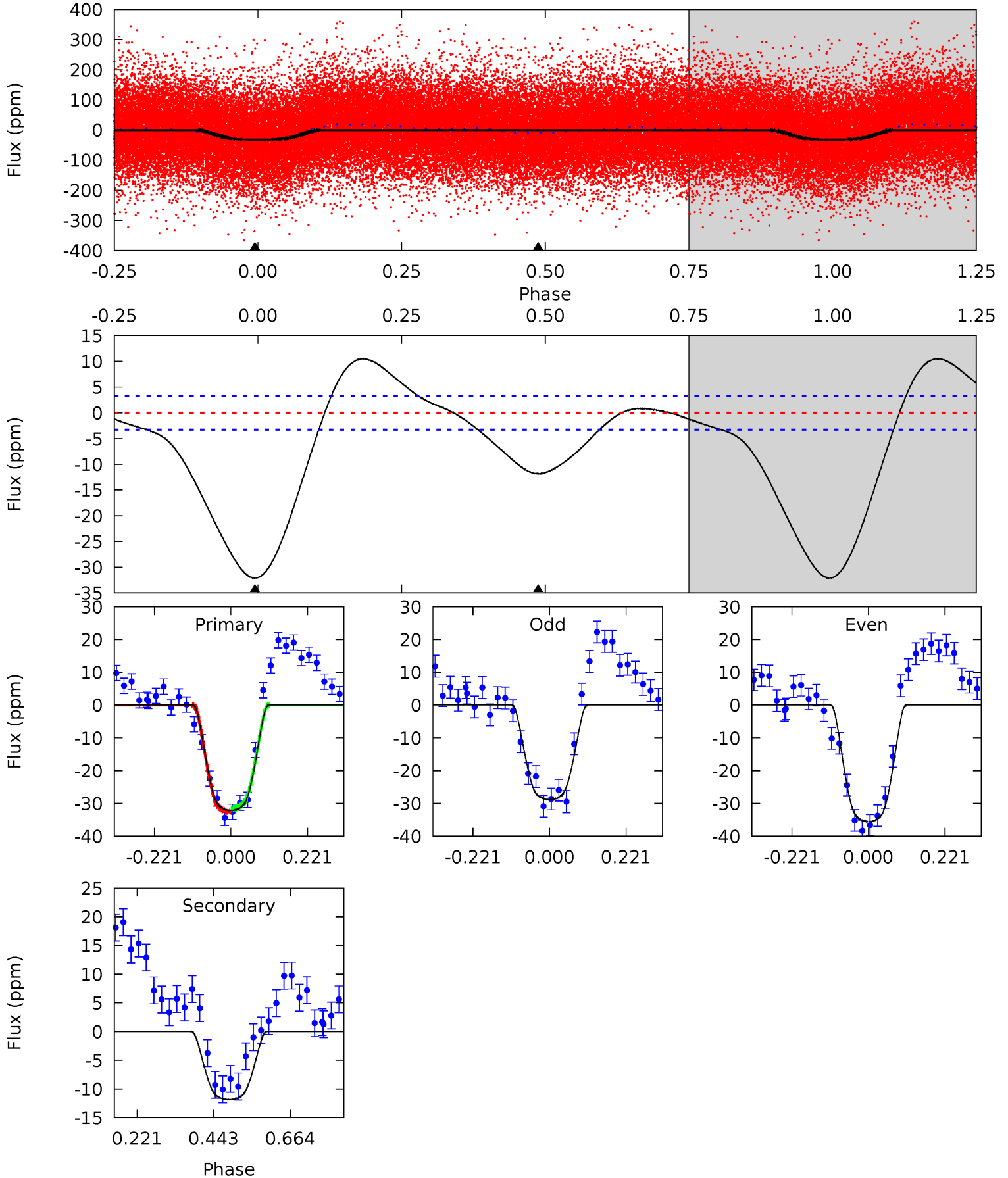
TCE 008552719-03 P= 1.546197 Days $T_0=132.481954$ (BKJD)



DV Model-Shift Uniqueness Test

008552719-03, P = 1.546228 Days, E = 130.937384 Days

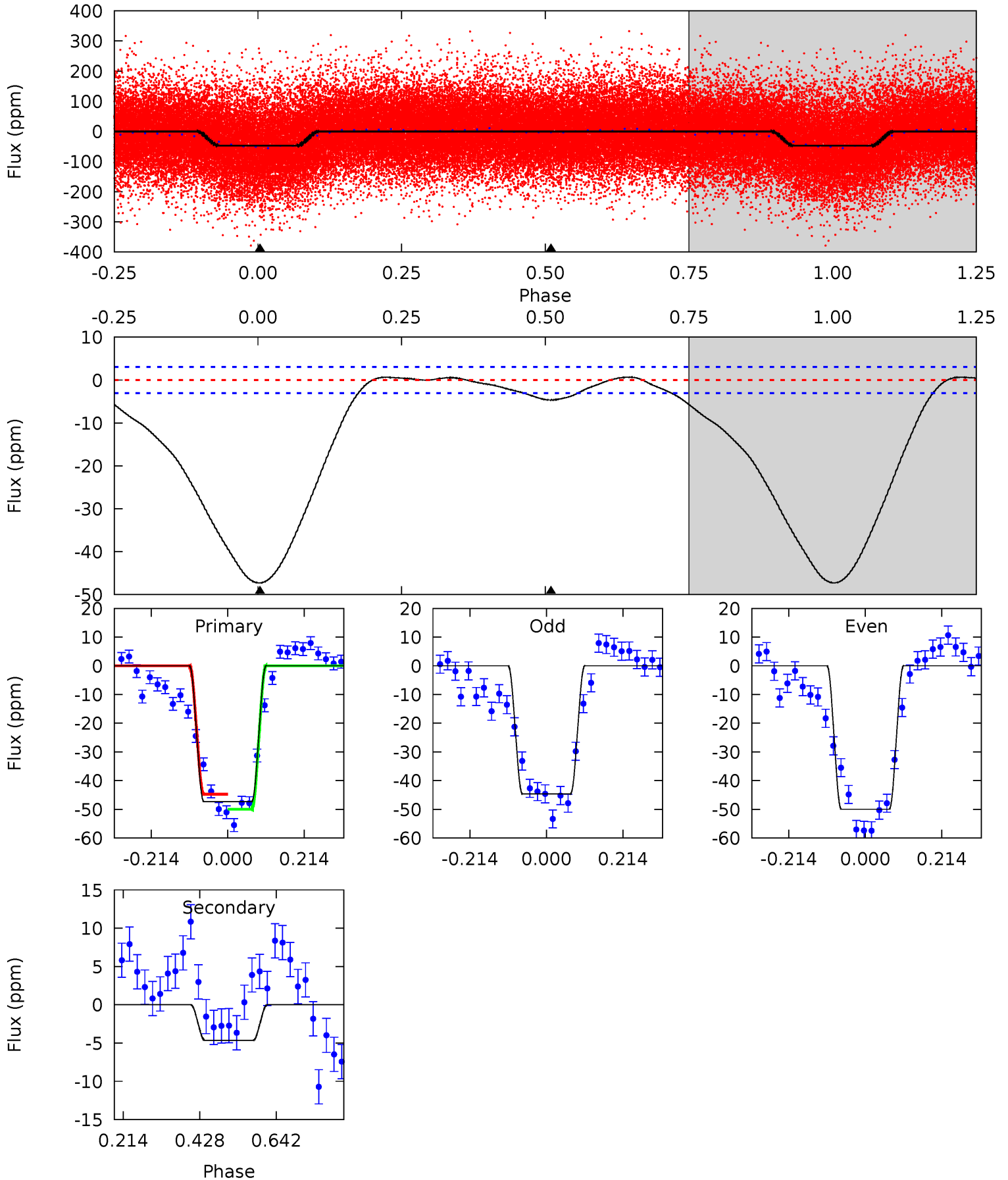
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
43.0	15.8	0	0	4.40	1.22	5.16	43.0	43.0	15.8	15.8	4.54	1.09	0.25	0.67



Alt Model-Shift Uniqueness Test

008552719-03, P = 1.546197 Days, E = 130.935757 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
67.9	6.69	0	0	4.40	1.24	5.20	67.9	67.9	6.69	6.69	3.78	1.08	0.01	3.77



Stellar Parameters For KIC 008552719

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5611^{+100}_{-112}	$4.388^{+0.080}_{-0.120}$	$0.360^{+0.100}_{-0.150}$	$1.073^{+0.173}_{-0.106}$	$1.026^{+0.057}_{-0.057}$	$1.170^{+0.391}_{-0.412}$
	+2%/-2%	+2%/-3%	+28%/-42%	+16%/-10%	+6%/-6%	+33%/-35%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 008552719-03 / KOI 1792.02

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-12 ± 1	$0.94^{+0.08}_{-0.07}$	2210^{+97}_{-75}	3951^{+99}_{-101}	$5.118^{+0.850}_{-0.832}$
Alt.	-5 ± 1	$0.84^{+0.08}_{-0.06}$	2206^{+106}_{-74}	3480^{+115}_{-117}	$2.557^{+0.606}_{-0.574}$

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 $A_{obs} \gg 1.0$

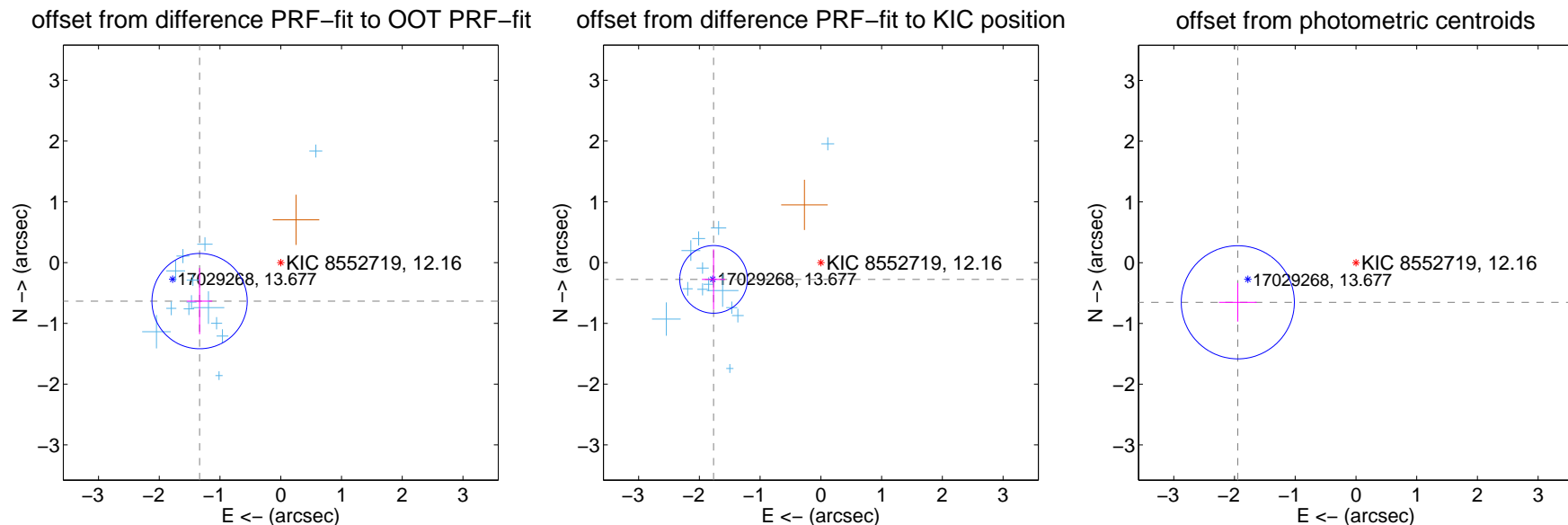
DV Centroid Data

Supplemental centroid analysis for 008552719-03. Kepler magnitude: 12.16. Transit SNR 22.26

There are 13 quarters with good PRF difference image offsets

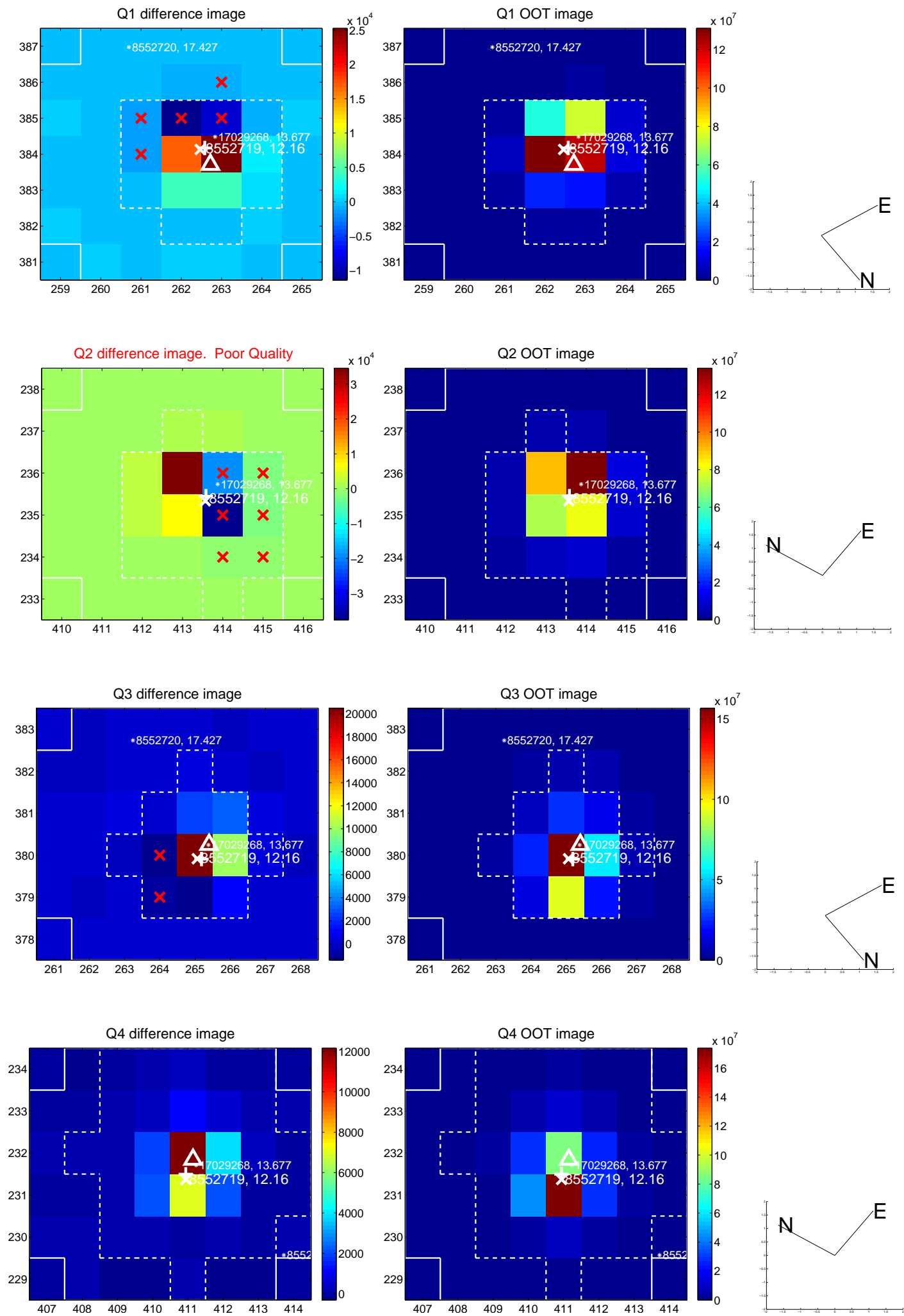
The direct PRF centroid is offset from the target star catalog position by about 0.58 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.479 ± 0.261	5.66	1.336 ± 0.208	-0.634 ± 0.544
PRF-fit source offset from KIC position	1.788 ± 0.186	9.63	1.767 ± 0.190	-0.276 ± 0.495
photometric centroid source offset	2.05 ± 0.31	6.61	1.95 ± 0.31	-0.65 ± 0.32

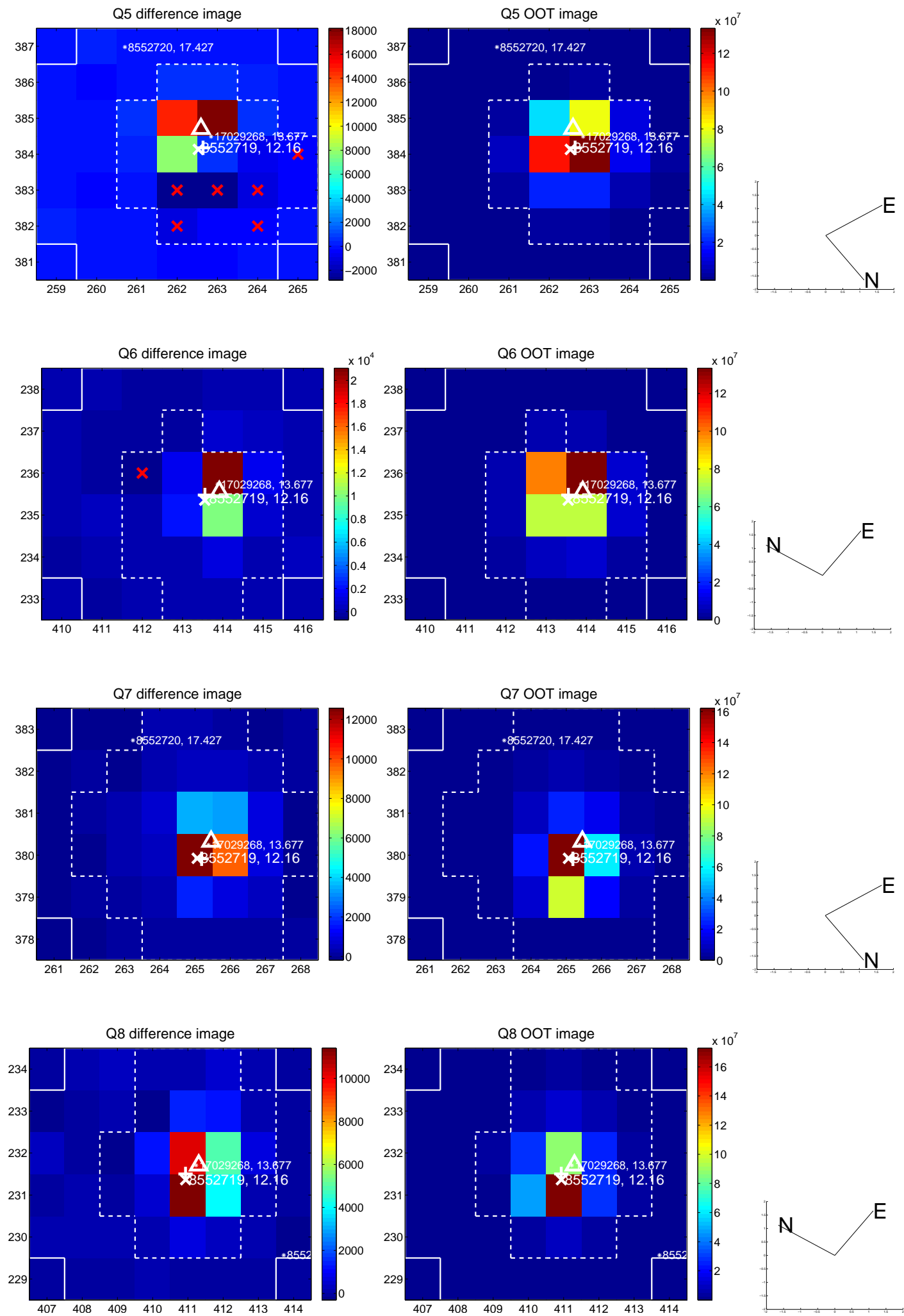


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

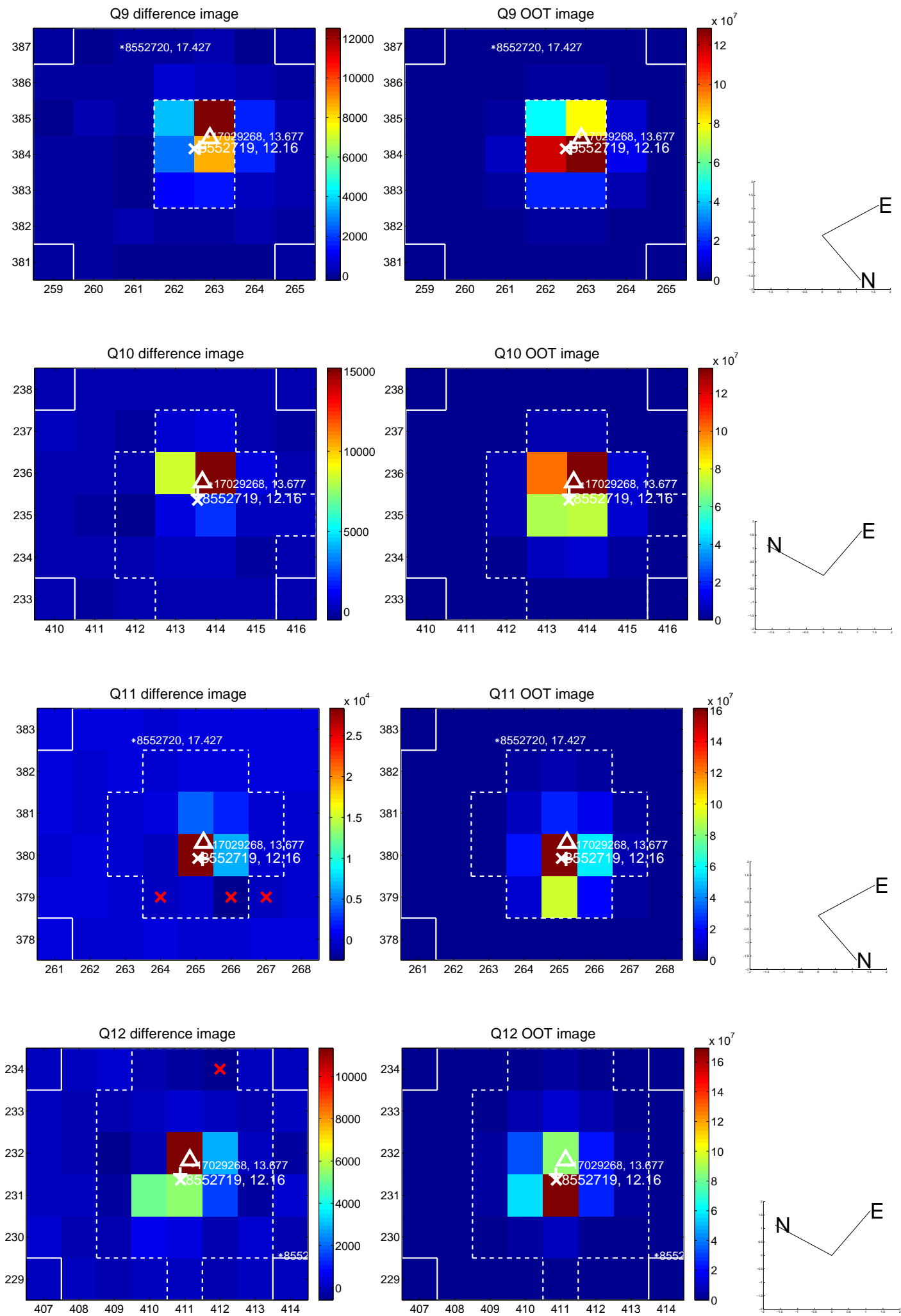
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



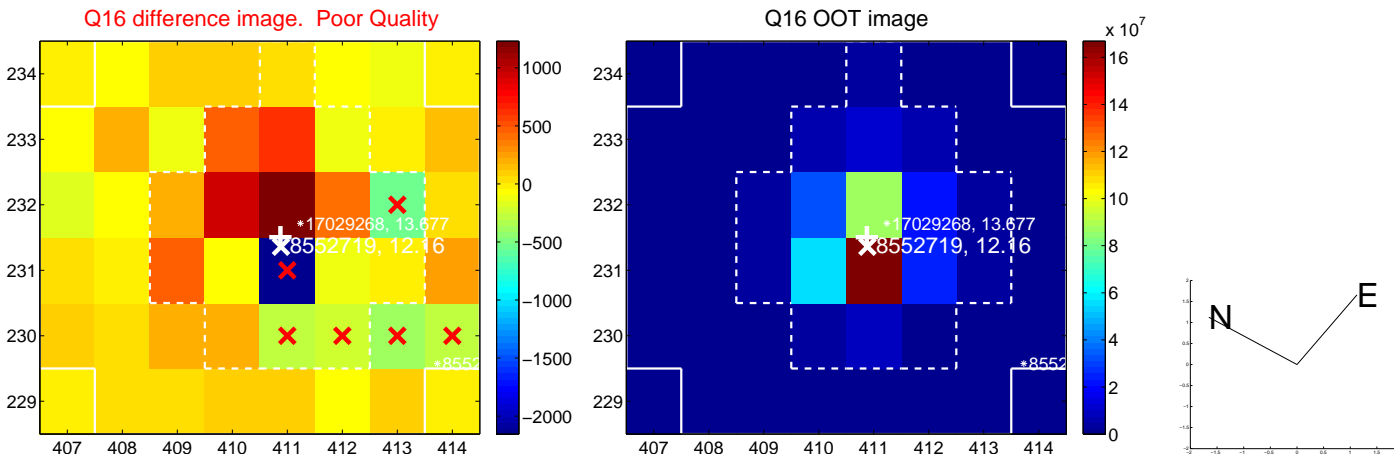
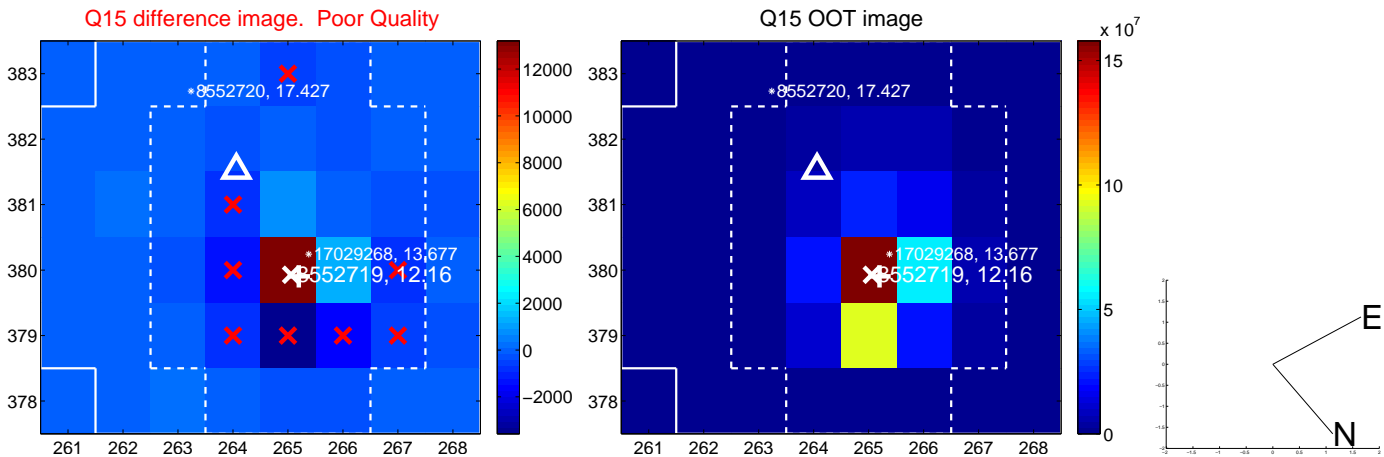
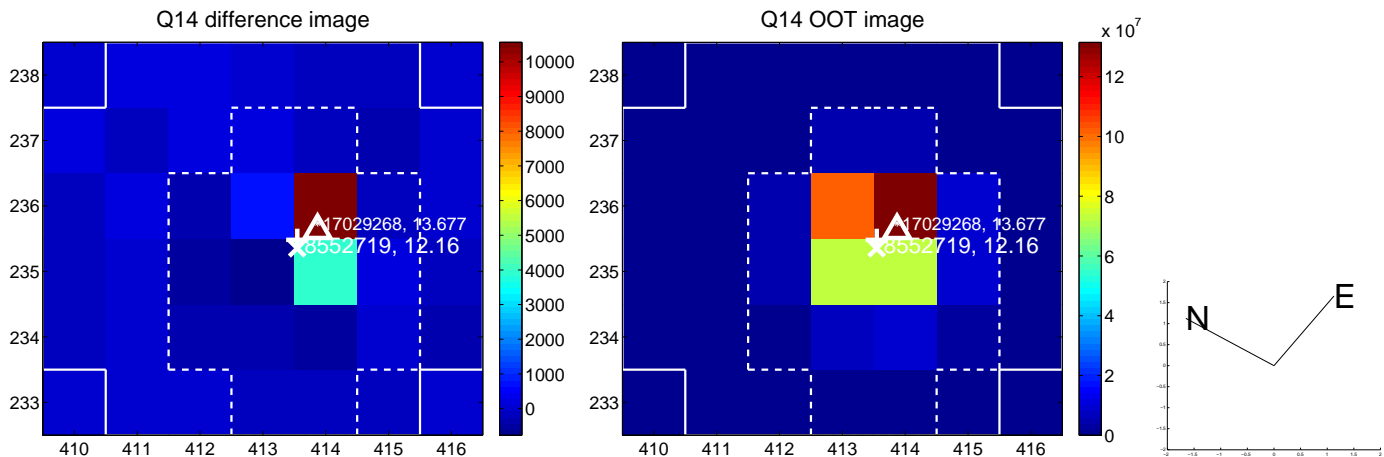
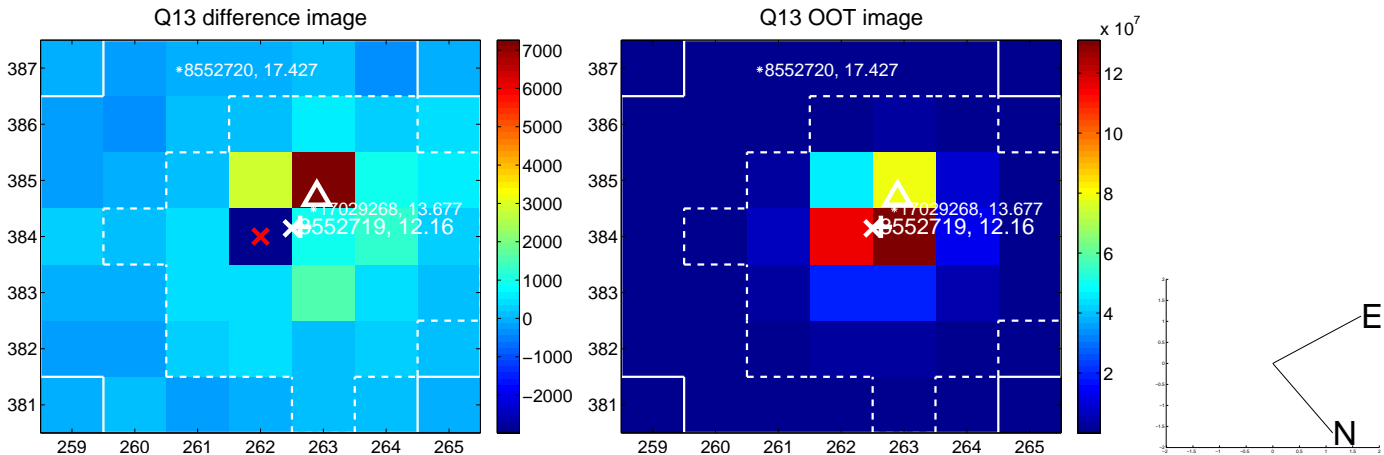
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



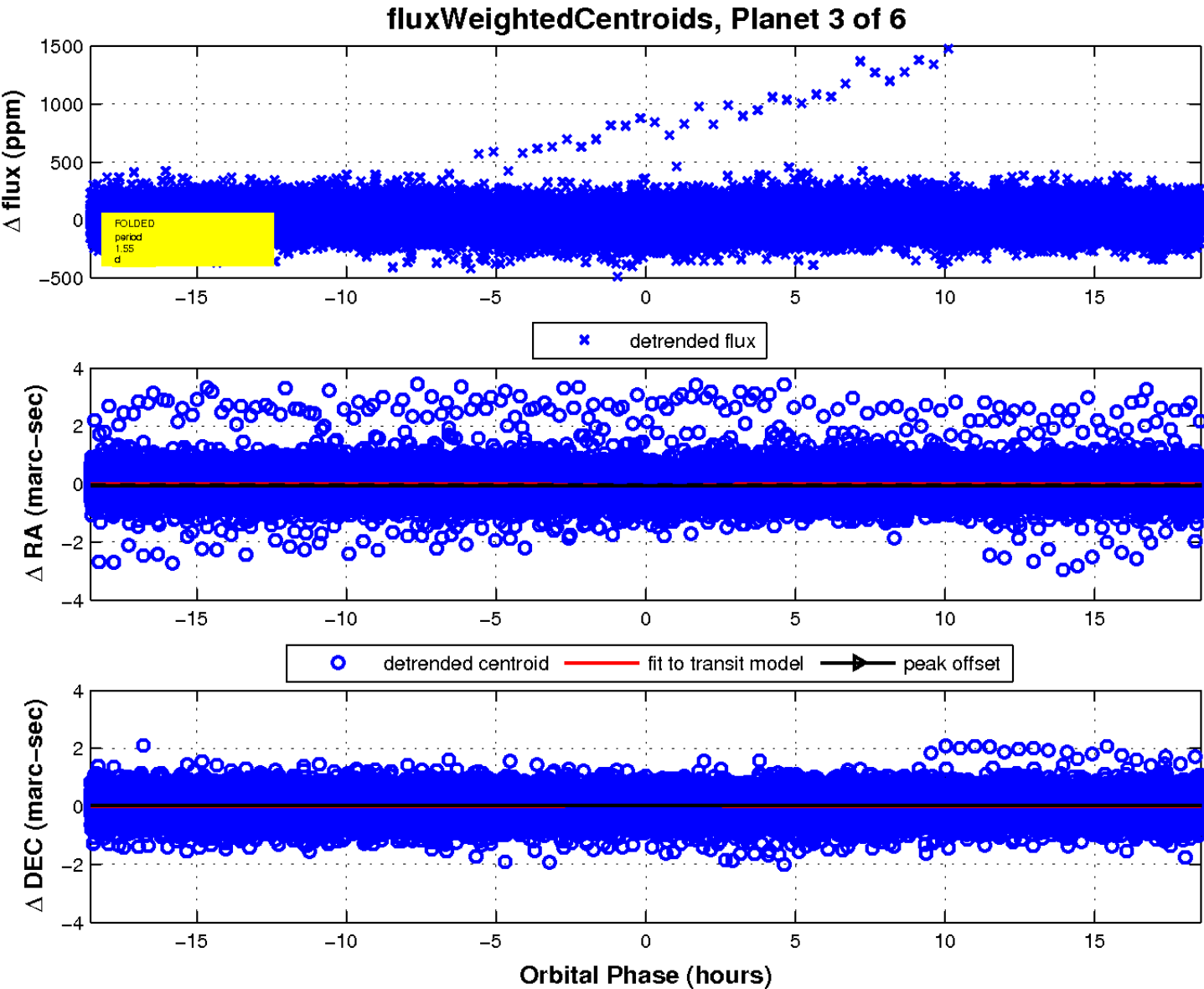
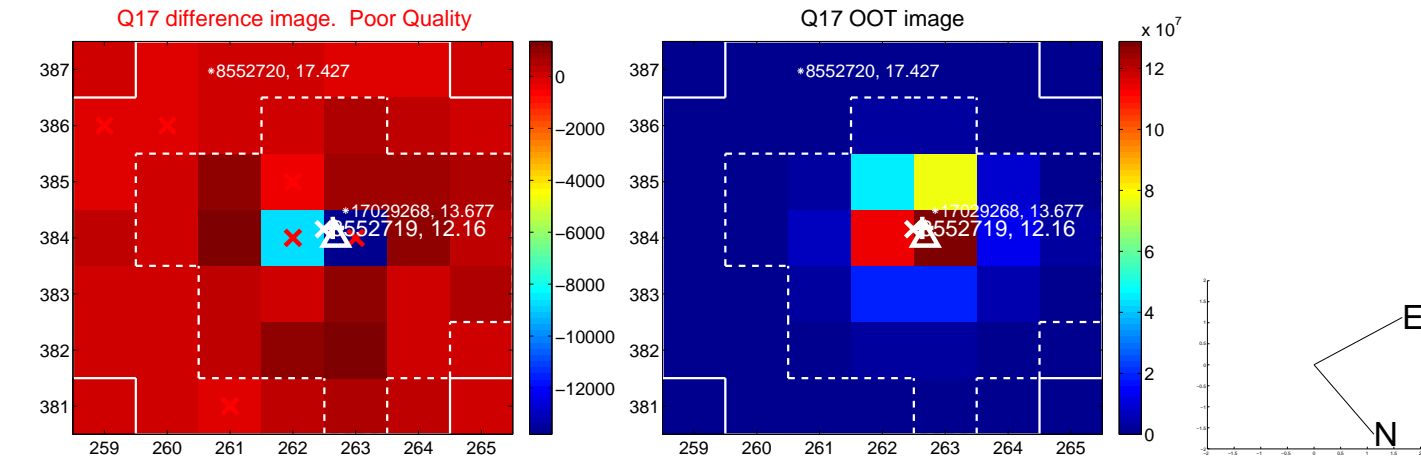
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



KIC 008552719

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})
008552719-01	OBS	1792.01	88.406788	176.273628	1716.6	12.432	153.9	160.6	1.07	5611	4.63	6.66
008552719-02	OBS	1792.03	9.109676	133.066227	132.1	5.583	30.5	34.1	1.07	5611	1.50	137.86
008552719-03	OBS	1792.02	1.546228	132.483612	34.6	7.785	18.8	22.3	1.07	5611	0.93	1466.98
008552719-04	OBS	No	123.841502	220.856241	228.2	6.915	13.4	11.1	1.07	5611	2.10	4.25
008552719-05	OBS	No	208.590876	215.658896	119.6	15.462	10.5	7.9	1.07	5611	1.41	2.12
008552719-06	OBS	No	97.053580	214.177885	100.9	6.172	8.3	8.0	1.07	5611	1.20	5.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008552719-01	OBS	PC	0.93	0	0	0	0	CENT_KIC_POS
008552719-02	OBS	PC	0.99	0	0	0	0	CENT_KIC_POS
008552719-03	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_KIC_POS
008552719-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_KIC_POS
008552719-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008552719-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_KIC_POS

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 008552719-04

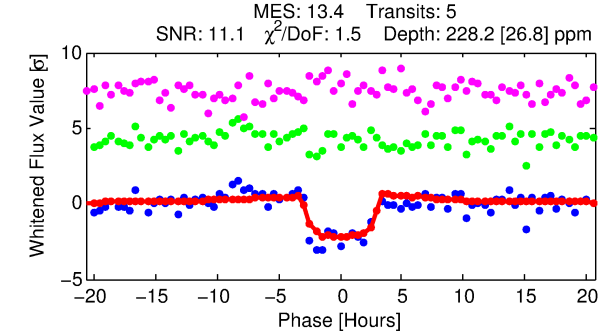
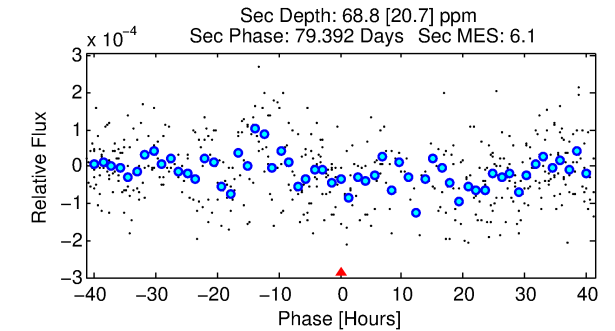
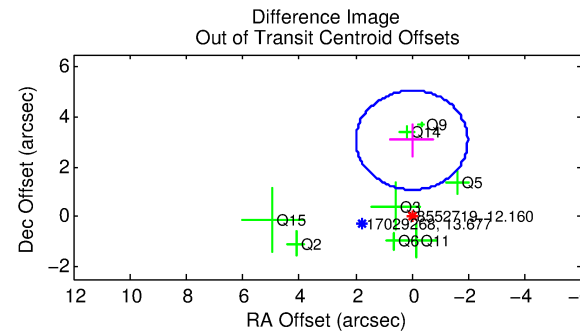
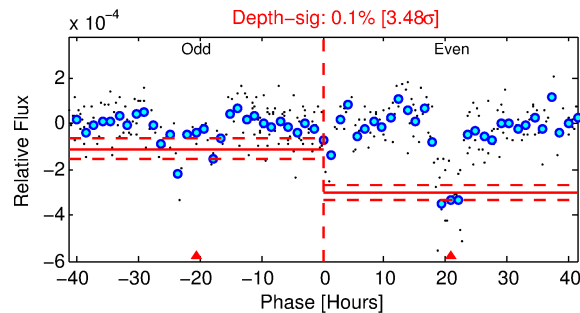
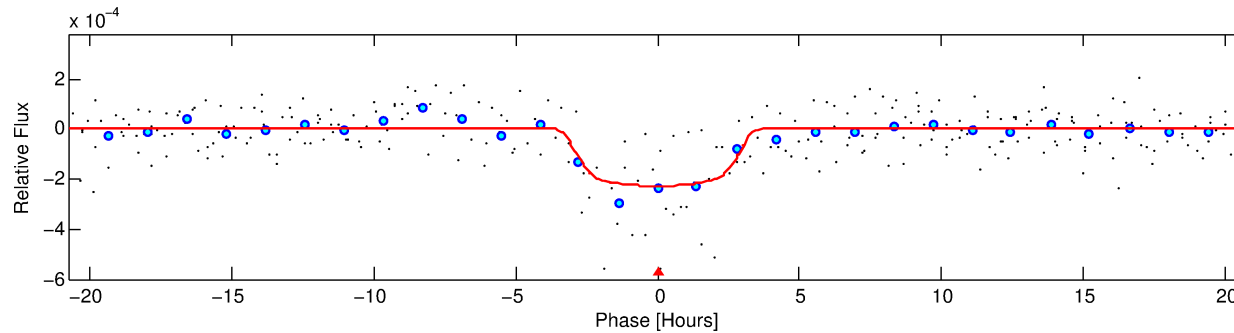
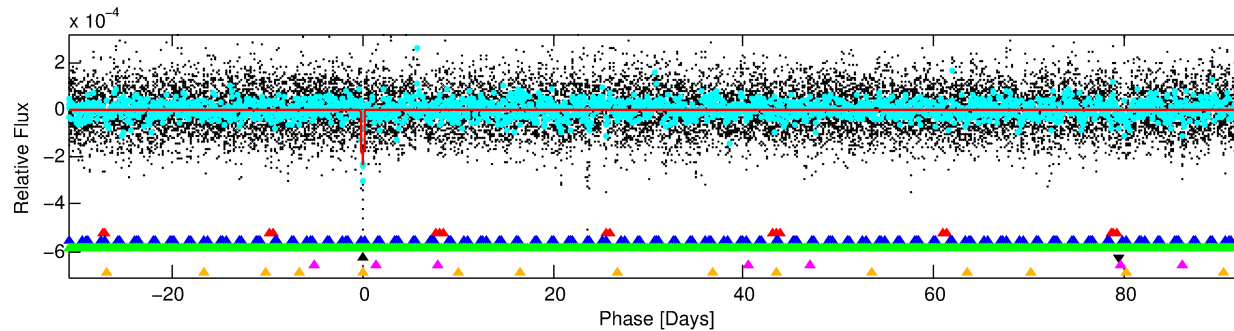
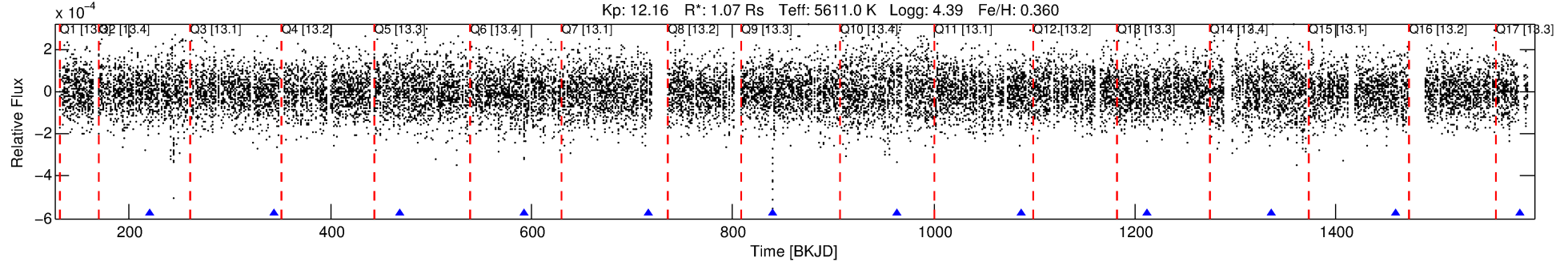
No Significant Match Found

DV One-Page Summary

KIC: 8552719 Candidate: 4 of 6 Period: 123.842 d

KOI: K01792 Corr: No Ephemeris Match

Kp: 12.16 R*: 1.07 Rs Teff: 5611.0 K Logg: 4.39 Fe/H: 0.360



DV Fit Results:

Period = 123.84150 [0.00636] d
Epoch = 220.8562 [0.0214] BKJD
Rp/R* = 0.0179 [0.0019]
a/R* = 49.17 [19.50]
b = 0.95 [0.04]
Seff = 4.25 [0.97]
Teq = 366 [21] K
Rp = 2.10 [0.40] Re
a = 0.4905 [0.0694] AU
Ag = 2068.79 [879.90] [2.35σ]
Teffp = 3817 [359] K [9.59σ]

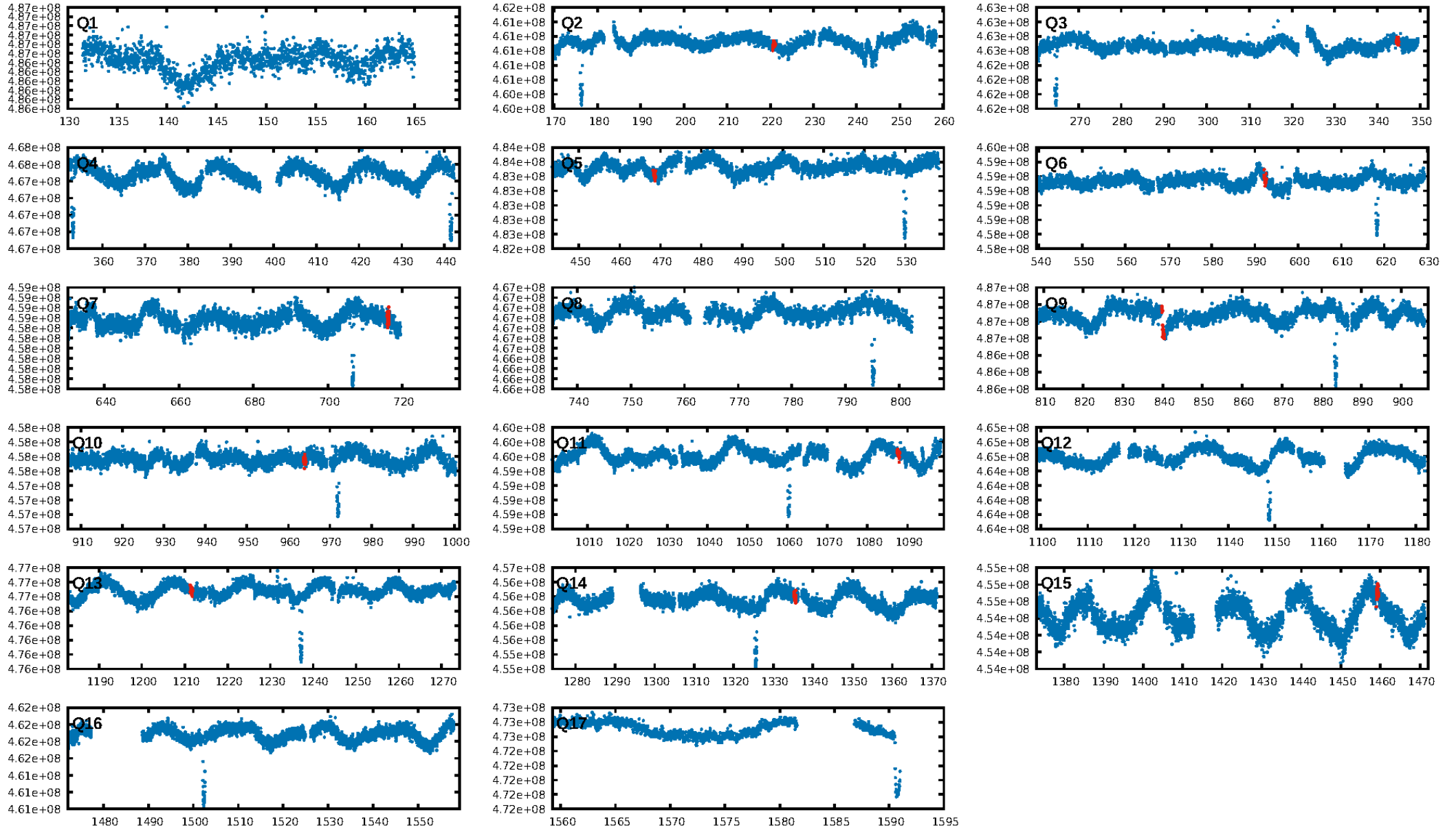
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [69.36σ]
LongPeriod-sig: 100.0% [120.09σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 93.1%
Bootstrap-pfa: 1.83e-22
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: -10.68
Centroid-sig: 7.3%
Centroid-so: 1.029 arcsec [2.33σ]
OotOffset-rm: 3.061 arcsec [4.63σ]
KicOffset-rm: 3.358 arcsec [5.60σ]
OotOffset-st: 3/3/0/2 [8]
KicOffset-st: 3/3/0/2 [8]
DiffImageQuality-fgm: 0.50 [4/8]
DiffImageOverlap-fno: 0.00 [0/11]

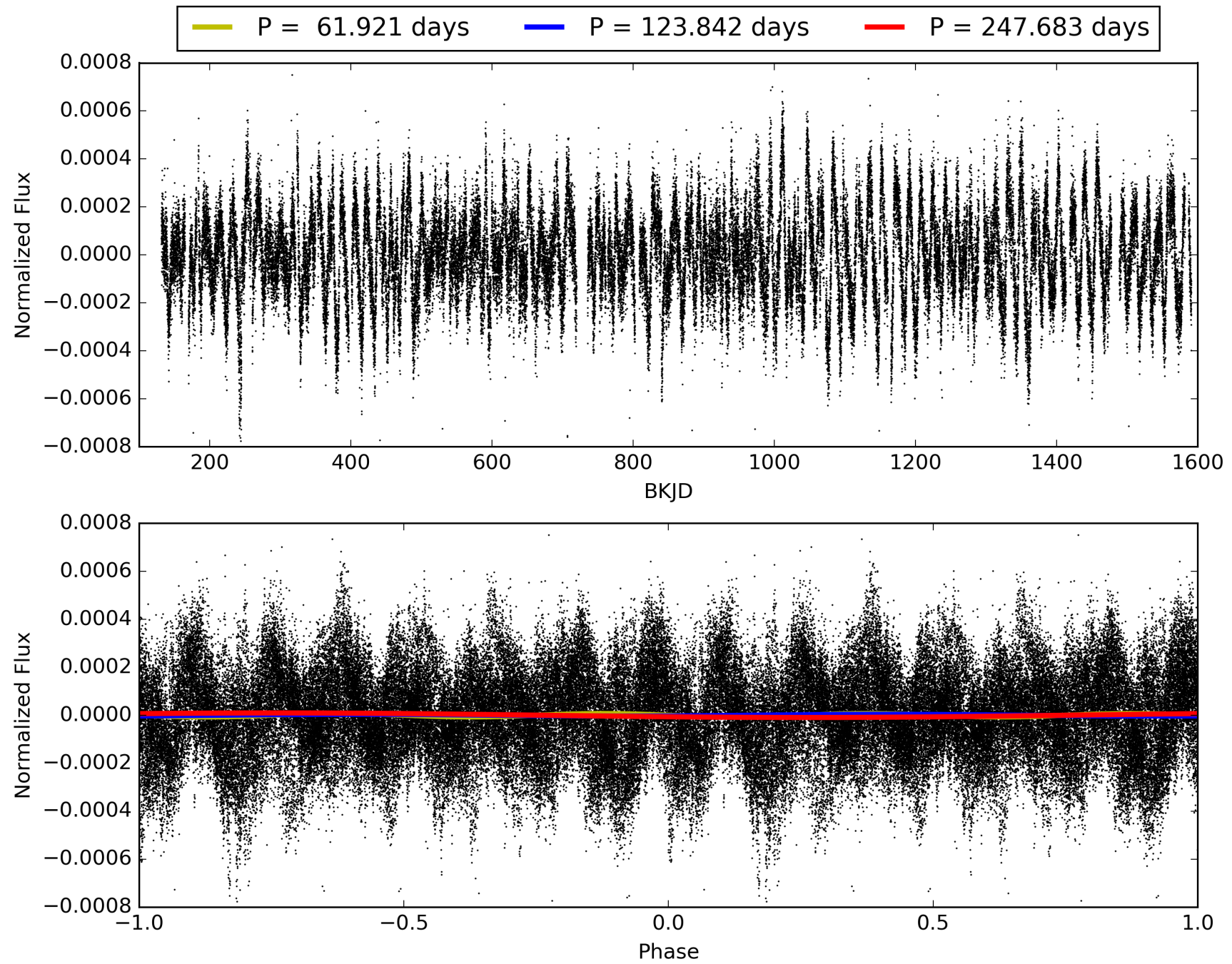
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:53:08 Z

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

TCE 008552719-04, PDC Light Curves

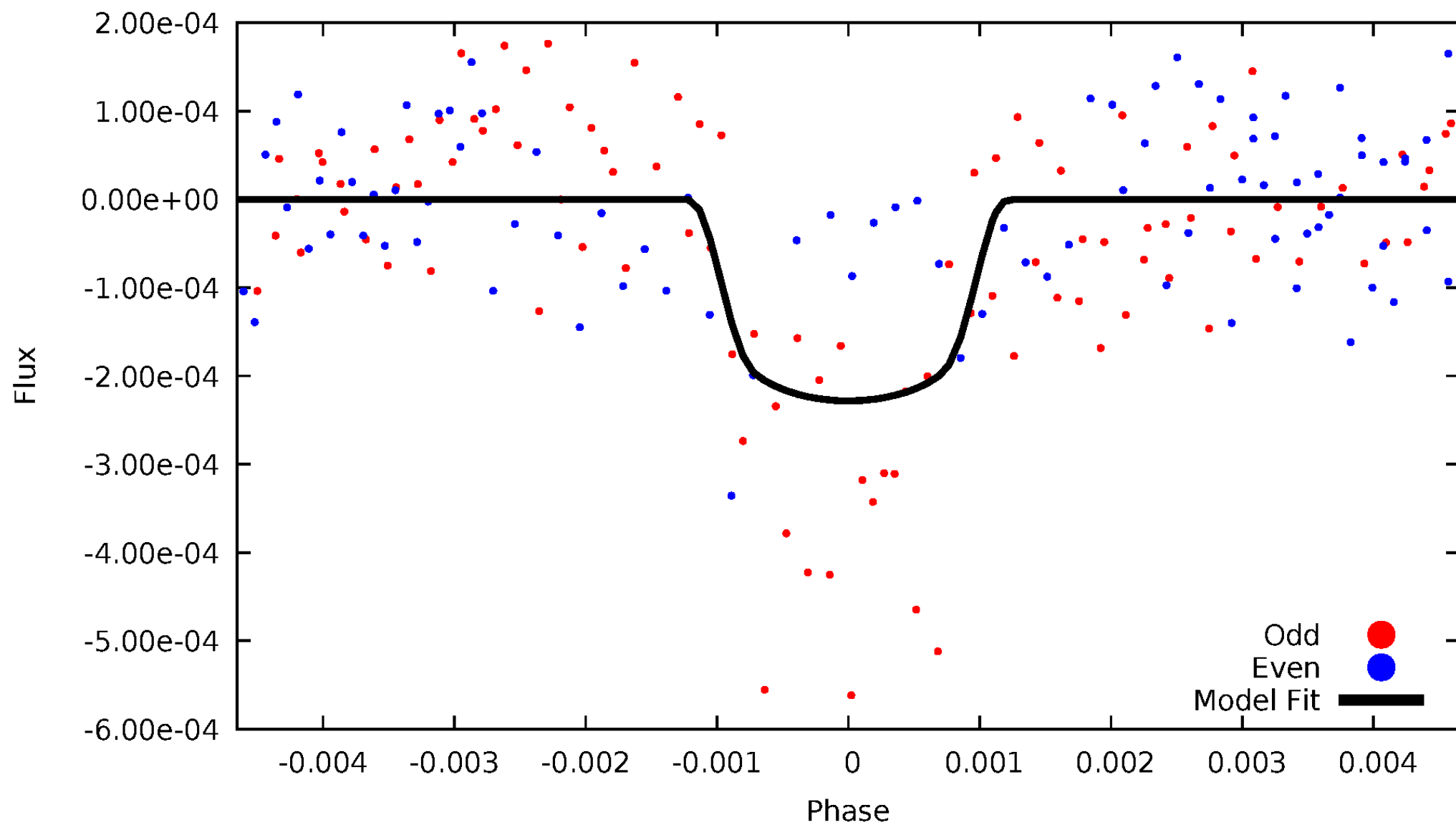


TCE 008552719-04



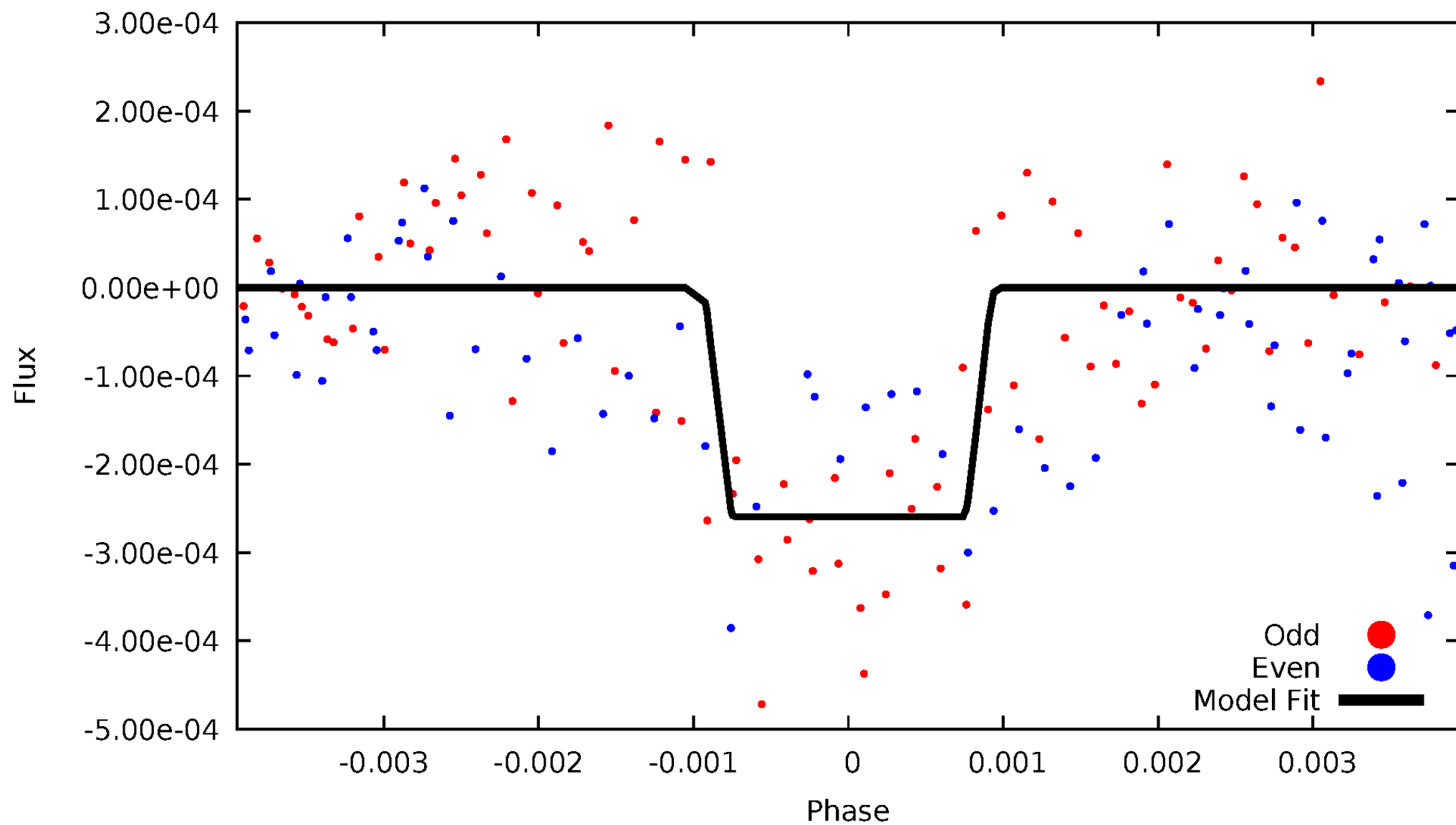
DV Odd/Even

TCE 008552719-04



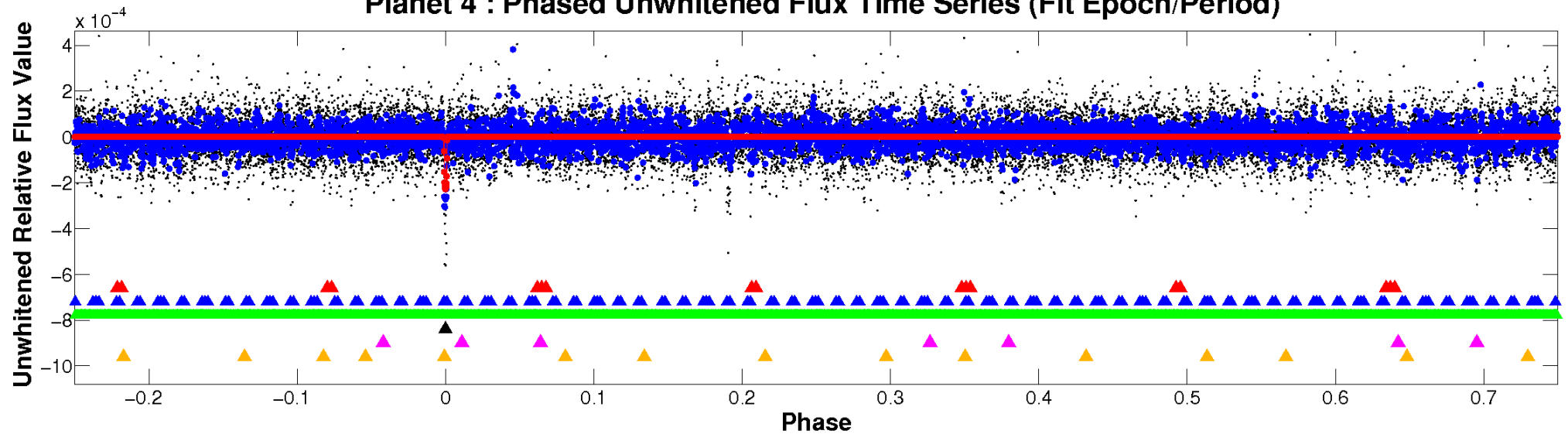
ALT Odd/Even

TCE 008552719-04

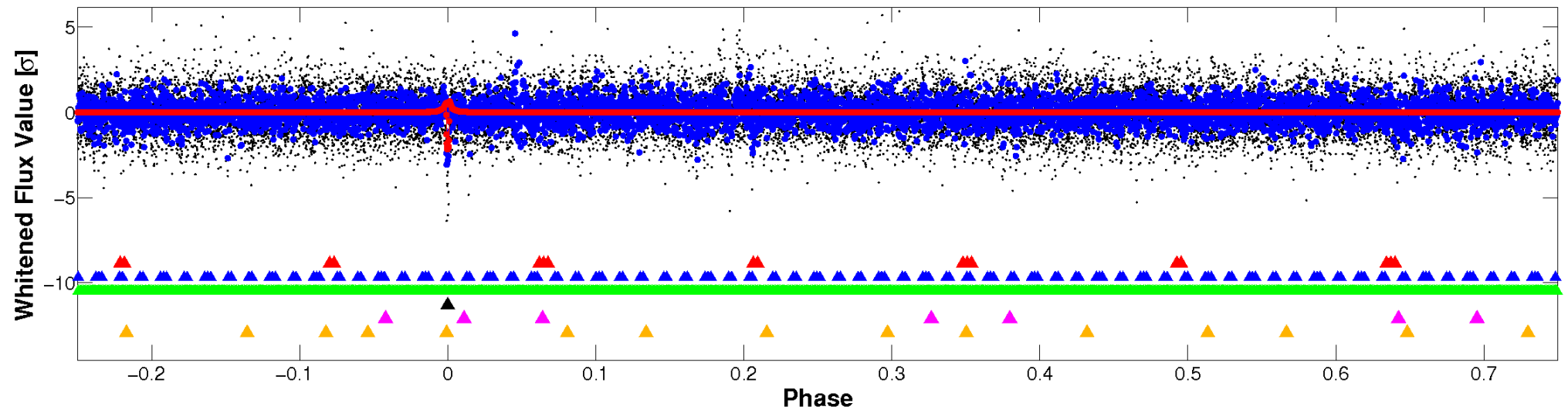


Non-Whitened Vs. Whitened Light Curve

Planet 4 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

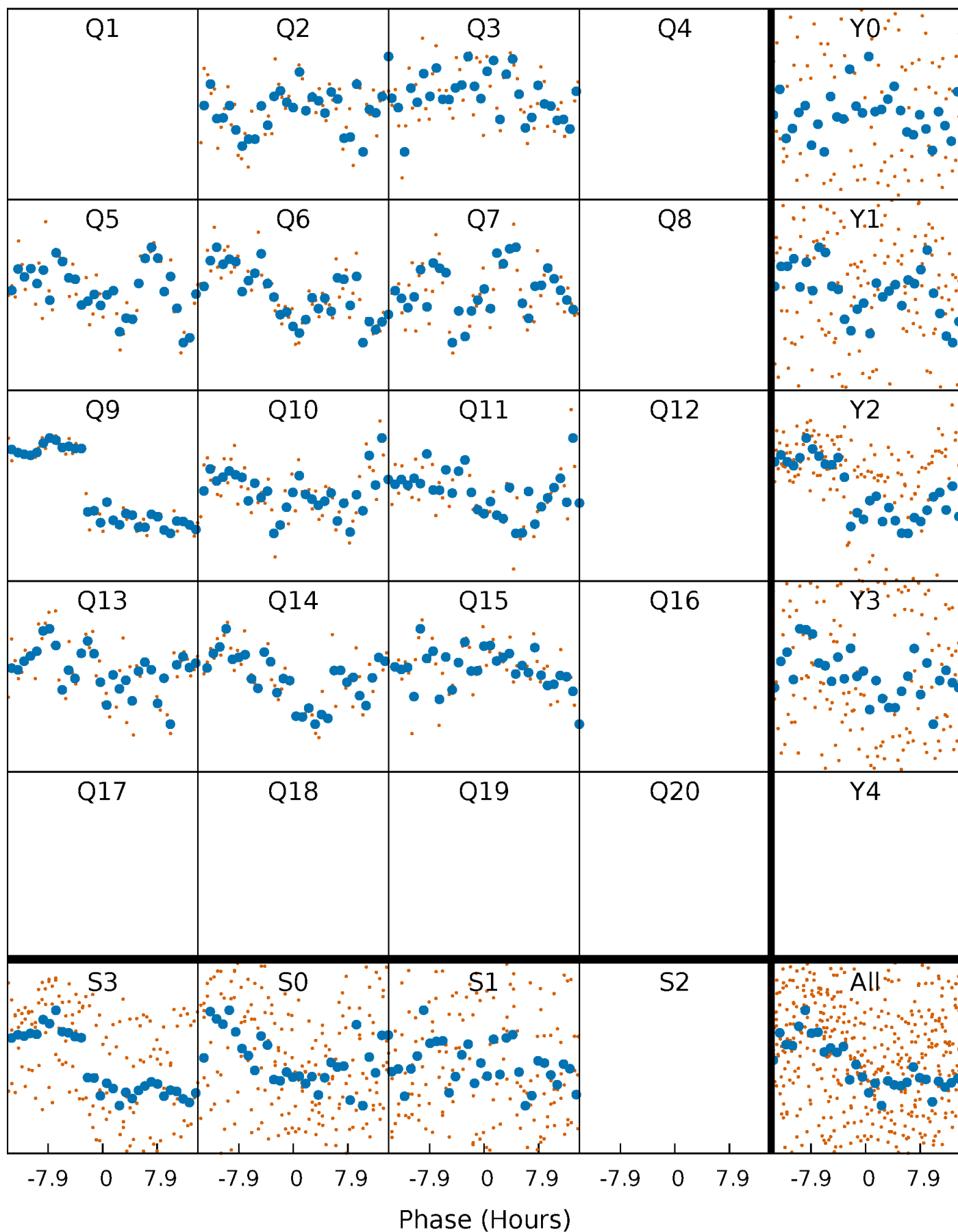


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



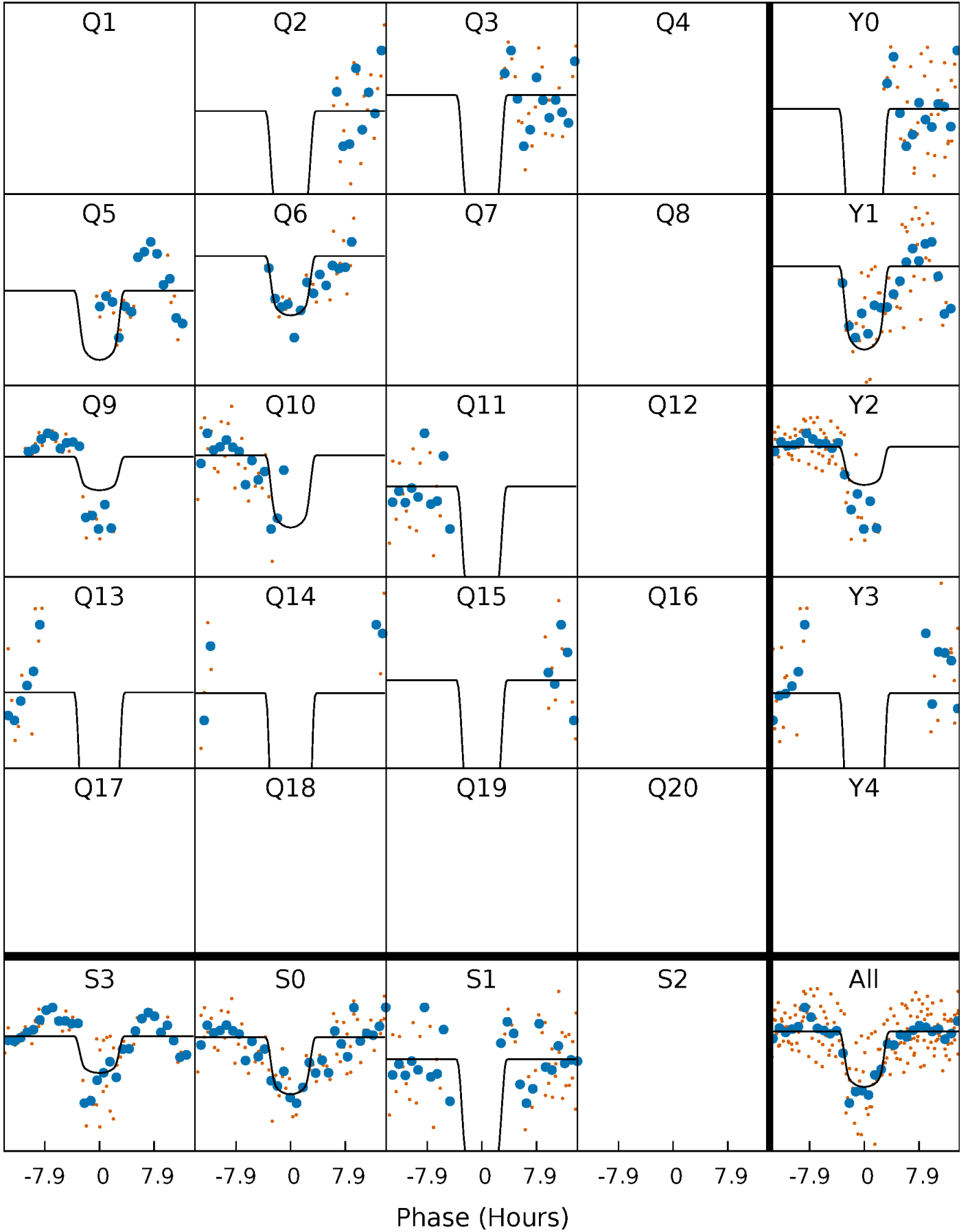
PDC Quarter-Phased Transit Curves

TCE 008552719-04 P=123.841502 Days $T_0=220.856241$ (BKJD)



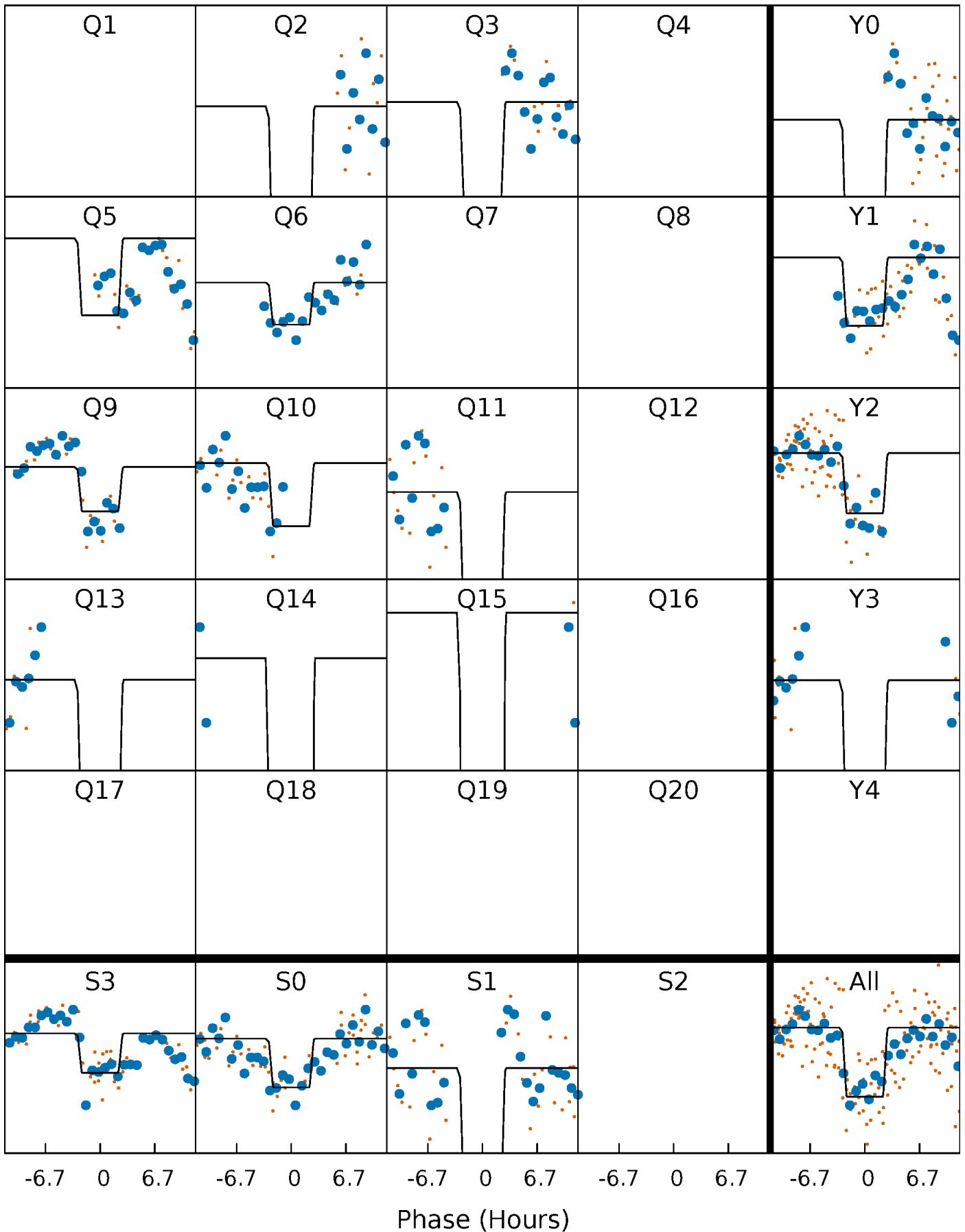
DV Quarter-Phased Transit Curves

TCE 008552719-04 P=123.841502 Days $T_0=220.856241$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

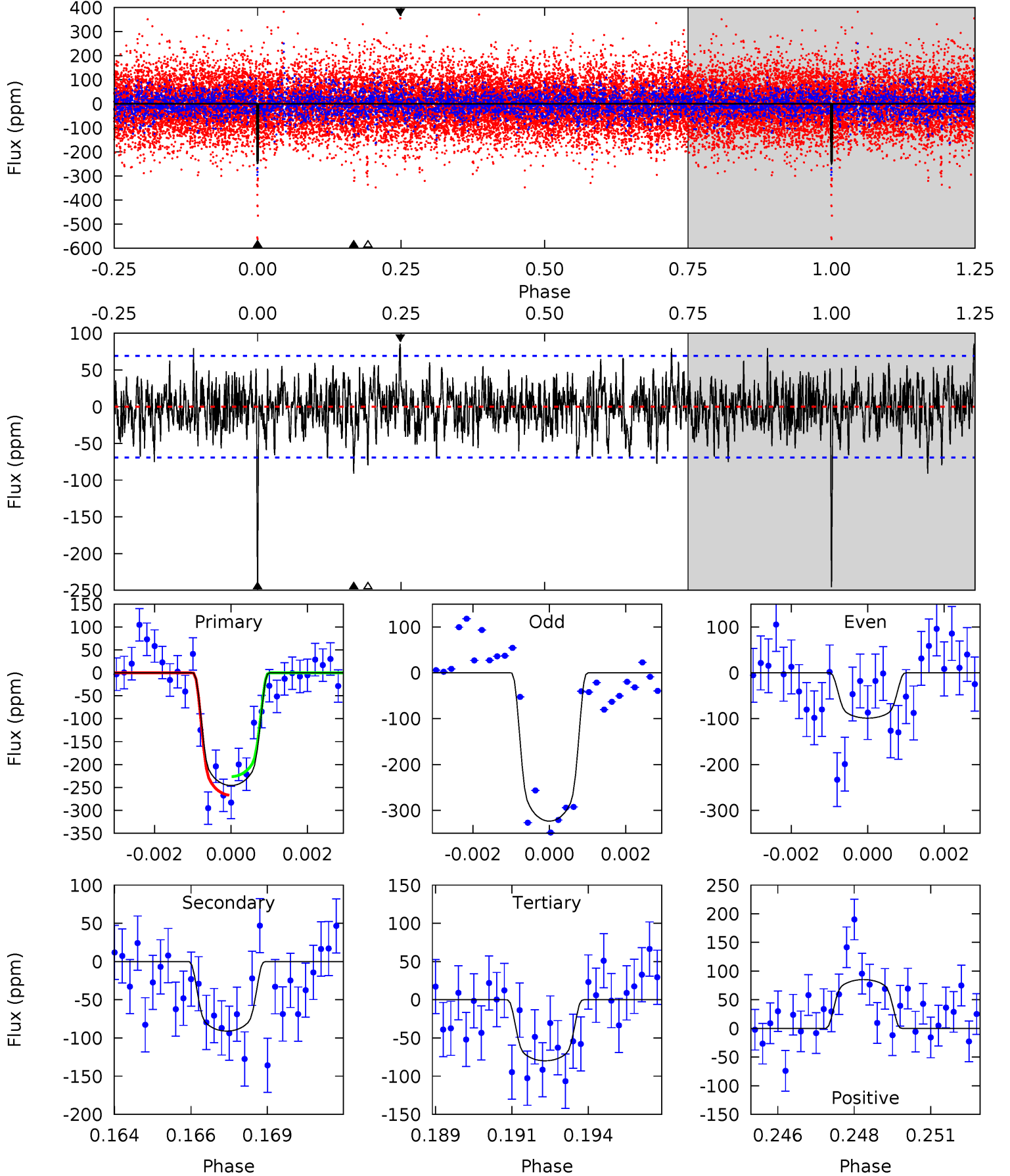
TCE 008552719-04 P=123.834899 Days $T_0=220.879555$ (BKJD)



DV Model-Shift Uniqueness Test

008552719-04, P = 123.841502 Days, E = 97.014739 Days

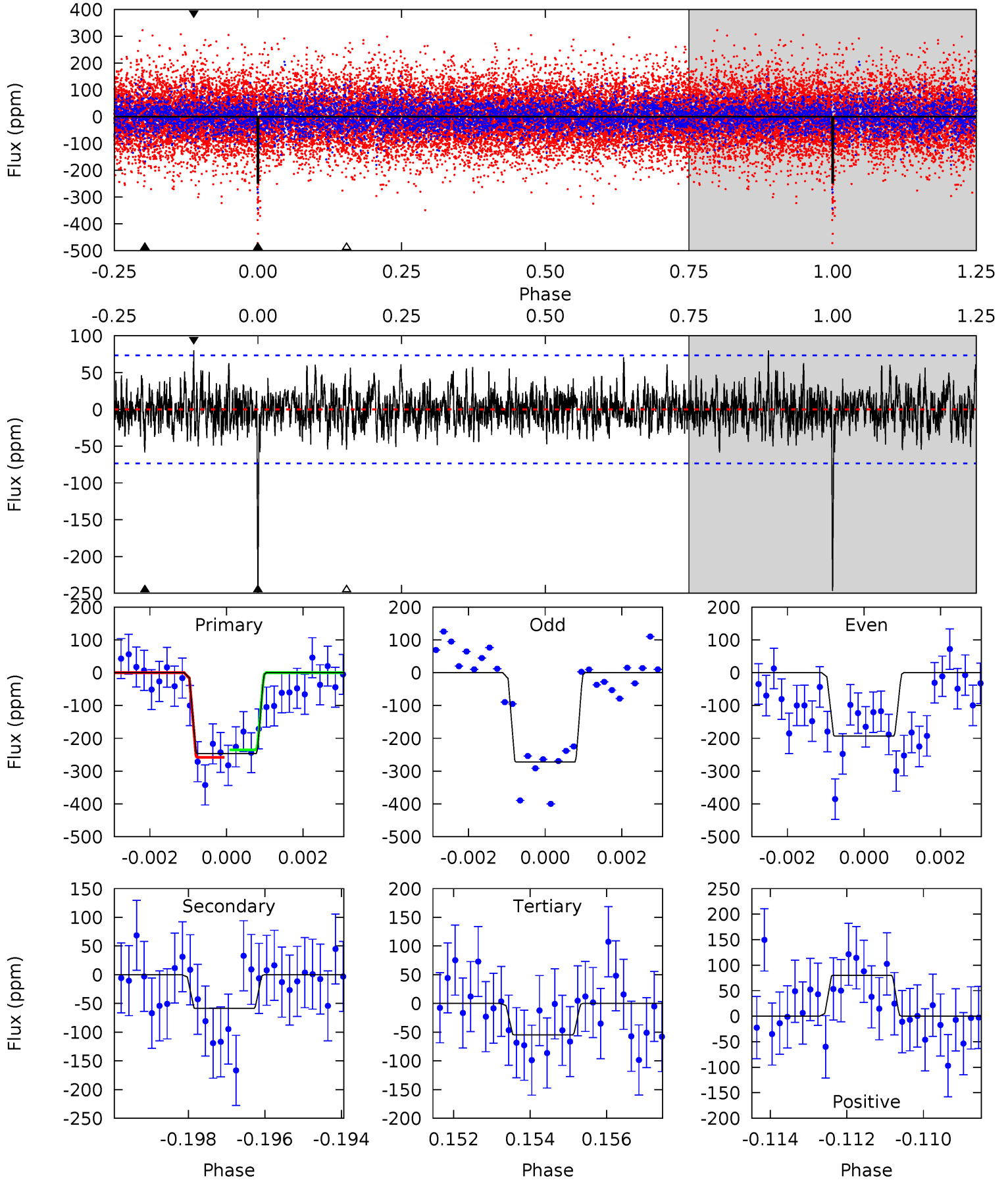
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.8	6.96	6.11	6.51	5.29	3.03	1.85	12.7	12.3	0.85	0.45	8.02	0.80	0.26	1.55



Alt Model-Shift Uniqueness Test

008552719-04, $P = 123.834899$ Days, $E = 97.044656$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.9	4.26	3.96	5.81	5.34	3.11	1.37	14.0	12.1	0.29	-1.55	2.67	0.97	0.24	0.81



Stellar Parameters For KIC 008552719

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5611^{+100}_{-112}	$4.388^{+0.080}_{-0.120}$	$0.360^{+0.100}_{-0.150}$	$1.073^{+0.173}_{-0.106}$	$1.026^{+0.057}_{-0.057}$	$1.170^{+0.391}_{-0.412}$
	+2%/-2%	+2%/-3%	+28%/-42%	+16%/-10%	+6%/-6%	+33%/-35%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 008552719-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-91 ± 13	$2.14^{+0.30}_{-0.25}$	514^{+22}_{-18}	4286^{+243}_{-186}	2600^{+908}_{-657}
Alt.	-59 ± 14	$1.92^{+0.27}_{-0.24}$	514^{+20}_{-20}	4126^{+244}_{-275}	2071^{+883}_{-681}

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

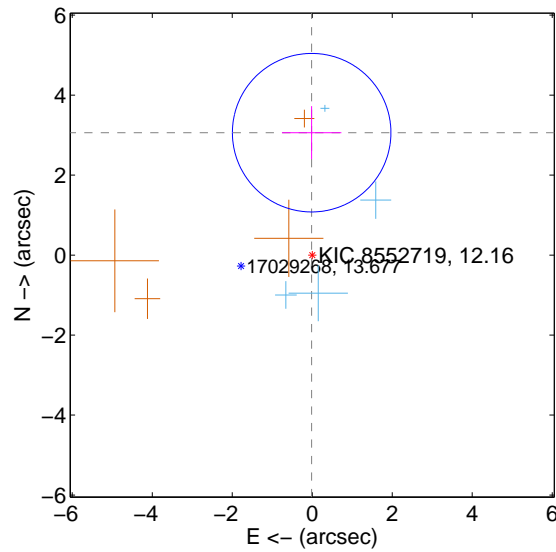
Supplemental centroid analysis for 008552719-04. Kepler magnitude: 12.16. Transit SNR 11.14

There are 4 quarters with good PRF difference image offsets

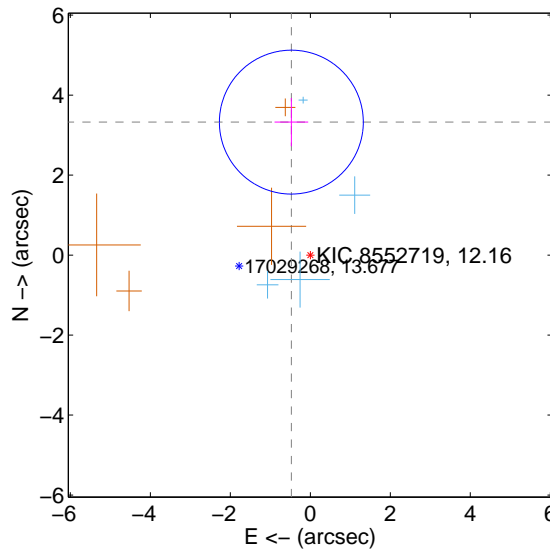
The direct PRF centroid is offset from the target star catalog position by about 0.57 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.061 ± 0.661	4.63	0.014 ± 0.743	3.061 ± 0.662
PRF-fit source offset from KIC position	3.358 ± 0.600	5.60	0.474 ± 0.421	3.325 ± 0.603
photometric centroid source offset	1.03 ± 0.44	2.33	0.70 ± 0.43	0.75 ± 0.45

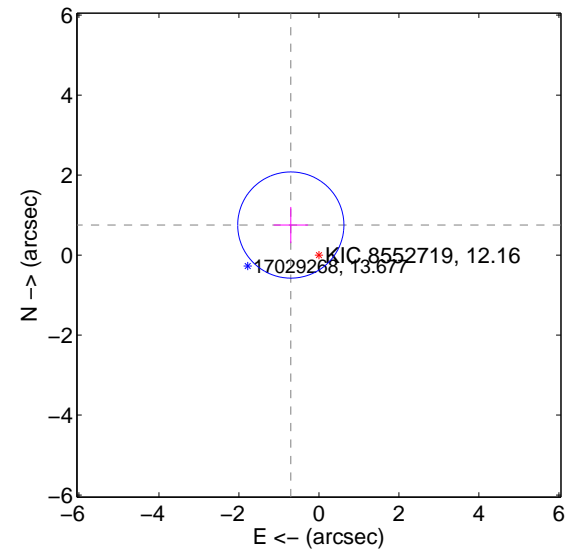
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

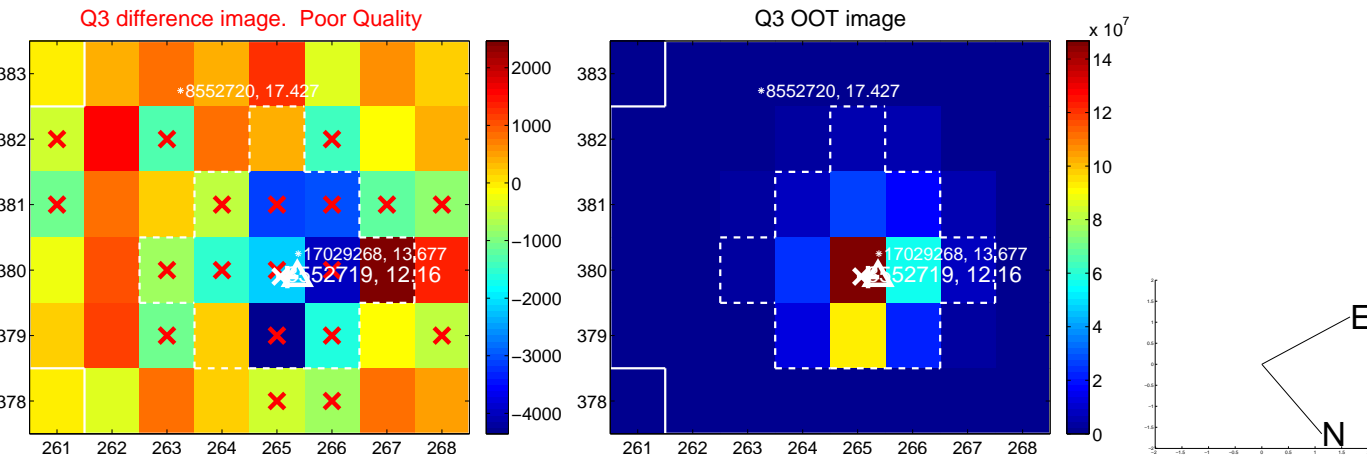
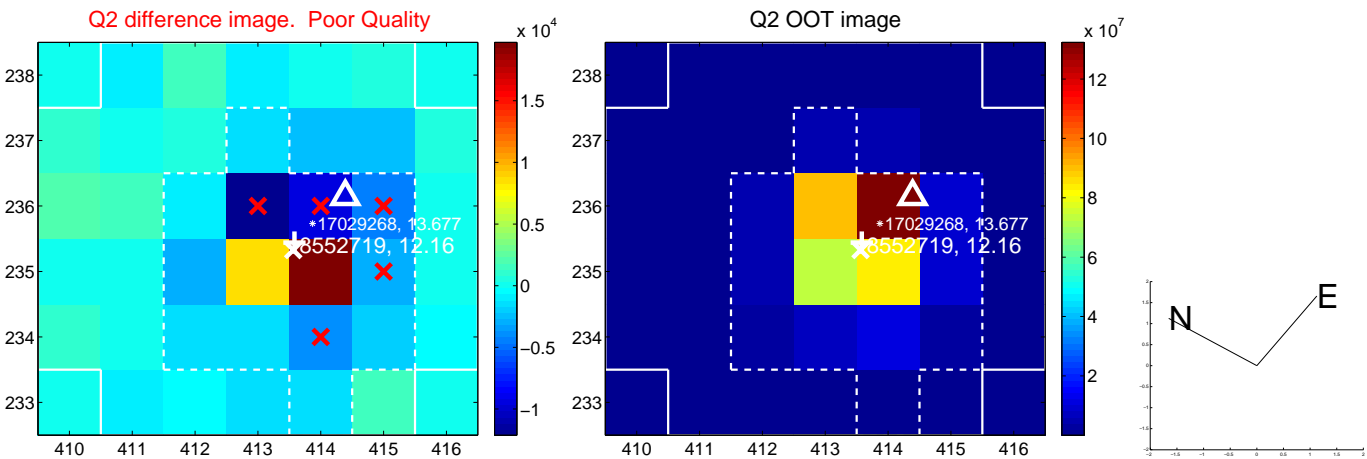


offset from photometric centroids

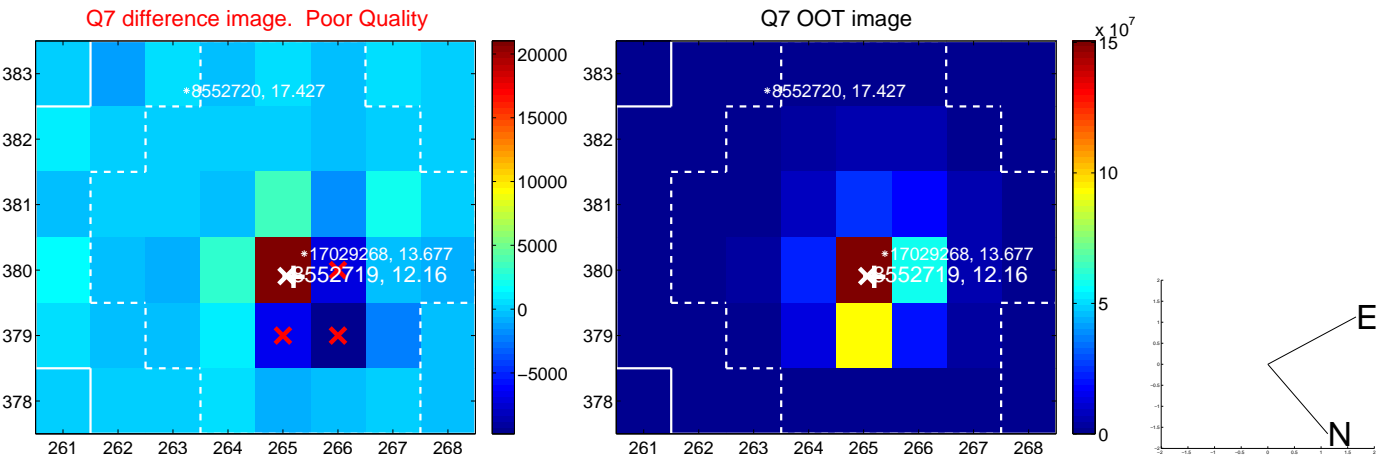
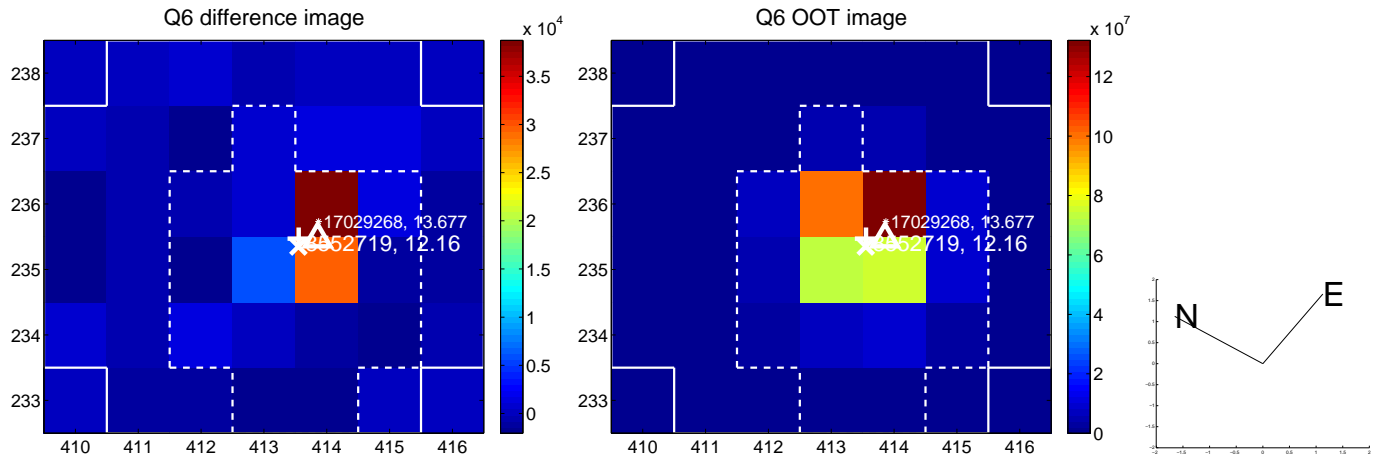
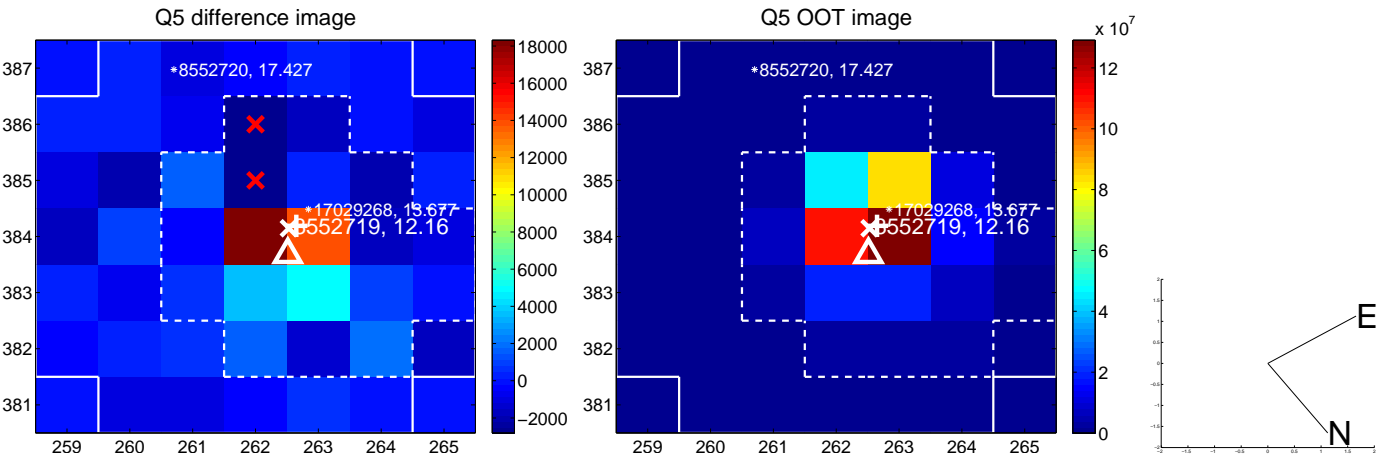


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

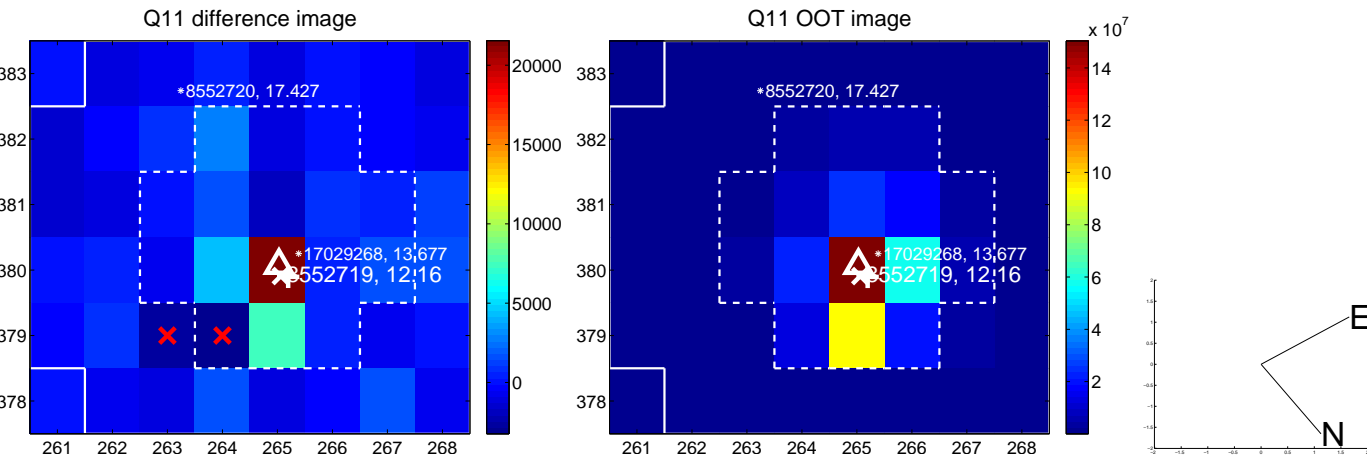
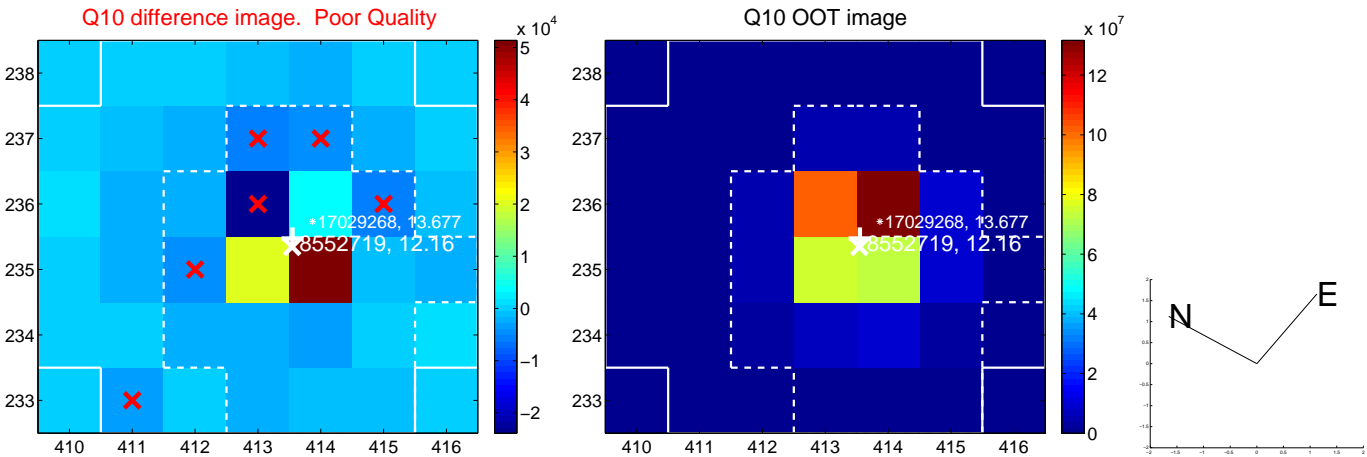
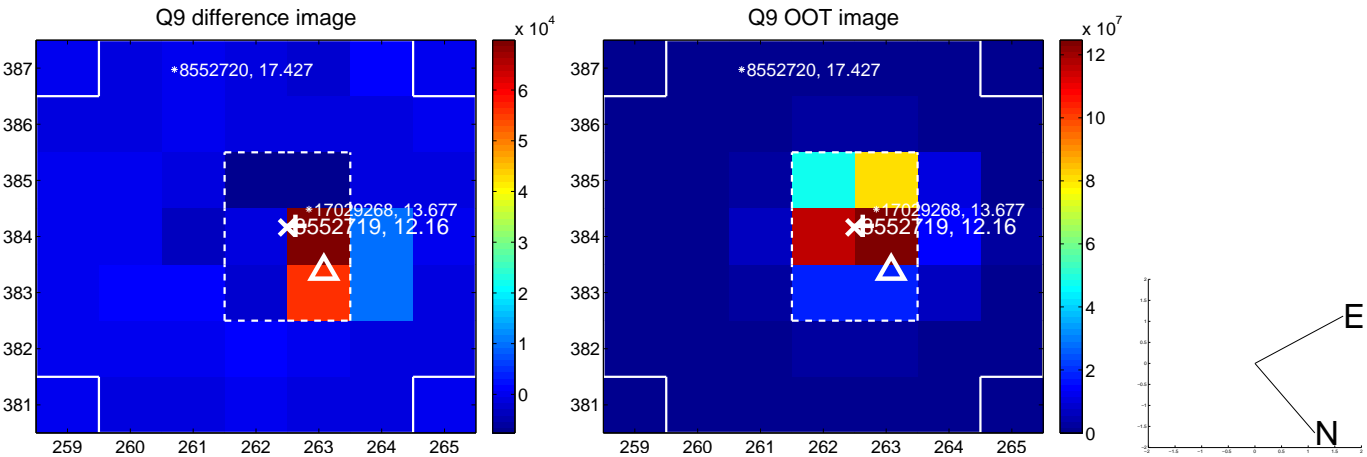
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



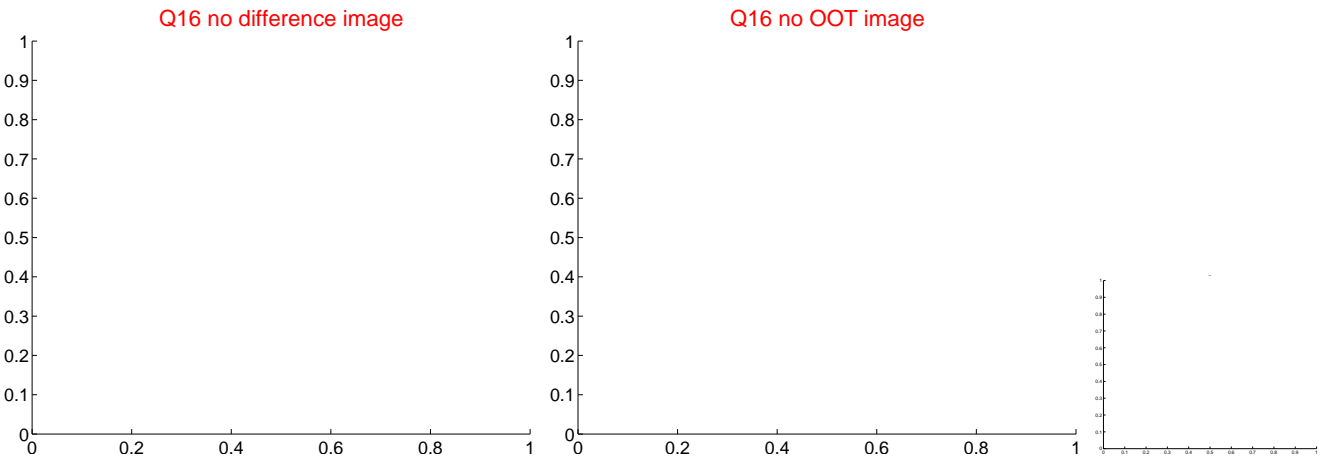
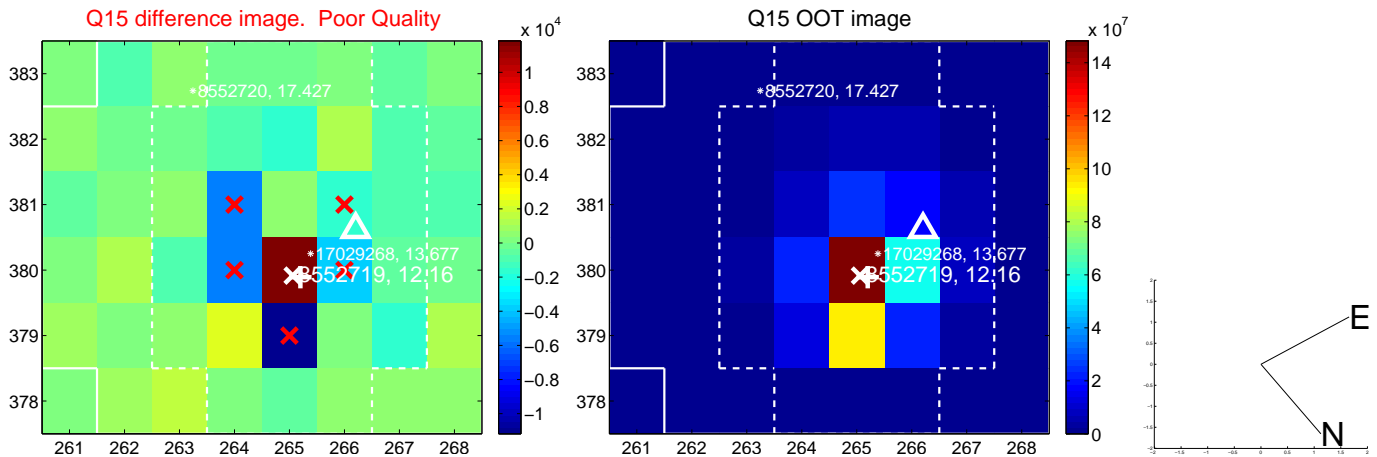
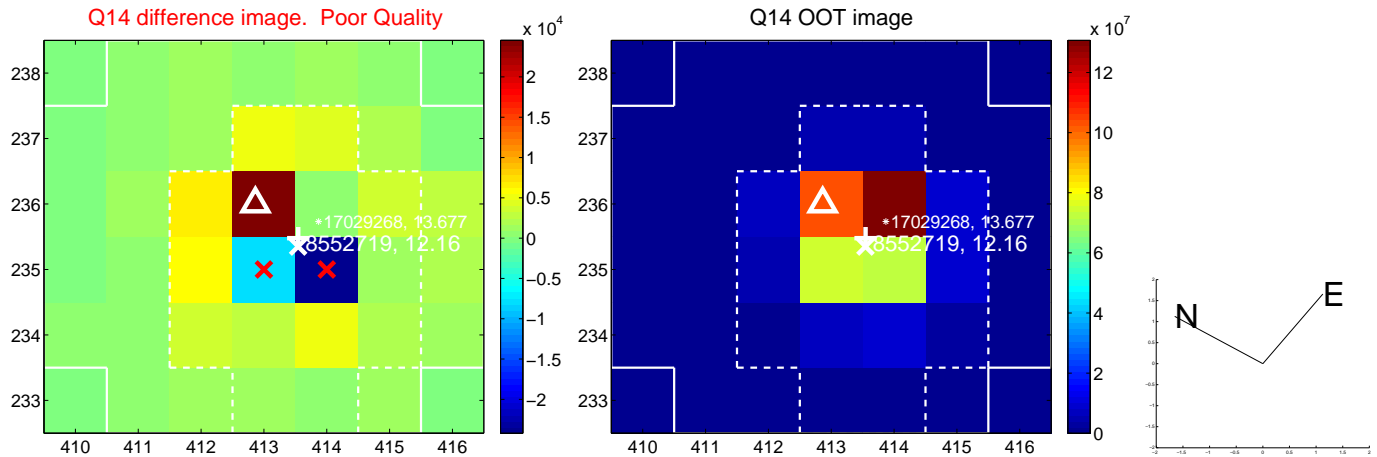
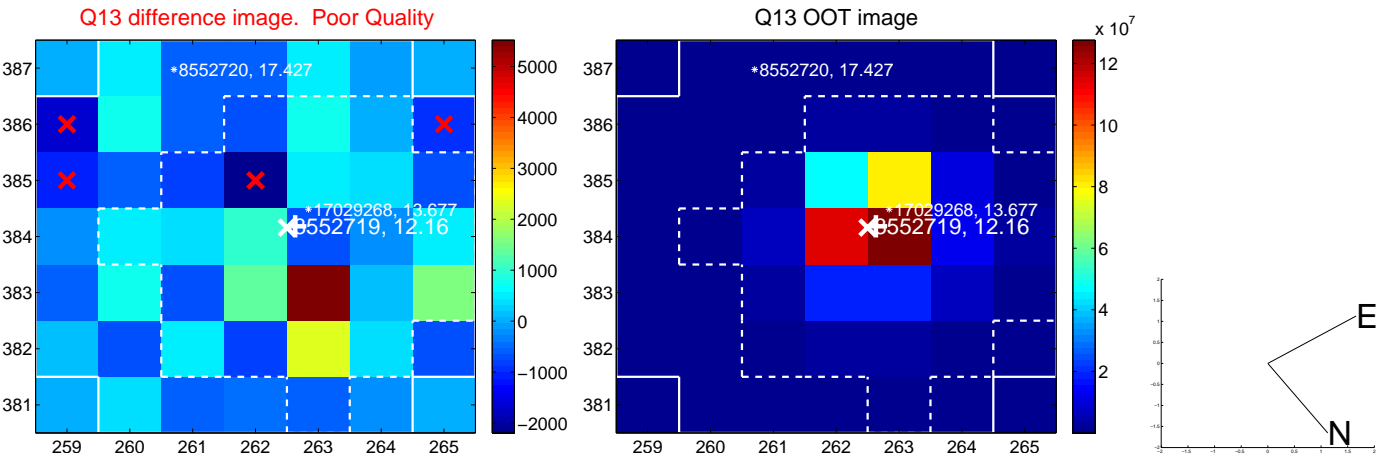
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



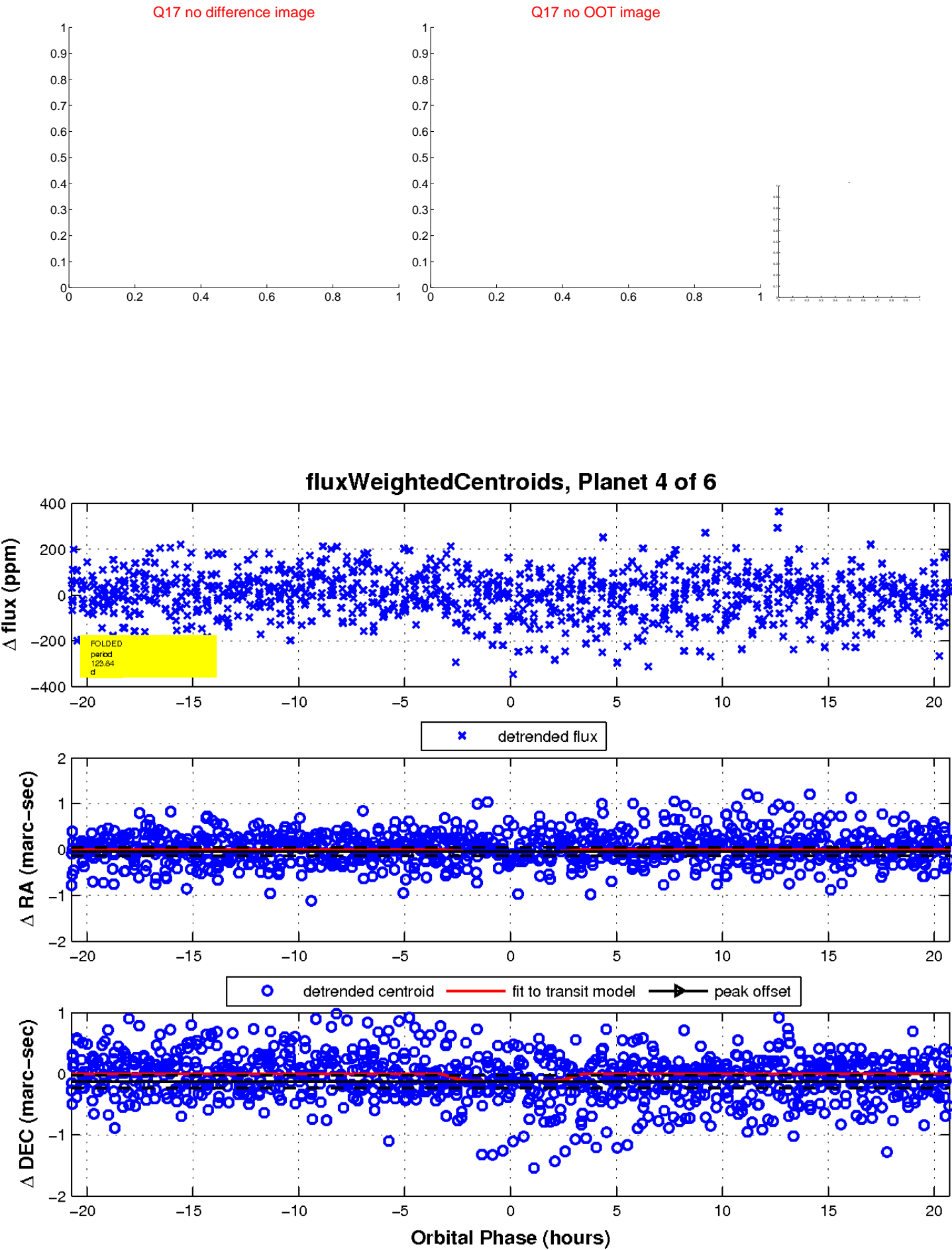
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

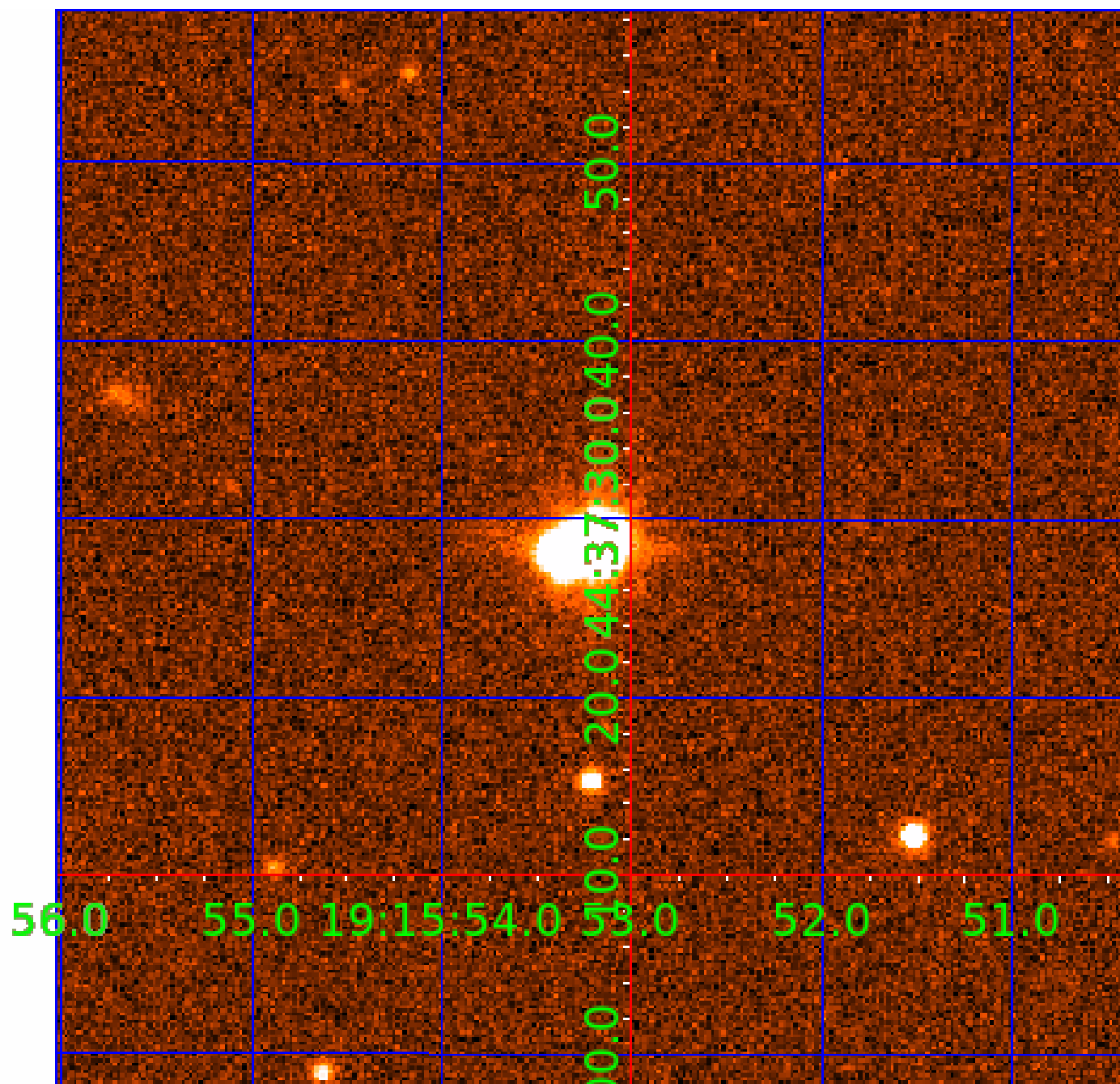


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008552719

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})
008552719-01	OBS	1792.01	88.406788	176.273628	1716.6	12.432	153.9	160.6	1.07	5611	4.63	6.66
008552719-02	OBS	1792.03	9.109676	133.066227	132.1	5.583	30.5	34.1	1.07	5611	1.50	137.86
008552719-03	OBS	1792.02	1.546228	132.483612	34.6	7.785	18.8	22.3	1.07	5611	0.93	1466.98
008552719-04	OBS	No	123.841502	220.856241	228.2	6.915	13.4	11.1	1.07	5611	2.10	4.25
008552719-05	OBS	No	208.590876	215.658896	119.6	15.462	10.5	7.9	1.07	5611	1.41	2.12
008552719-06	OBS	No	97.053580	214.177885	100.9	6.172	8.3	8.0	1.07	5611	1.20	5.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008552719-01	OBS	PC	0.93	0	0	0	0	CENT_KIC_POS
008552719-02	OBS	PC	0.99	0	0	0	0	CENT_KIC_POS
008552719-03	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_KIC_POS
008552719-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_KIC_POS
008552719-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008552719-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_KIC_POS

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 008552719-05

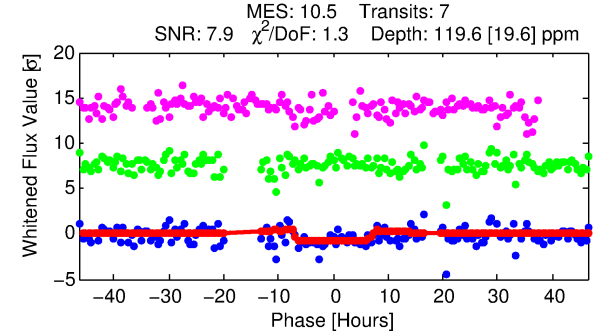
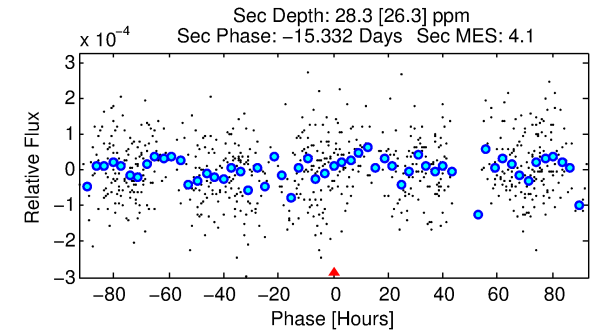
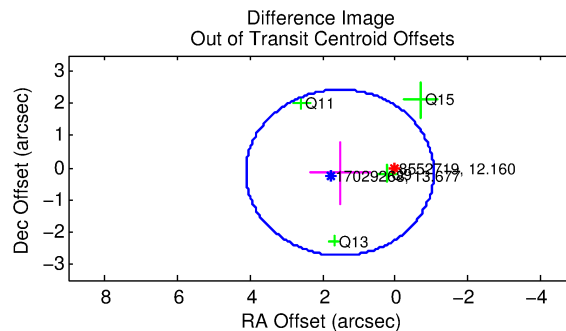
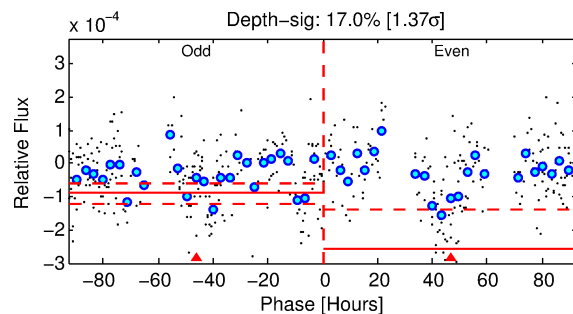
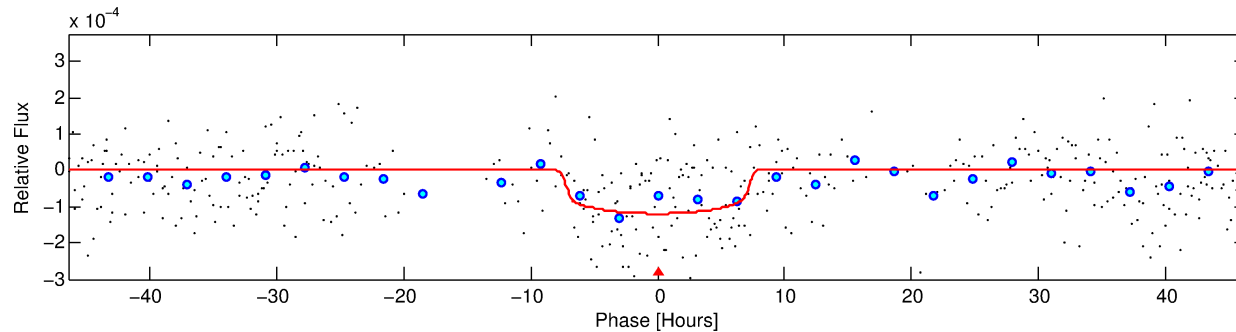
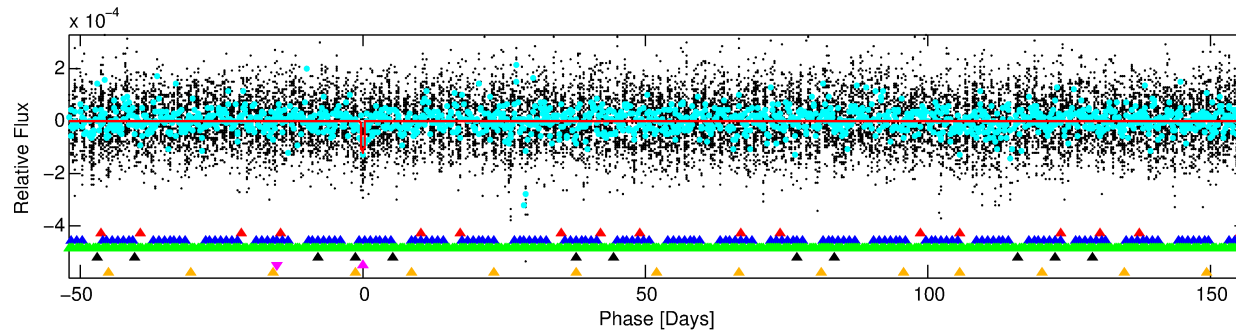
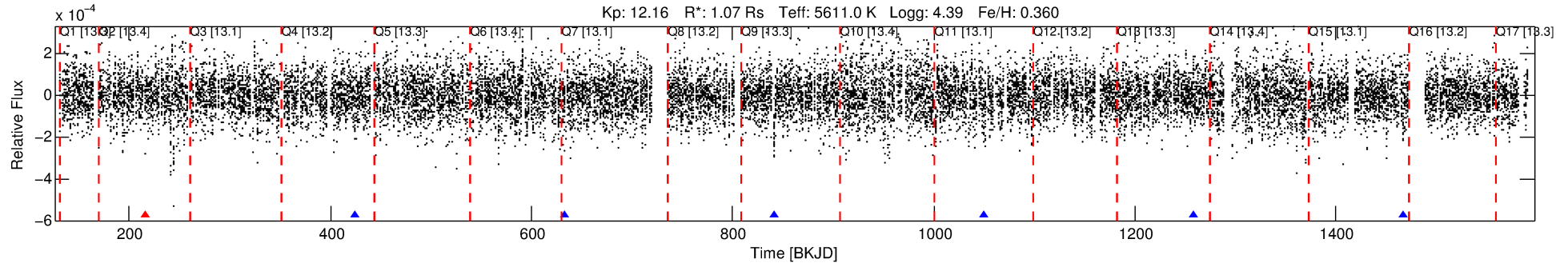
No Significant Match Found

DV One-Page Summary

KIC: 8552719 Candidate: 5 of 6 Period: 208.591 d

KOI: K01792 Corr: No Ephemeris Match

Kp: 12.16 R*: 1.07 Rs Teff: 5611.0 K Logg: 4.39 Fe/H: 0.360

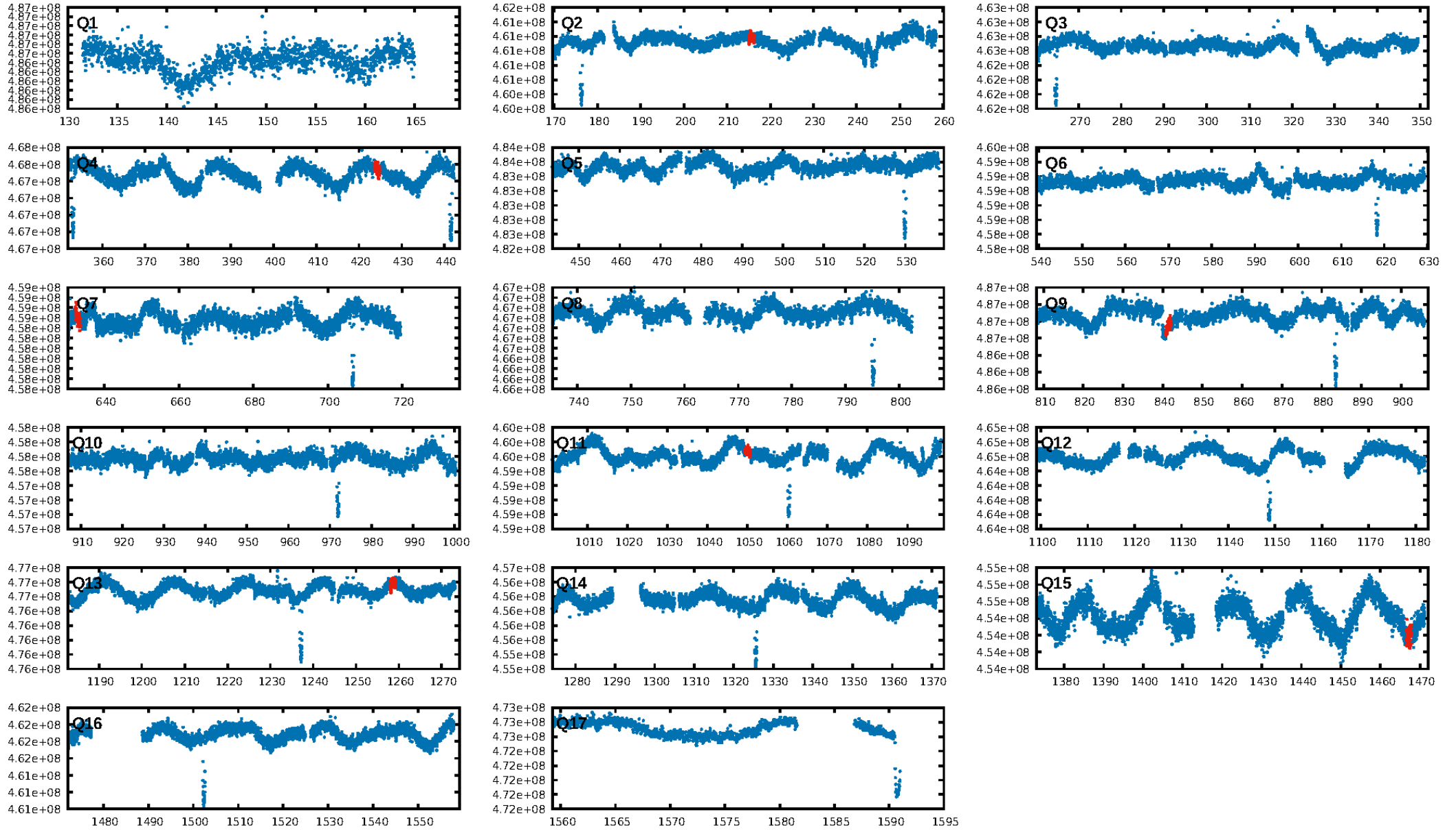


DV Fit Results:	DV Diagnostic Results:
Period = 208.59088 [0.02051] d	ShortPeriod-sig: 100.0% [120.09σ]
Epoch = 215.6589 [0.0683] BKJD	LongPeriod-sig: N/A
Rp/R* = 0.0120 [0.0024]	ModelChiSquare2-sig: 0.0%
a/R* = 47.30 [38.59]	ModelChiSquareGof-sig: 100.0%
b = 0.90 [0.18]	Bootstrap-pfa: 4.69e-15
Seff = 2.12 [0.48]	RollingBand-fgt: 0.86 [6/7]
Teq = 308 [18] K	GhostDiagnostic-chr: 0.3787
Rp = 1.41 [0.36] Re	Centroid-sig: 2.0%
a = 0.6944 [0.0983] AU	Centroid-so: 1.438 arcsec [1.66σ]
Ag = 3772.57 [3900.25] [0.97σ]	OotOffset-rm: 1.532 arcsec [1.78σ]
Teffp = 3728 [946] K [3.62σ]	OotOffset-st: 0/2/0/2 [4]
	KicOffset-rm: 2.010 arcsec [3.22σ]
	OotOffset-st: 0/2/0/2 [4]
	KicOffset-st: 0/2/0/2 [4]
	DiffImageQuality-fgm: 0.00 [0/4]
	DiffImageOverlap-fno: 0.00 [0/6]

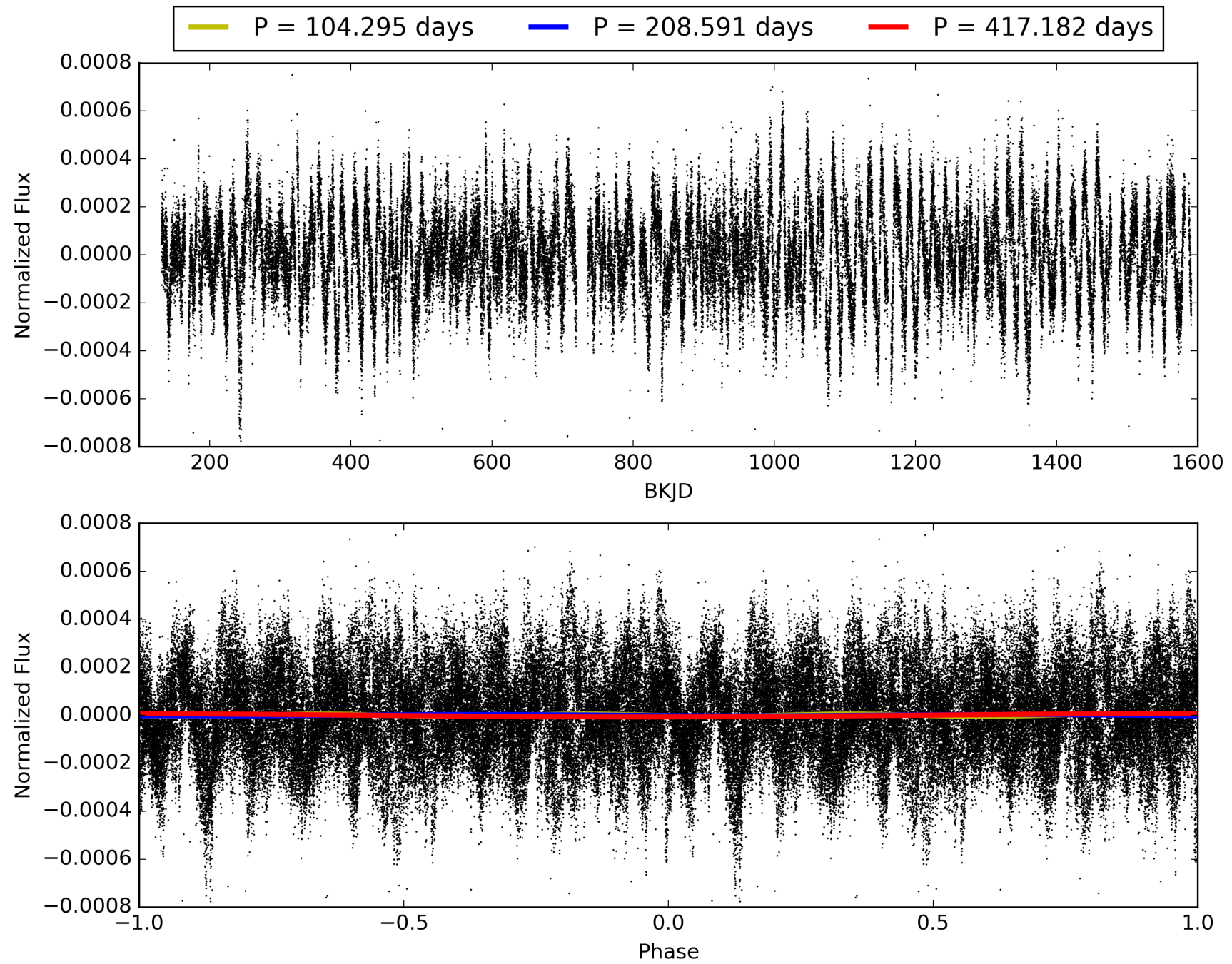
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:53:13 Z

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

TCE 008552719-05, PDC Light Curves

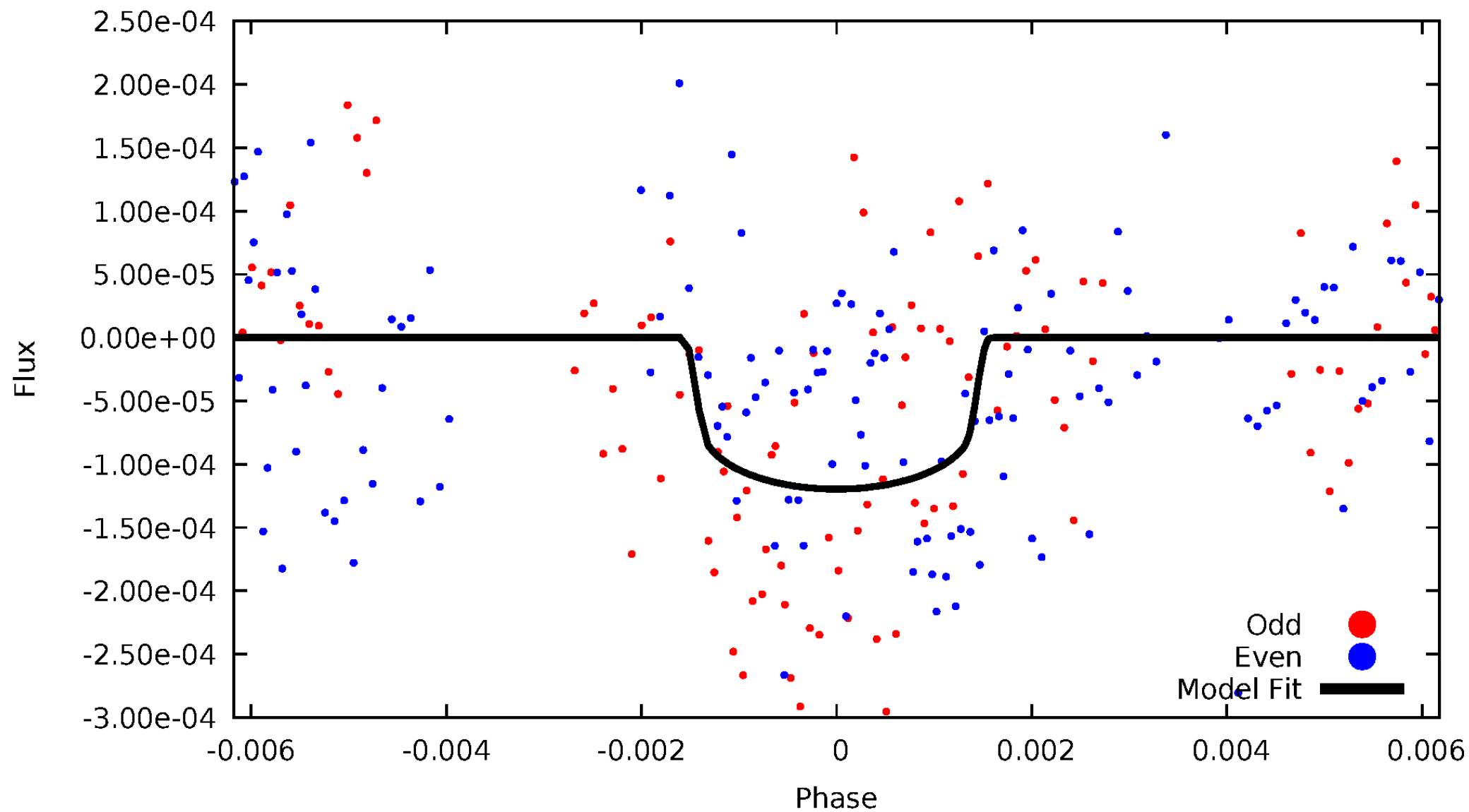


TCE 008552719-05



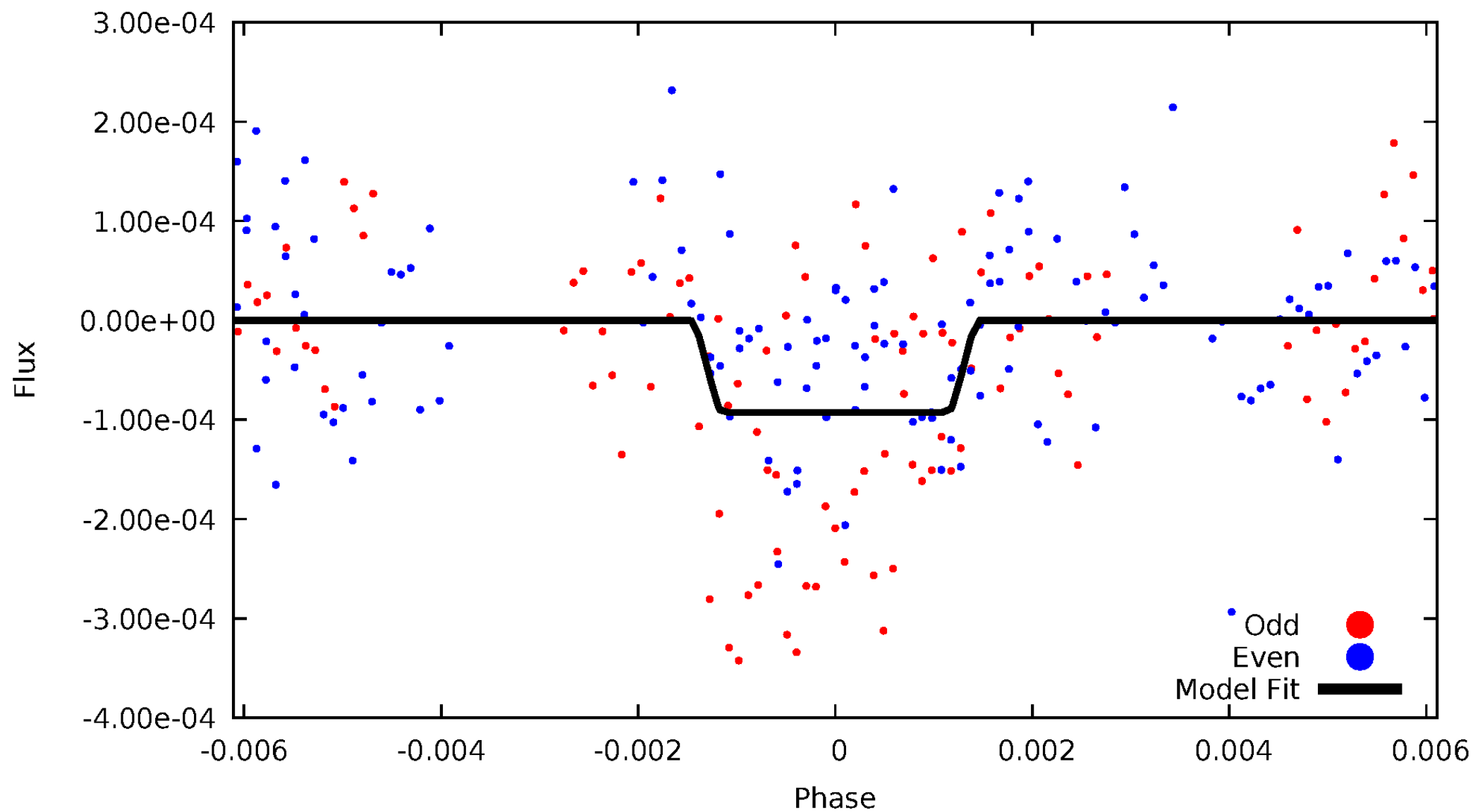
DV Odd/Even

TCE 008552719-05



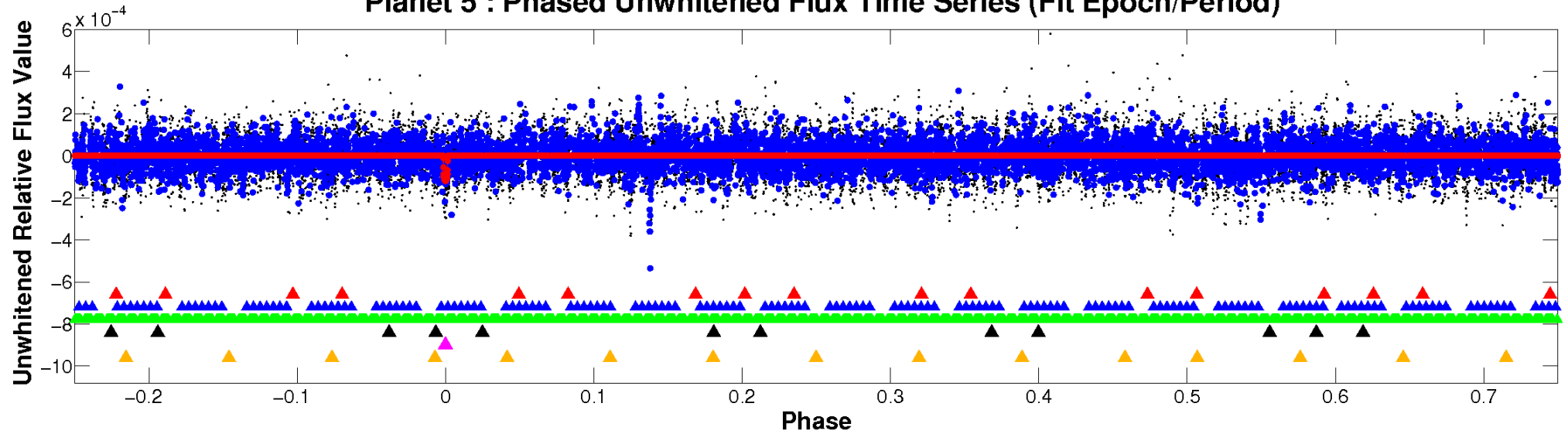
ALT Odd/Even

TCE 008552719-05

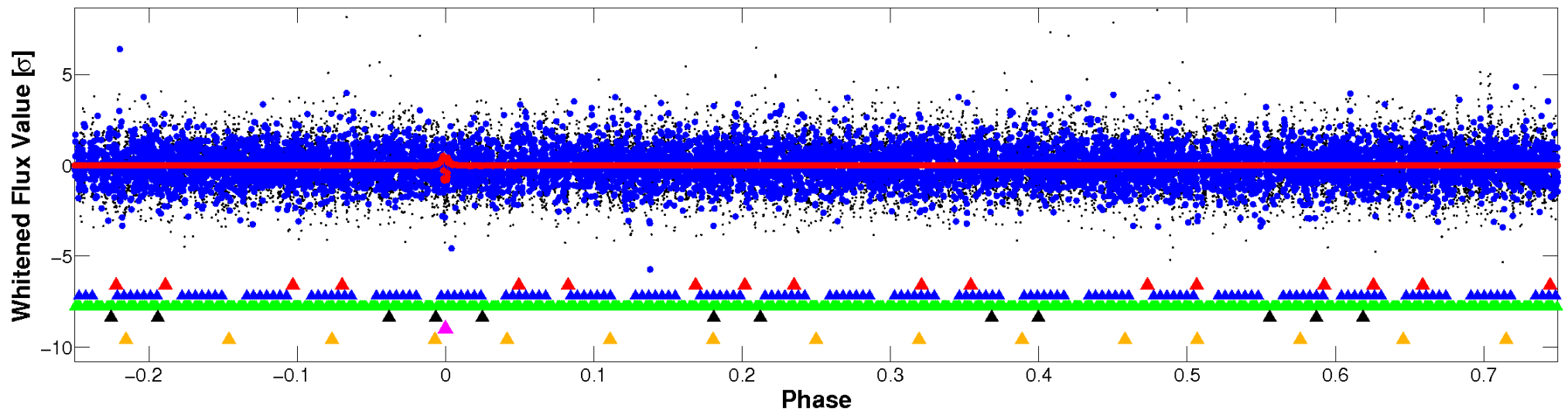


Non-Whitened Vs. Whitened Light Curve

Planet 5 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

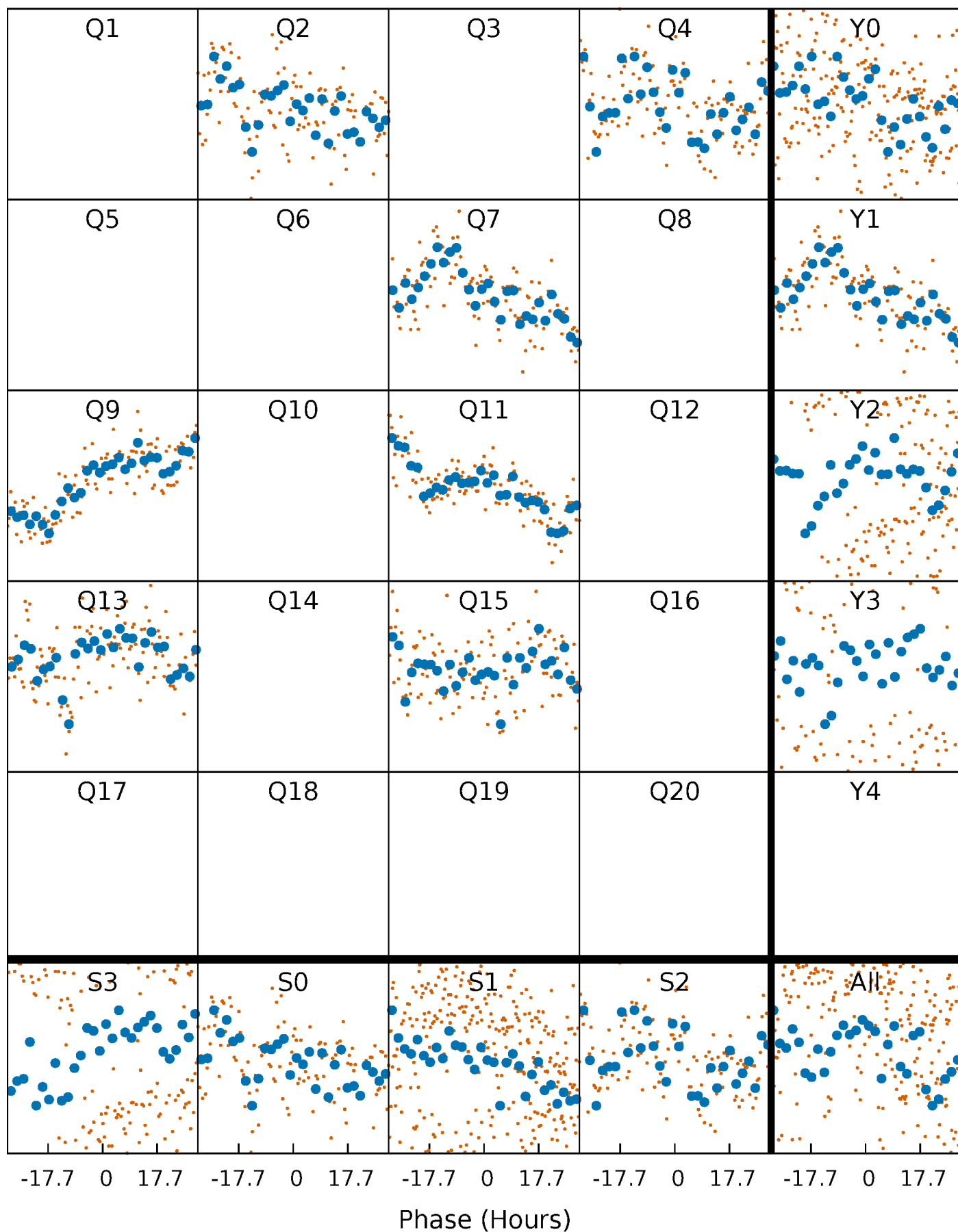


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



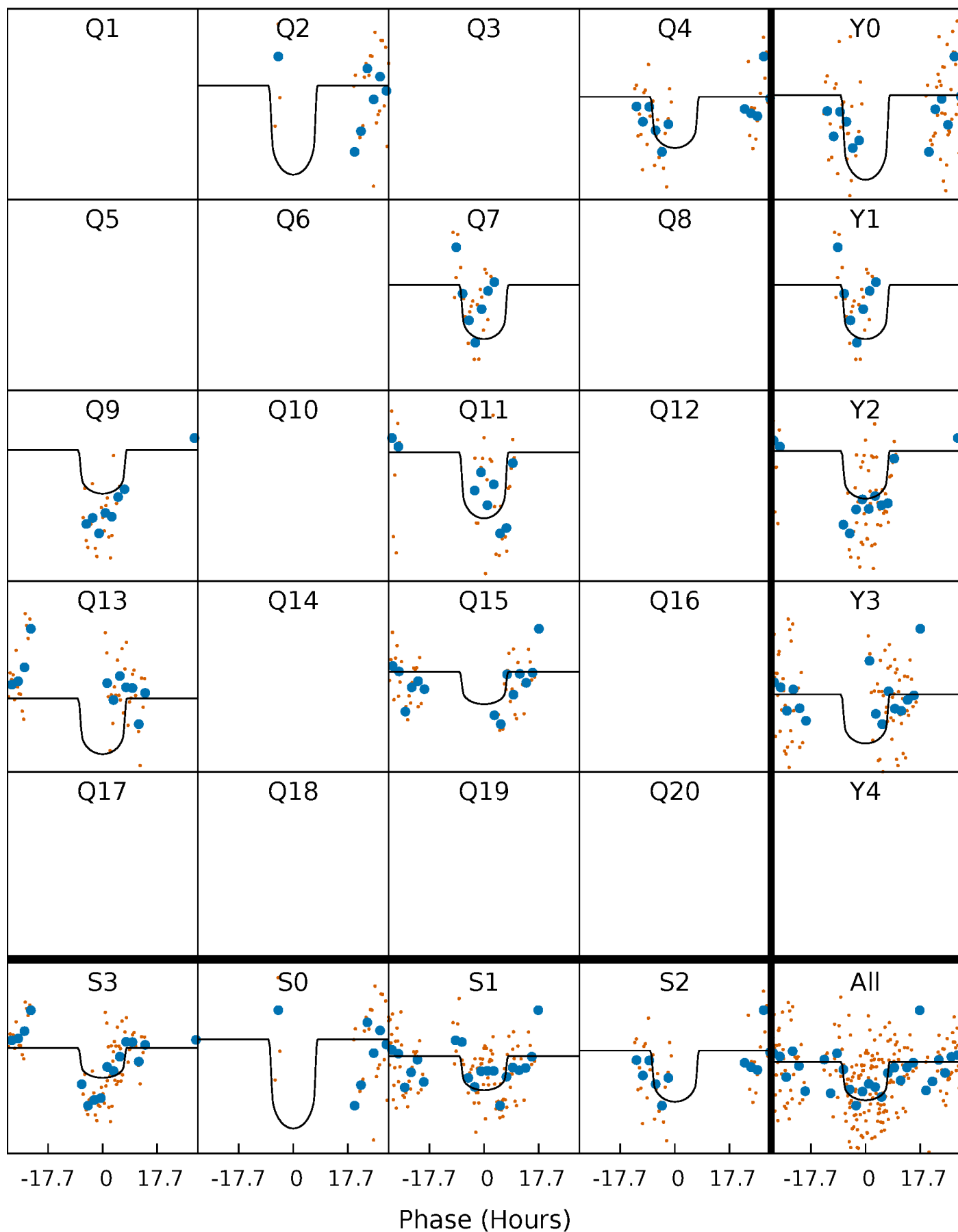
PDC Quarter-Phased Transit Curves

TCE 008552719-05 $P=208.590876$ Days $T_0=215.658896$ (BKJD)



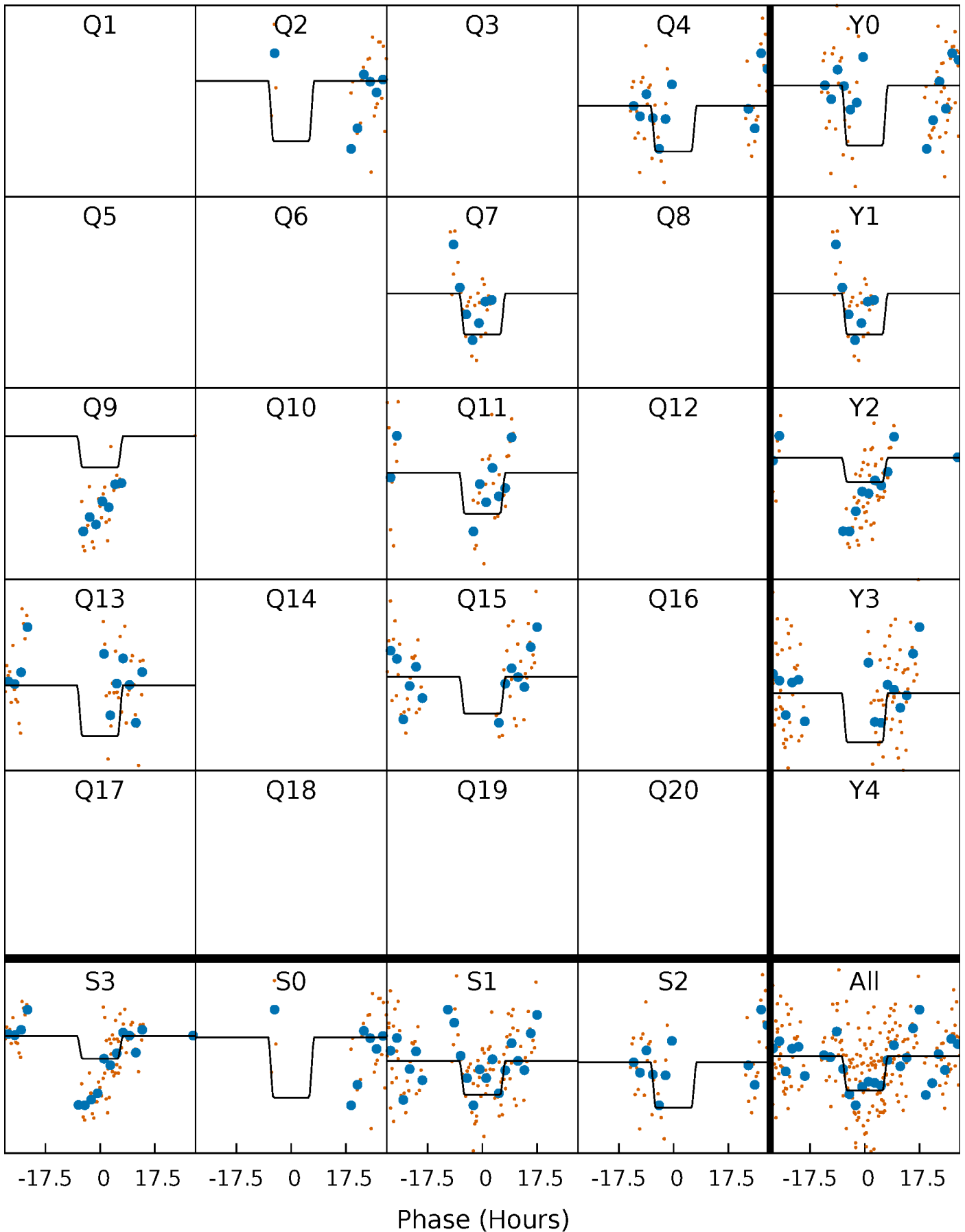
DV Quarter-Phased Transit Curves

TCE 008552719-05 $P=208.590876$ Days $T_0=215.658896$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

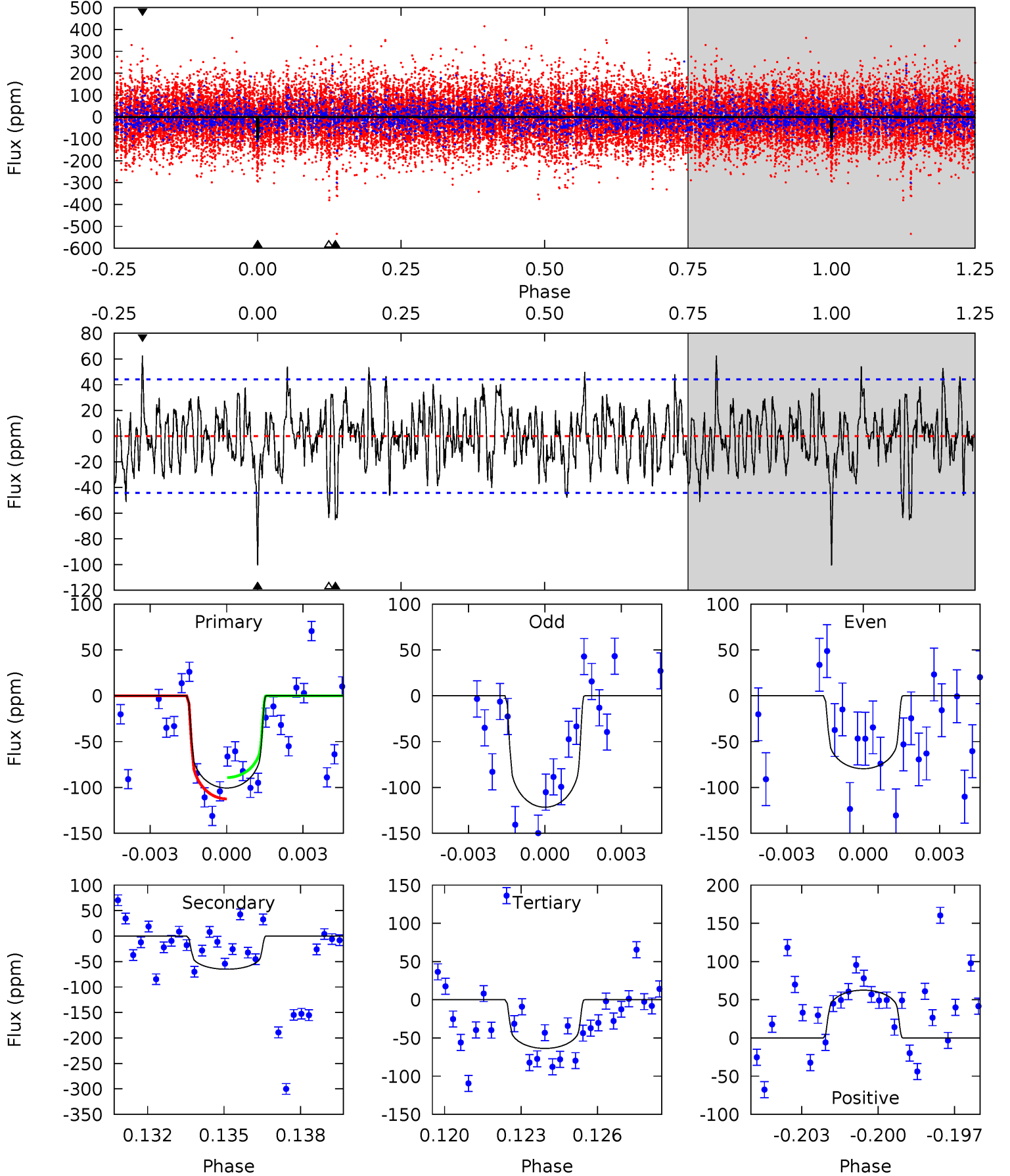
TCE 008552719-05 $P=208.585780$ Days $T_0=215.678438$ (BKJD)



DV Model-Shift Uniqueness Test

008552719-05, P = 208.590876 Days, E = 7.068020 Days

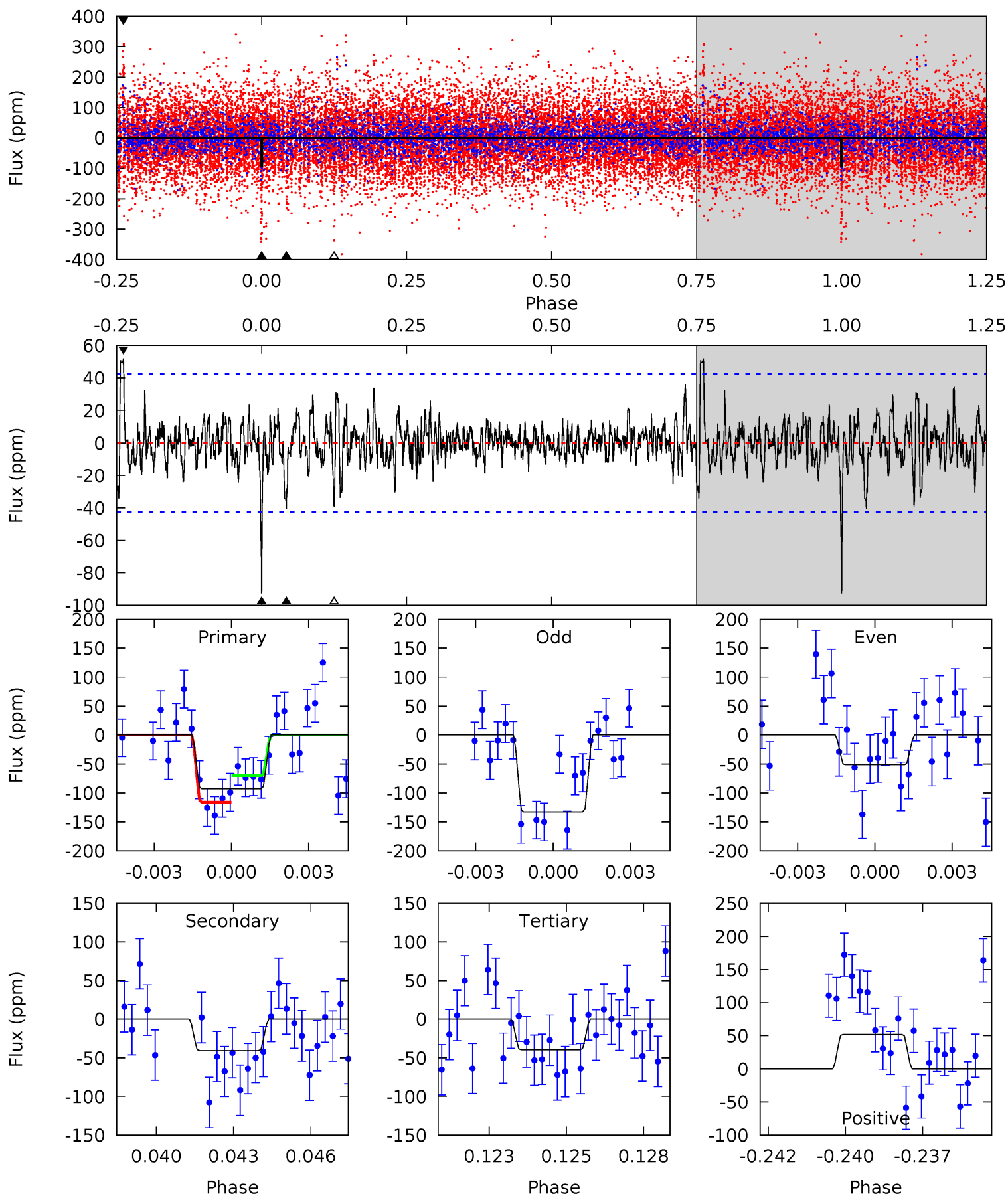
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.0	7.75	7.57	7.44	5.25	2.96	2.23	4.40	4.53	0.17	0.30	2.50	0.94	0.38	1.38



Alt Model-Shift Uniqueness Test

008552719-05, P = 208.585780 Days, E = 7.092658 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.5	5.03	4.90	6.46	5.26	2.98	1.25	6.59	5.03	0.13	-1.43	5.04	1.24	0.36	2.85



Stellar Parameters For KIC 008552719

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5611^{+100}_{-112}	$4.388^{+0.080}_{-0.120}$	$0.360^{+0.100}_{-0.150}$	$1.073^{+0.173}_{-0.106}$	$1.026^{+0.057}_{-0.057}$	$1.170^{+0.391}_{-0.412}$
	+2%/-2%	+2%/-3%	+28%/-42%	+16%/-10%	+6%/-6%	+33%/-35%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 008552719-05 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-65 ± 8	$1.44^{+0.32}_{-0.31}$	432^{+19}_{-16}	4709^{+503}_{-359}	8508^{+4853}_{-3046}
Alt.	-41 ± 8	$1.13^{+0.30}_{-0.30}$	431^{+17}_{-15}	4670^{+670}_{-394}	8089^{+7323}_{-2972}

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

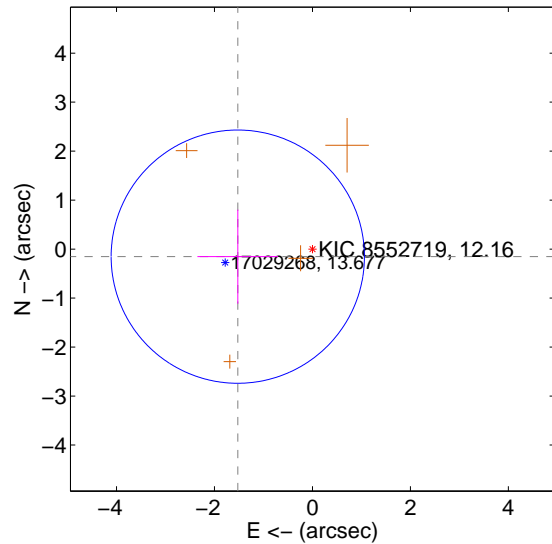
Supplemental centroid analysis for 008552719-05. Kepler magnitude: 12.16. Transit SNR 7.85

There are 0 quarters with good PRF difference image offsets

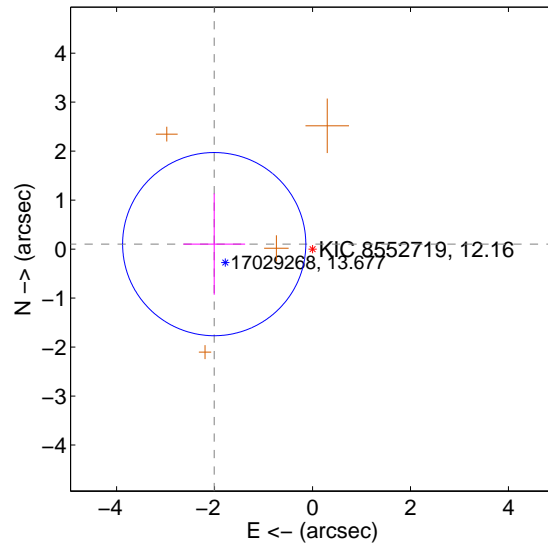
The direct PRF centroid is offset from the target star catalog position by about 0.57 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.532 ± 0.862	1.78	1.524 ± 0.824	-0.154 ± 0.959
PRF-fit source offset from KIC position	2.010 ± 0.623	3.22	2.007 ± 0.631	0.101 ± 1.034
photometric centroid source offset	1.44 ± 0.87	1.66	-1.05 ± 0.85	0.99 ± 0.89

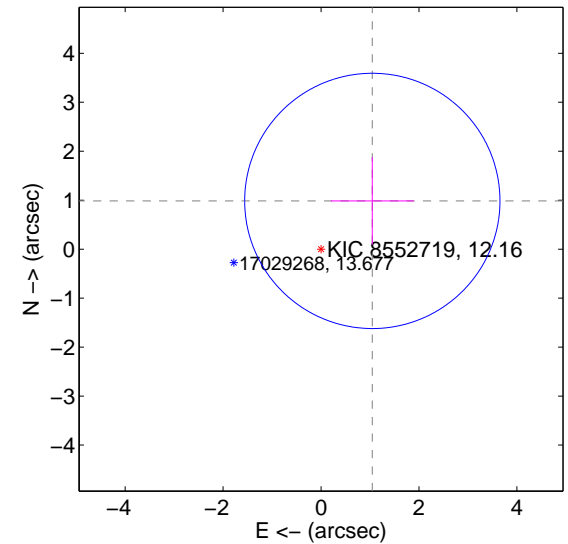
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

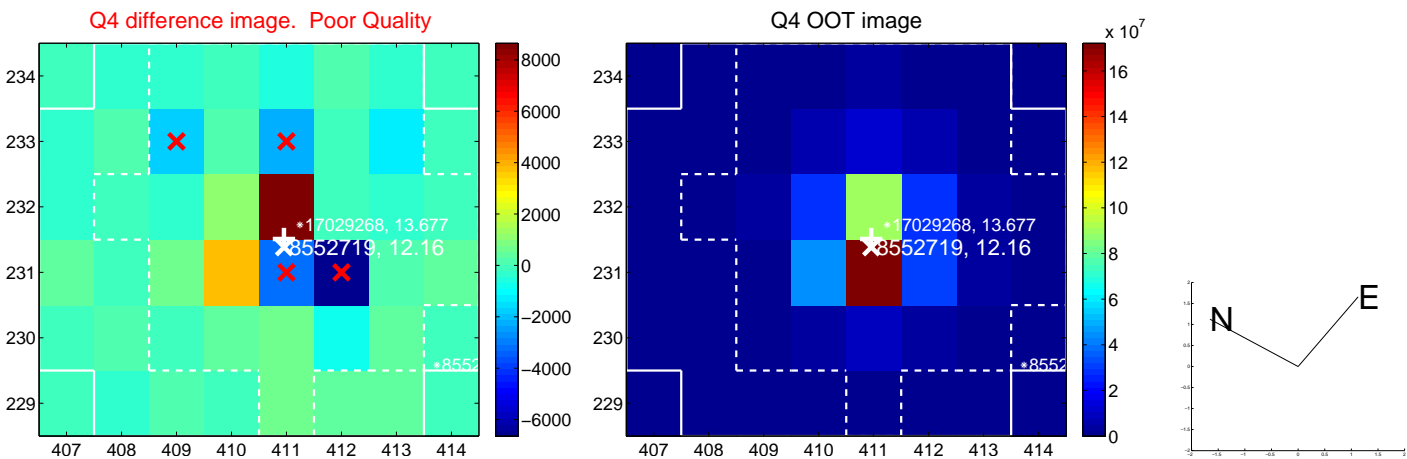
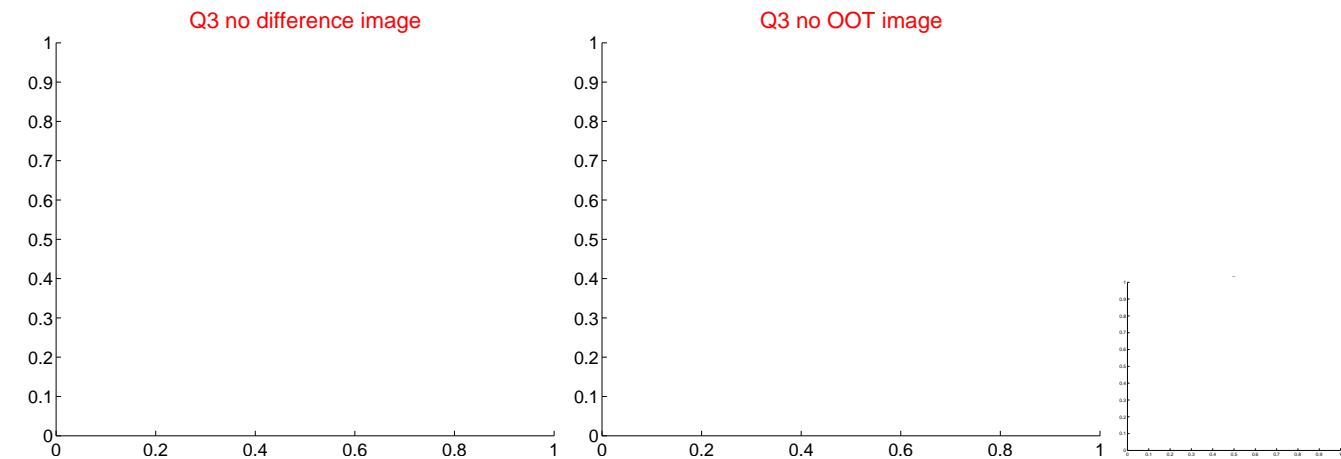
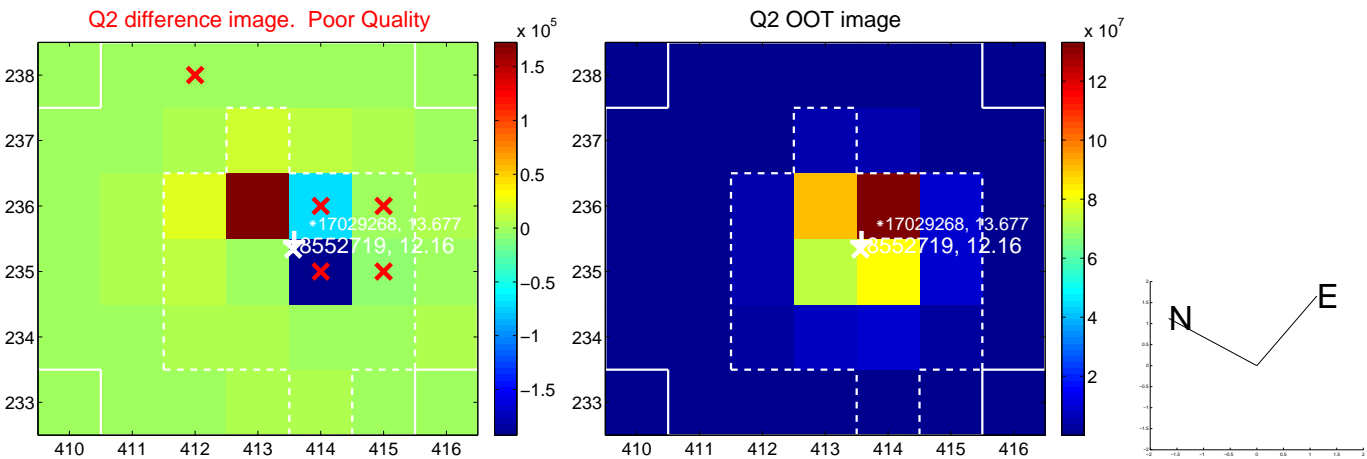


offset from photometric centroids

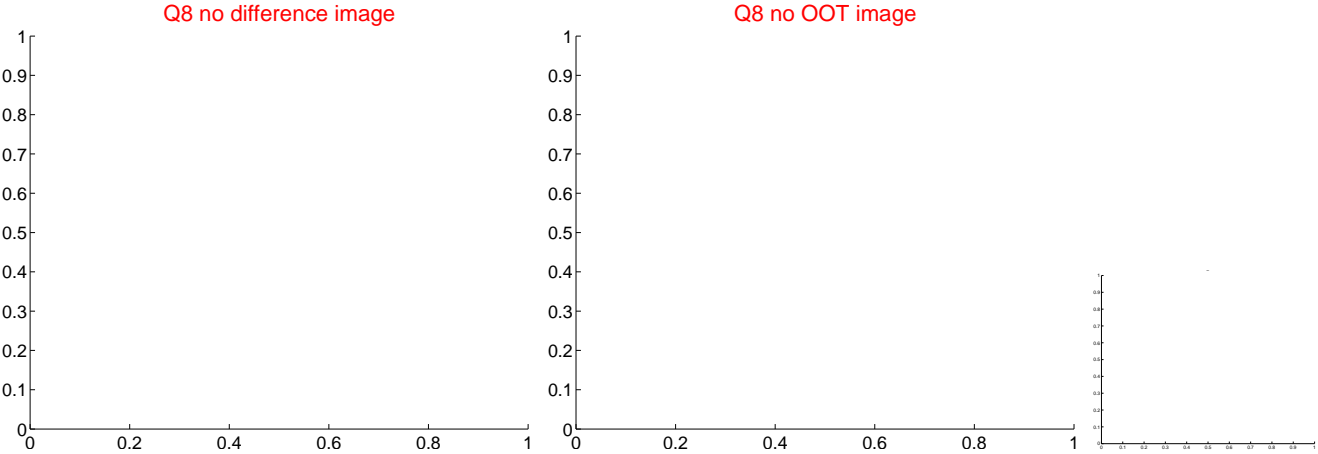
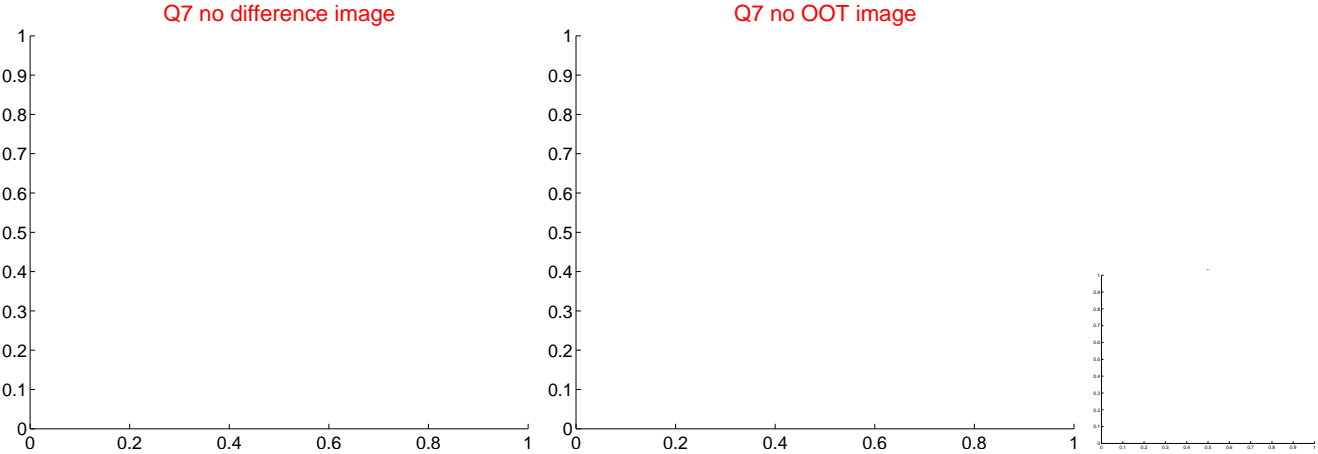
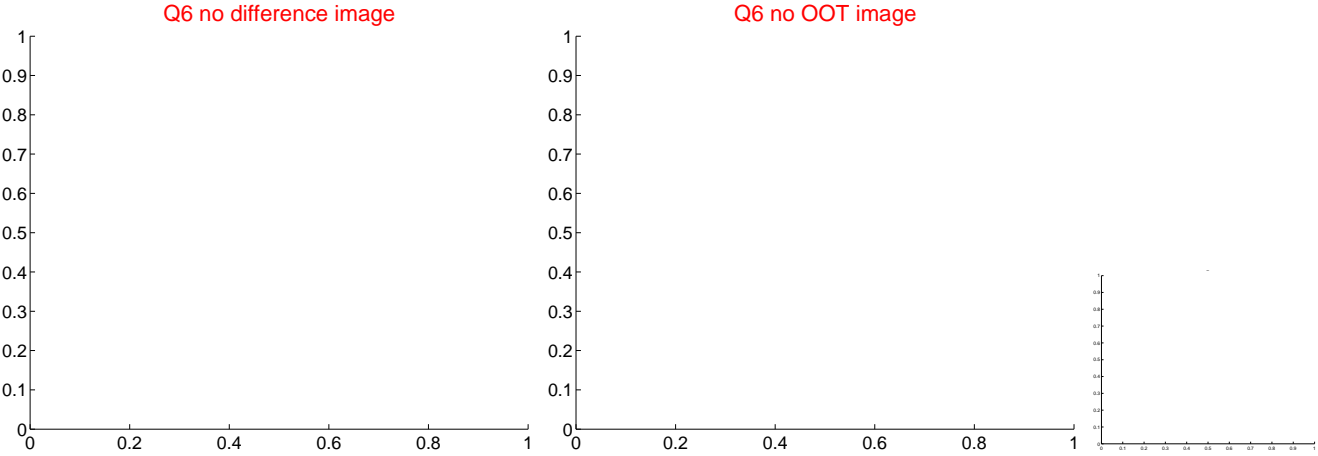
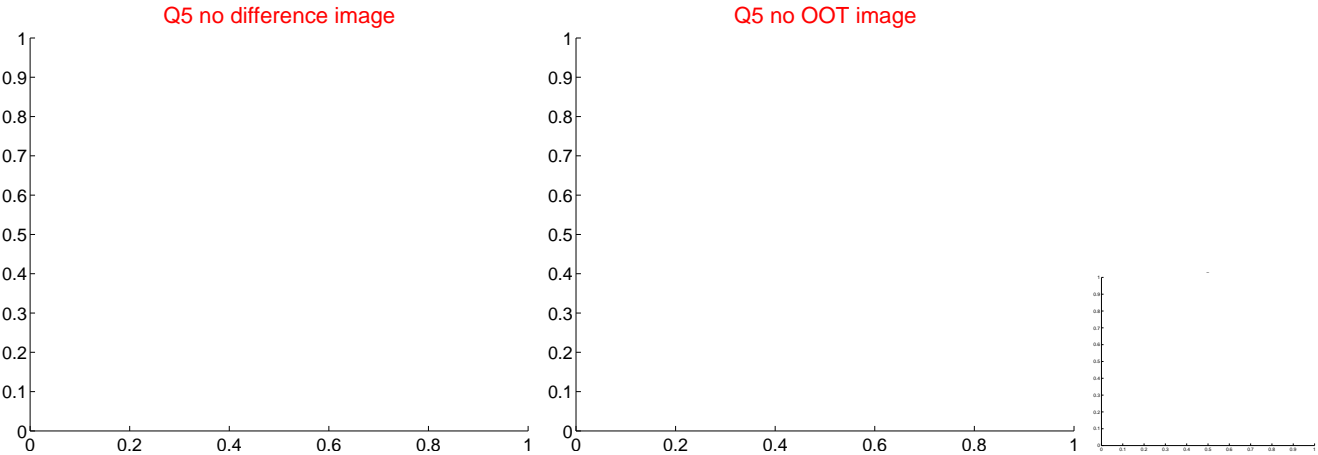


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

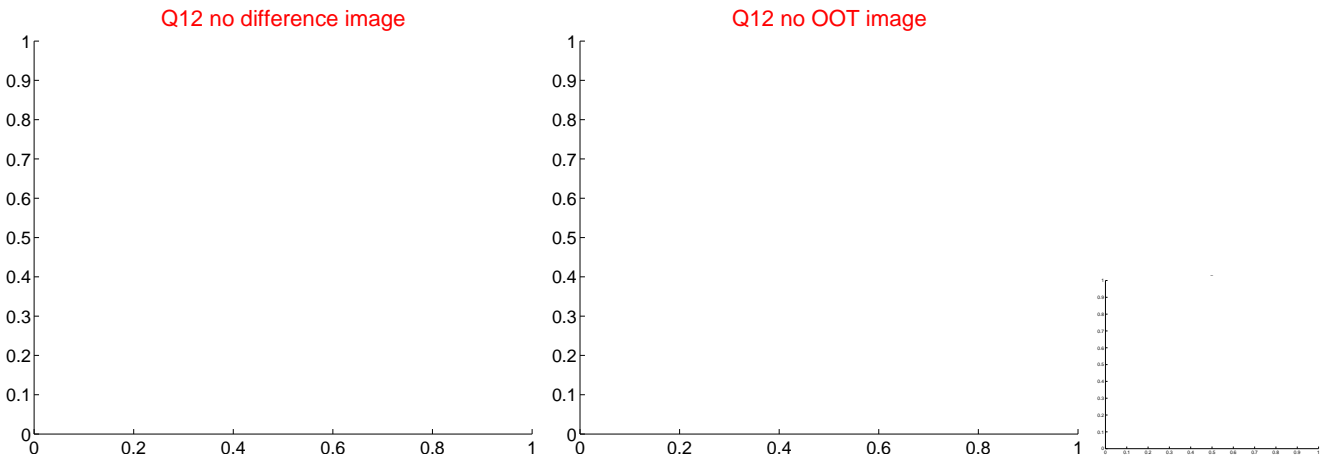
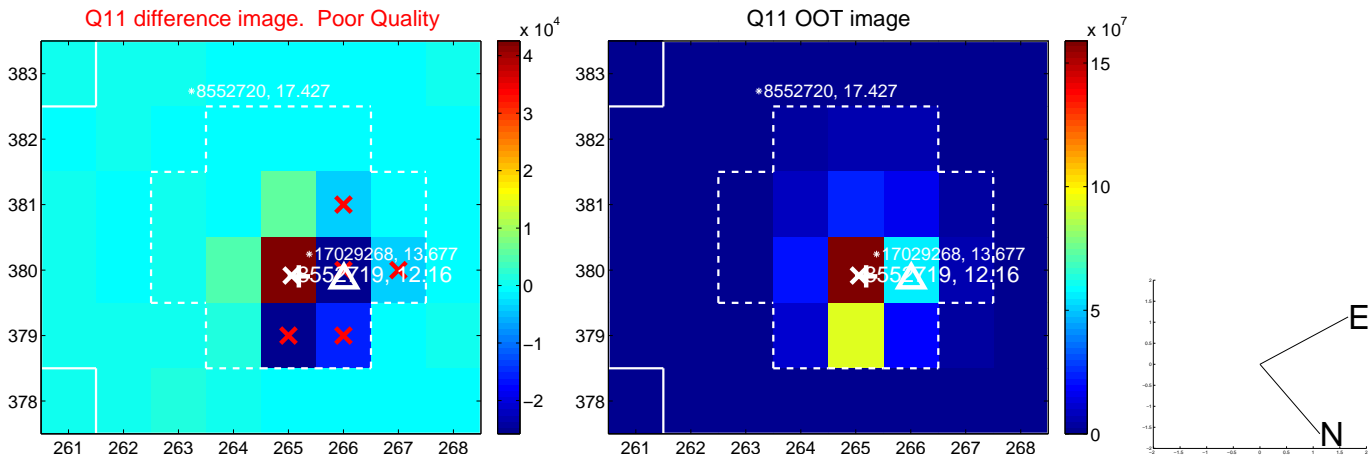
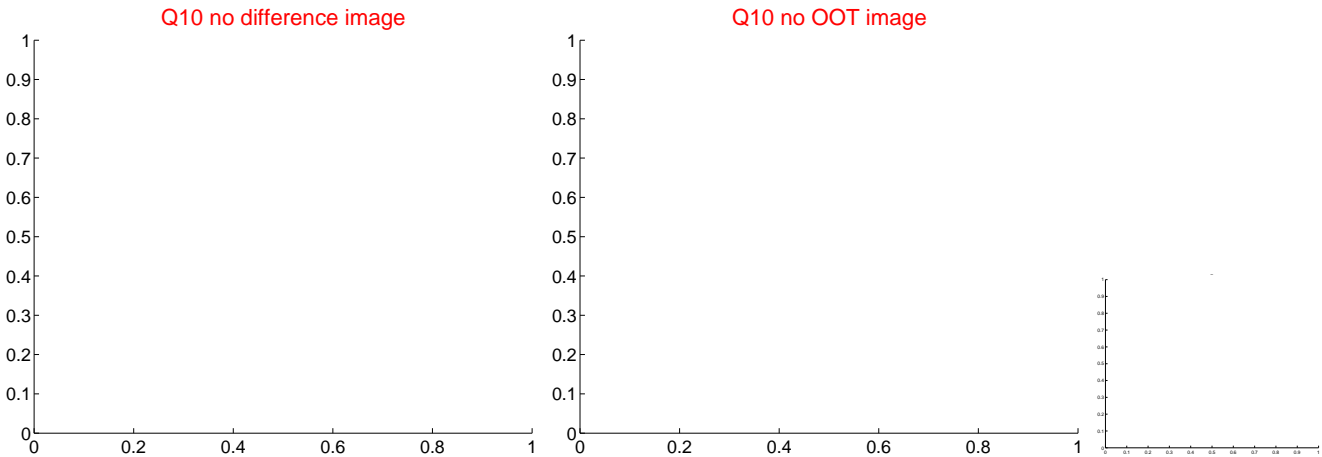
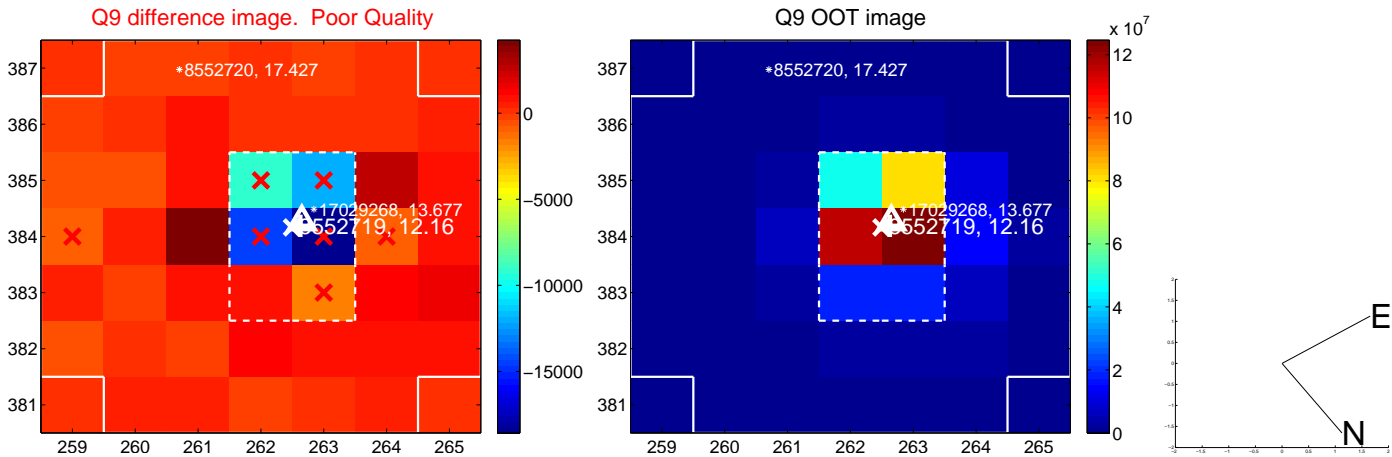
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



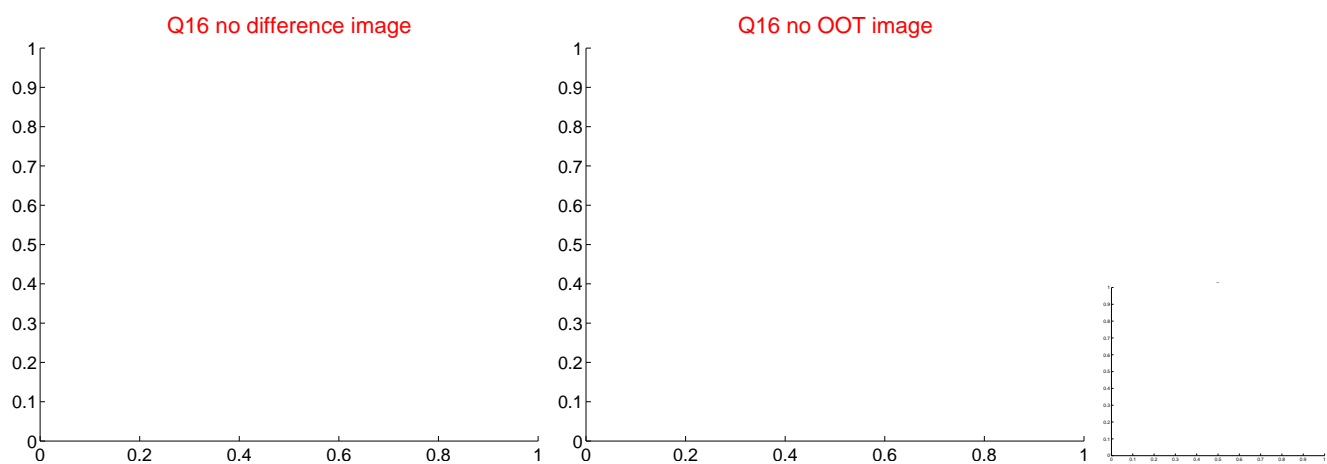
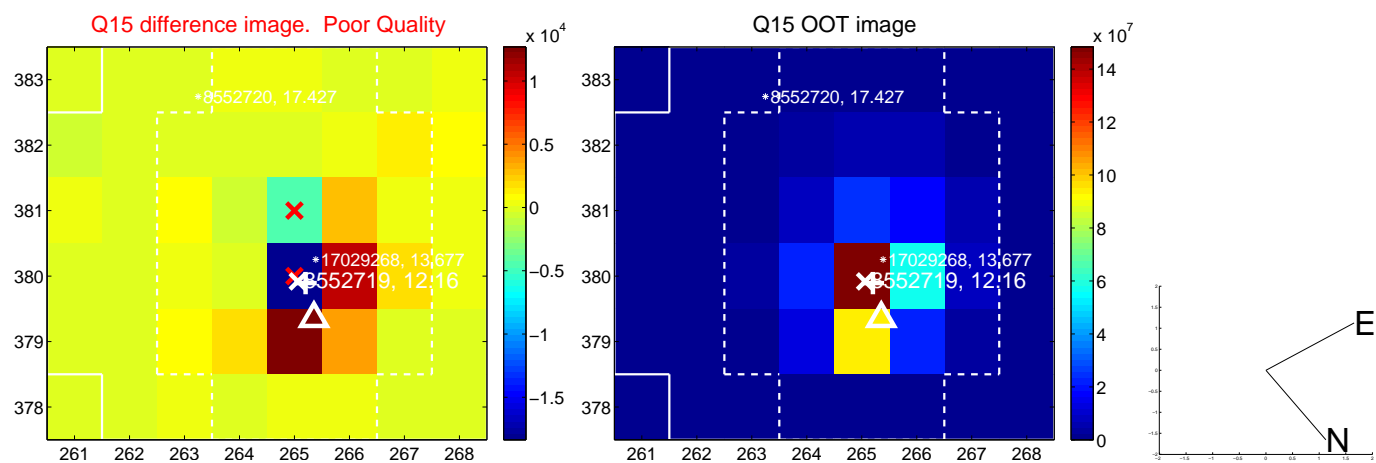
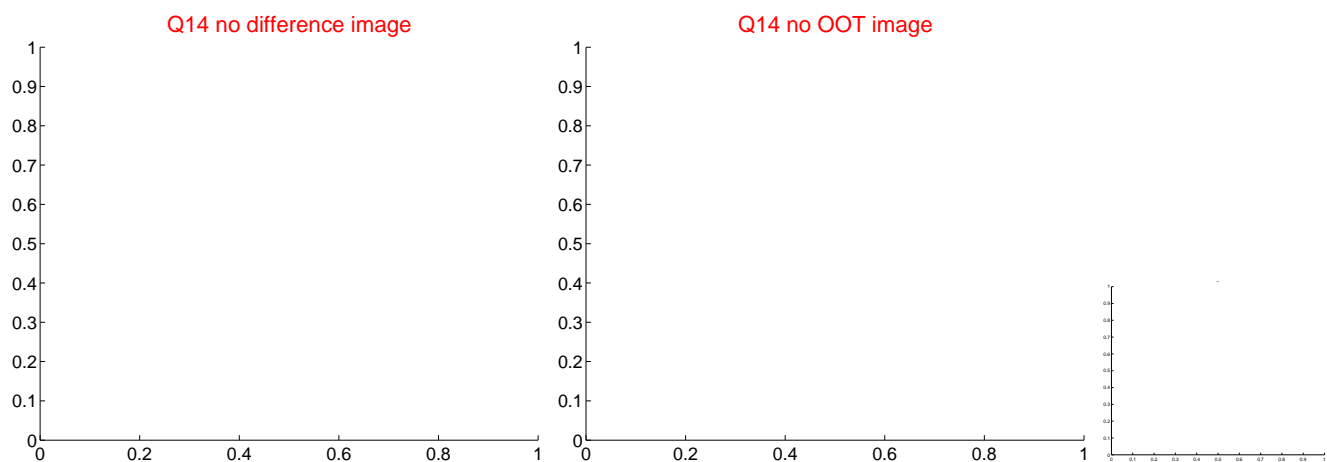
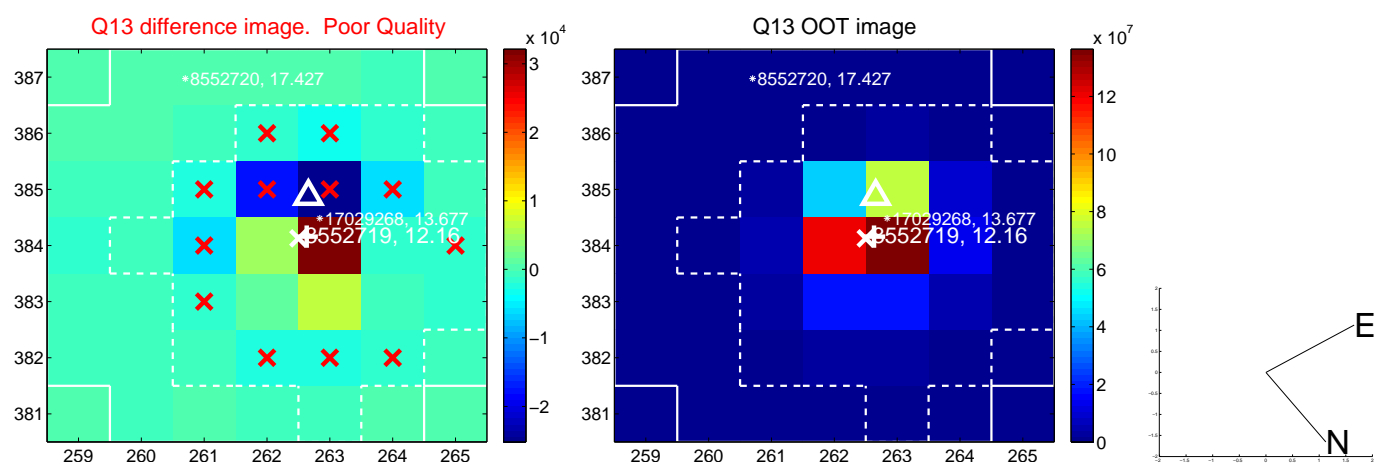
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



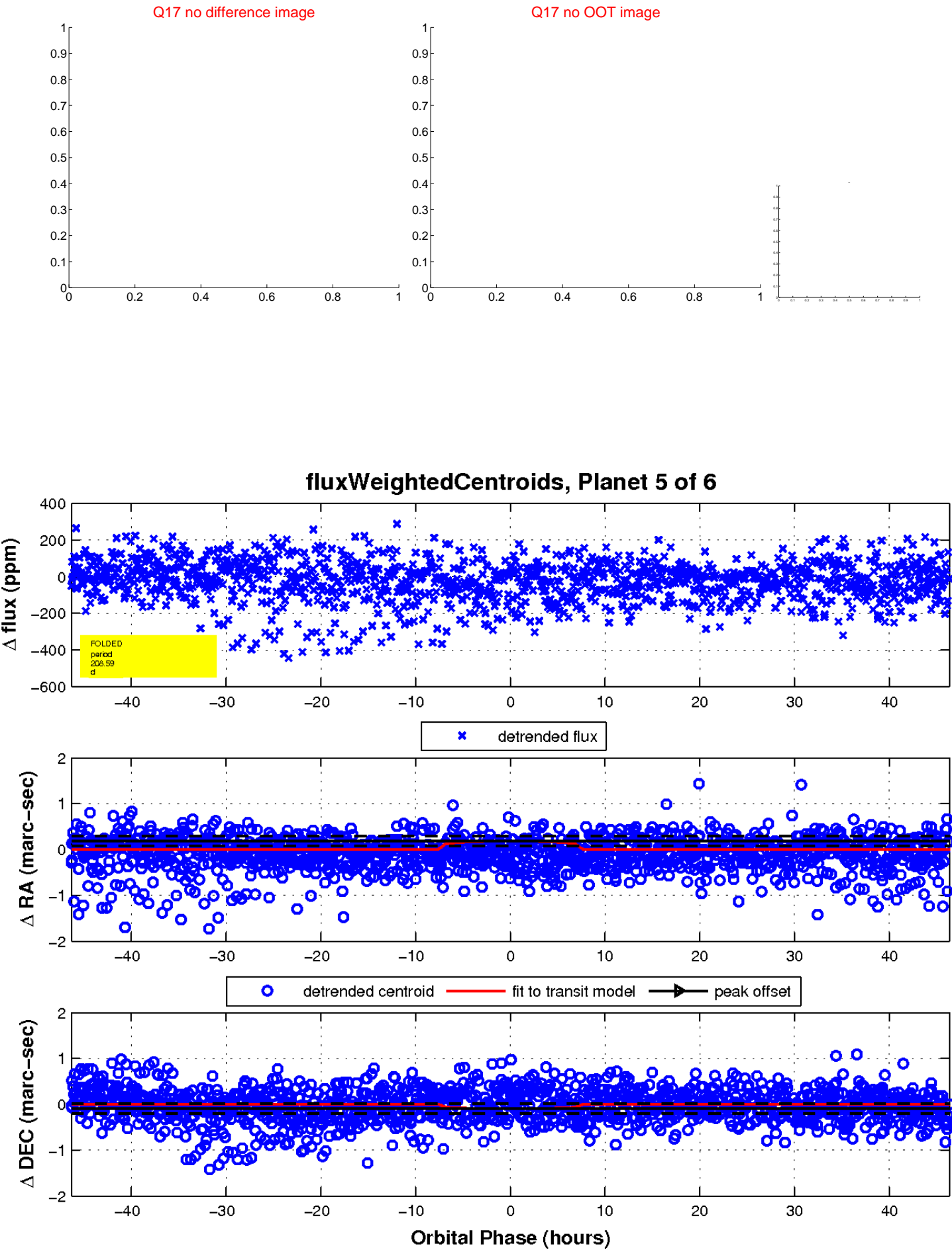
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



KIC 008552719

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})
008552719-01	OBS	1792.01	88.406788	176.273628	1716.6	12.432	153.9	160.6	1.07	5611	4.63	6.66
008552719-02	OBS	1792.03	9.109676	133.066227	132.1	5.583	30.5	34.1	1.07	5611	1.50	137.86
008552719-03	OBS	1792.02	1.546228	132.483612	34.6	7.785	18.8	22.3	1.07	5611	0.93	1466.98
008552719-04	OBS	No	123.841502	220.856241	228.2	6.915	13.4	11.1	1.07	5611	2.10	4.25
008552719-05	OBS	No	208.590876	215.658896	119.6	15.462	10.5	7.9	1.07	5611	1.41	2.12
008552719-06	OBS	No	97.053580	214.177885	100.9	6.172	8.3	8.0	1.07	5611	1.20	5.88

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008552719-01	OBS	PC	0.93	0	0	0	0	CENT_KIC_POS
008552719-02	OBS	PC	0.99	0	0	0	0	CENT_KIC_POS
008552719-03	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_KIC_POS
008552719-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_KIC_POS
008552719-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008552719-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_KIC_POS

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.

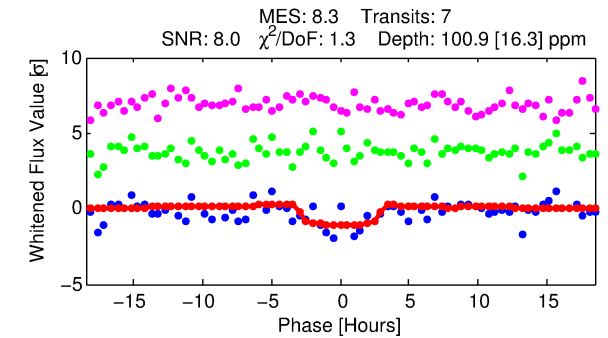
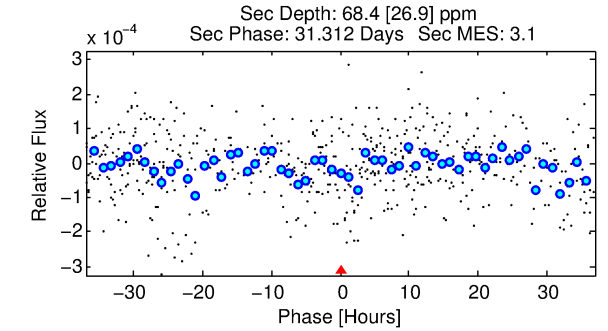
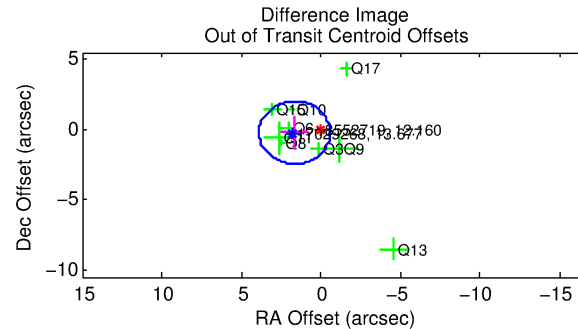
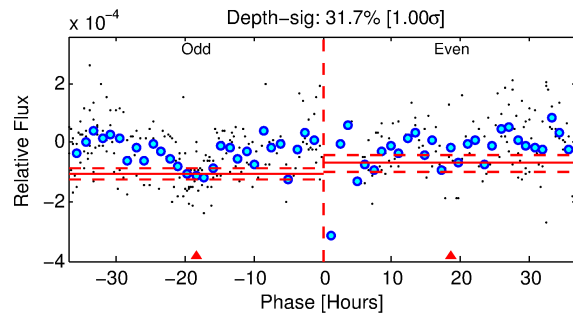
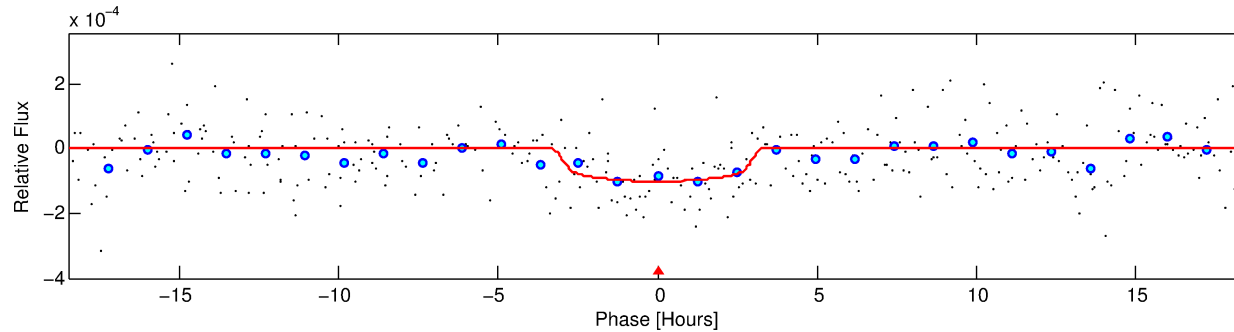
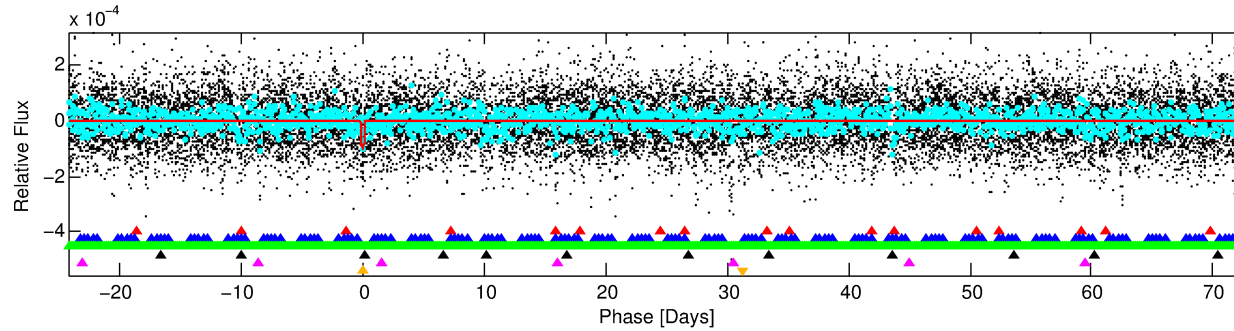
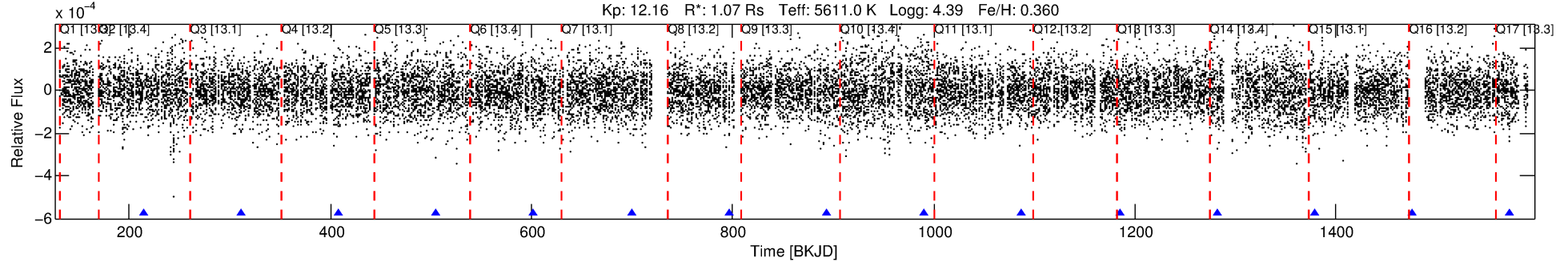
Ephemeris Match Information For 008552719-06

No Significant Match Found

DV One-Page Summary

KIC: 8552719 Candidate: 6 of 6 Period: 97.054 d
KOI: K01792 Corr: No Ephemeris Match

Kp: 12.16 R*: 1.07 Rs Teff: 5611.0 K Logg: 4.39 Fe/H: 0.360



DV Fit Results:

Period = 97.05358 [0.00202] d
Epoch = 214.1779 [0.0173] BKJD
Rp/R* = 0.0102 [0.0105]
a/R* = 74.31 [316.36]
b = 0.80 [1.96]
Seff = 5.88 [1.34]
Teq = 397 [23] K
Rp = 1.20 [1.24] Re
a = 0.4170 [0.0590] AU
Ag = 4547.78 [9545.20] [0.48σ]
Teff = 5042 [2634] K [1.76σ]

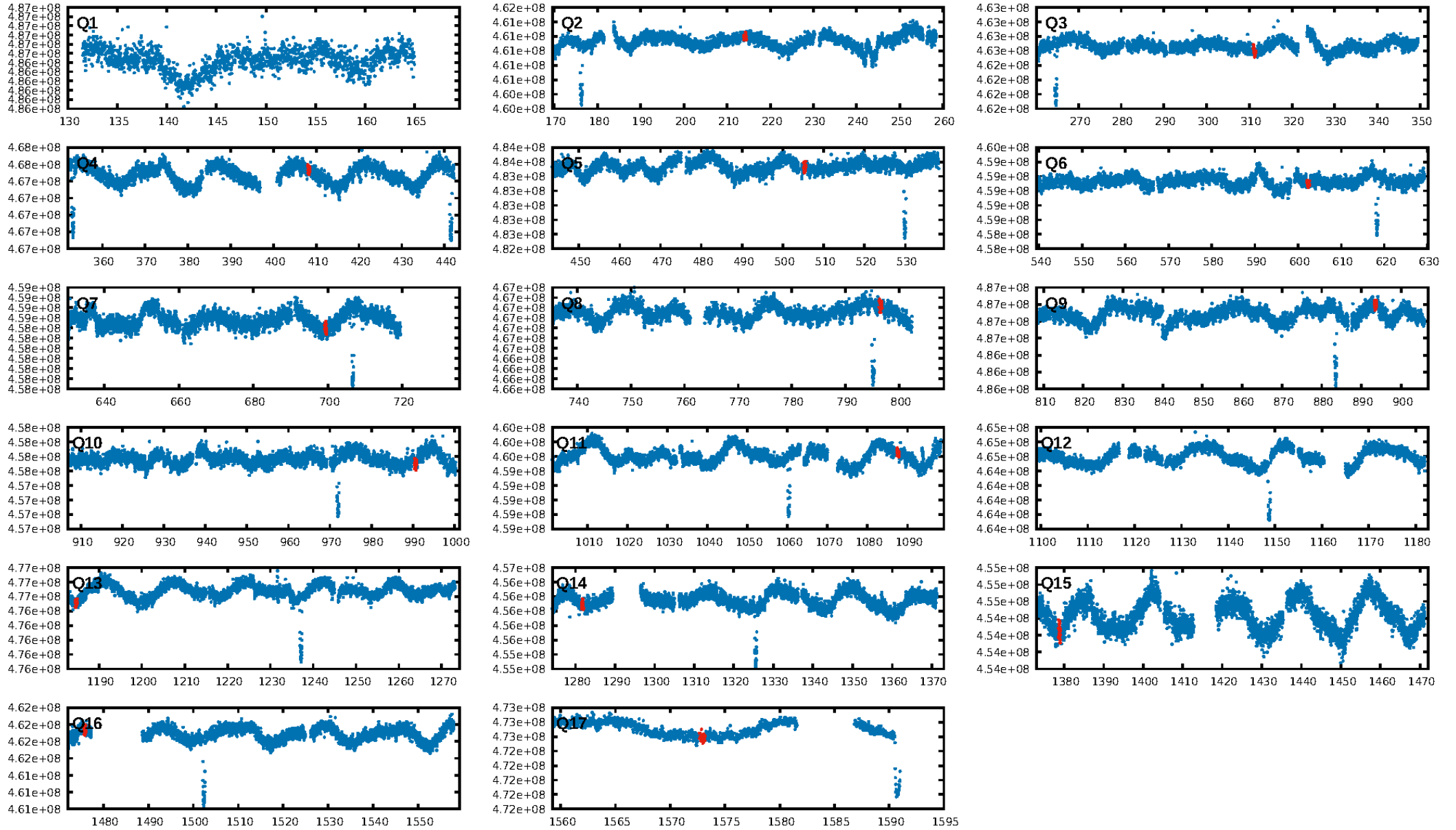
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [14.95σ]
LongPeriod-sig: 100.0% [69.36σ]
ModelChiSquare2-sig: 50.3%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 2.16e-10
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: -3.802
Centroid-sig: 24.8%
Centroid-so: 1.564 arcsec [1.82σ]
OotOffset-rm: 1.656 arcsec [2.22σ]
KicOffset-rm: 2.079 arcsec [2.61σ]
OotOffset-st: 2/3/1/3 [9]
KicOffset-st: 2/3/1/3 [9]
DiffImageQuality-fgm: 0.33 [3/9]
DiffImageOverlap-fno: 0.15 [2/13]

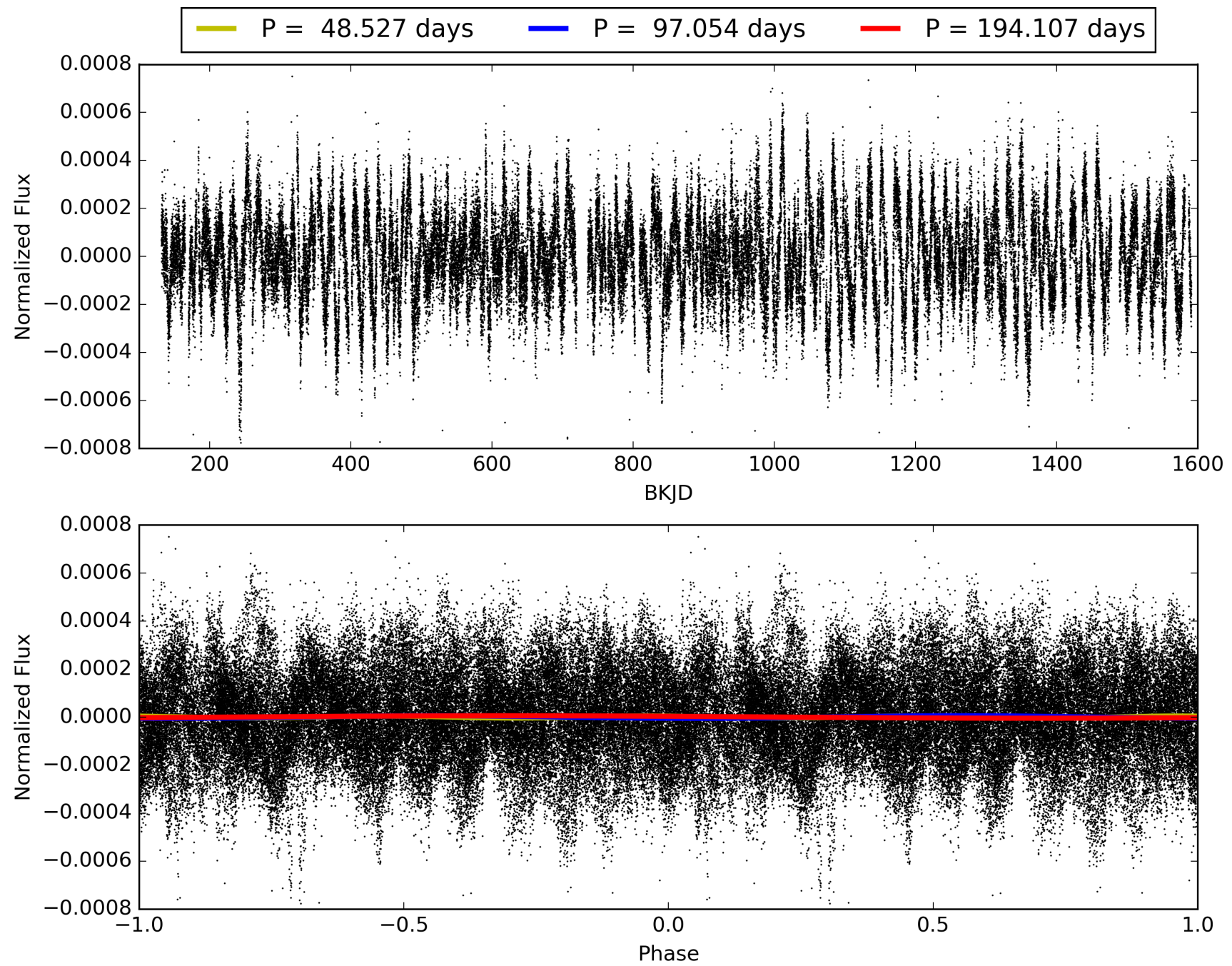
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:53:18 Z

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

TCE 008552719-06, PDC Light Curves

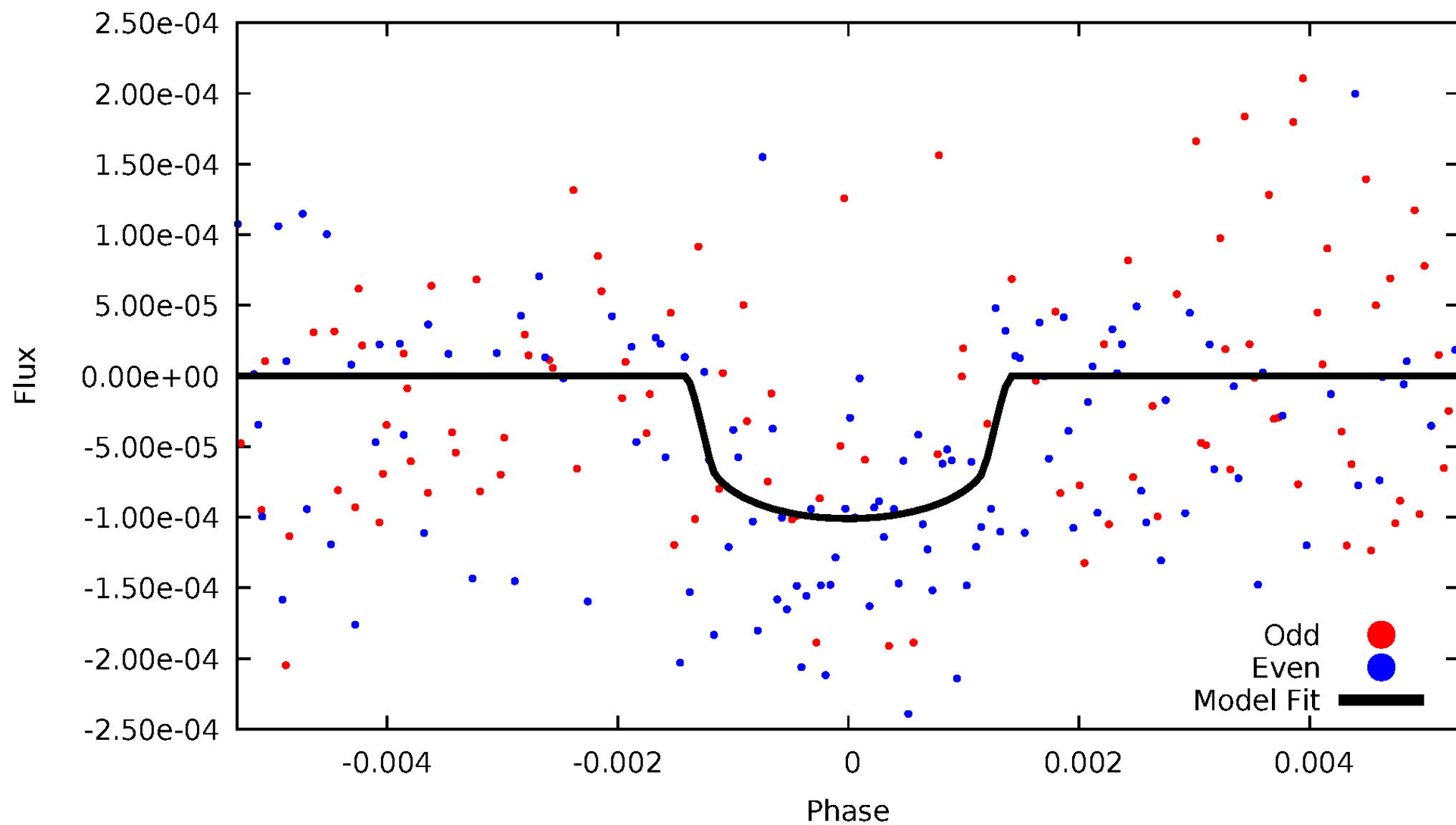


TCE 008552719-06



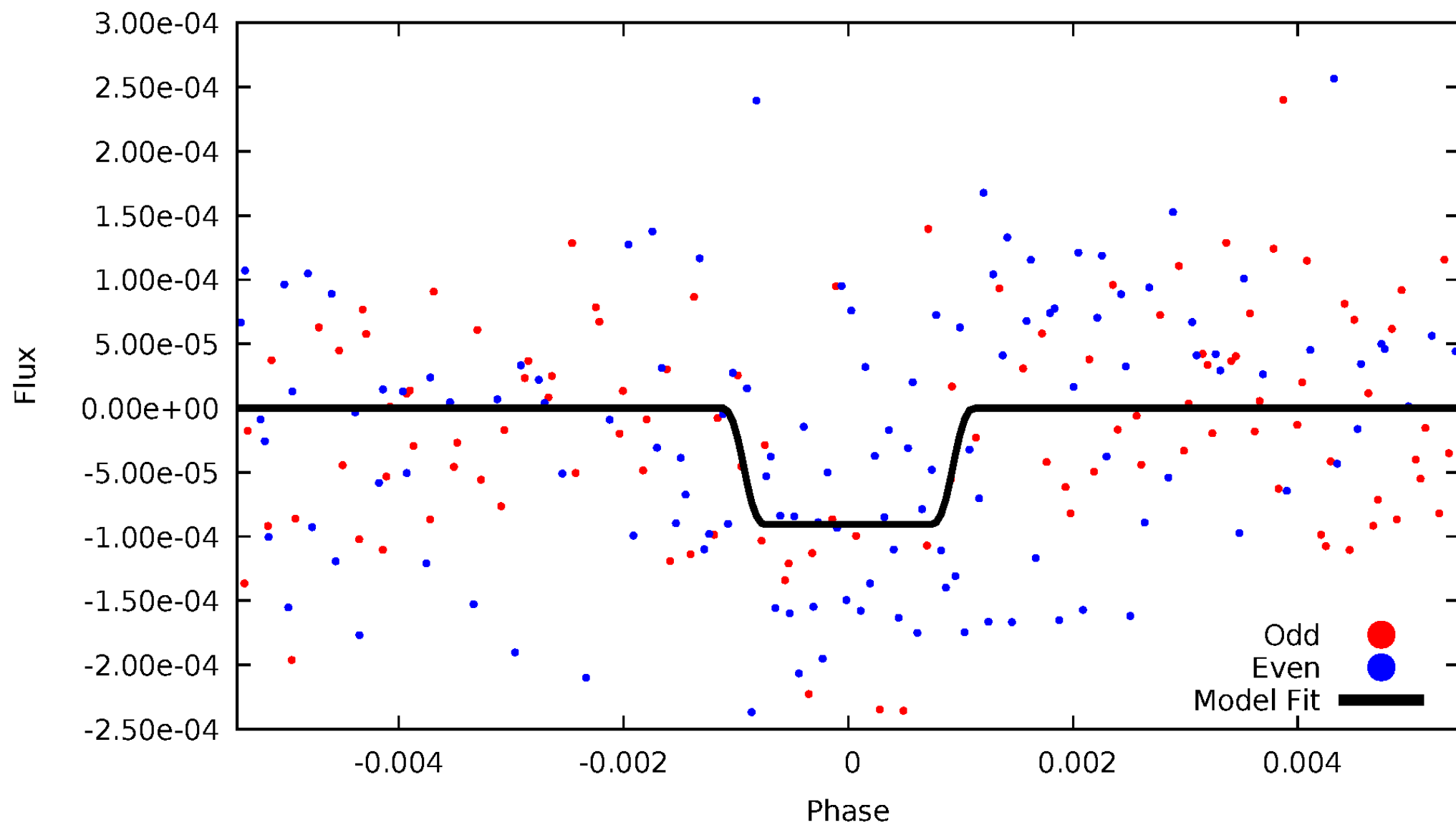
DV Odd/Even

TCE 008552719-06



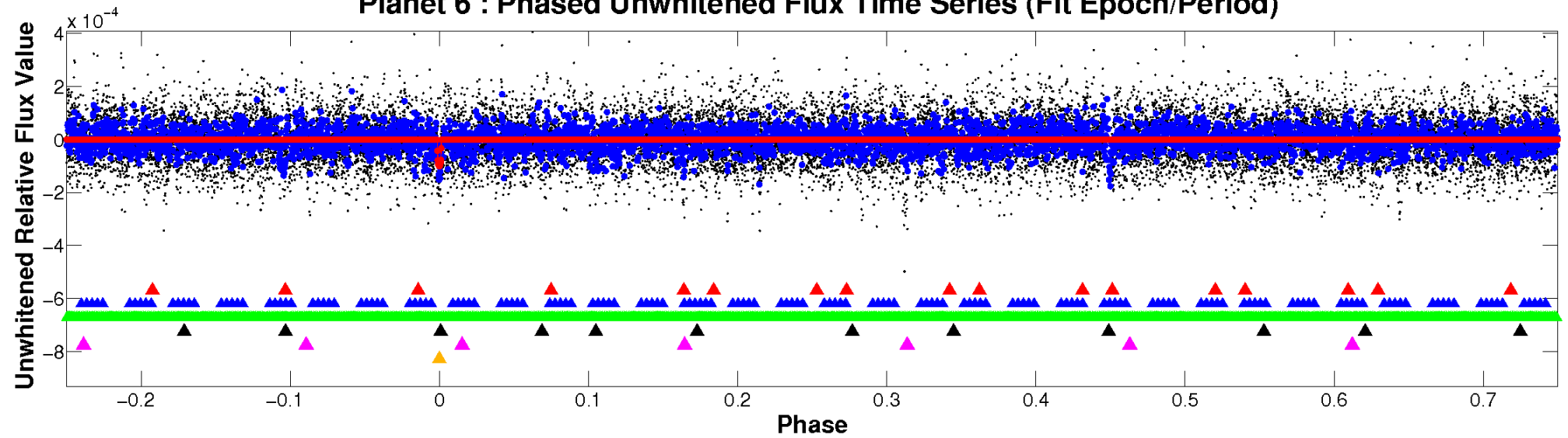
ALT Odd/Even

TCE 008552719-06

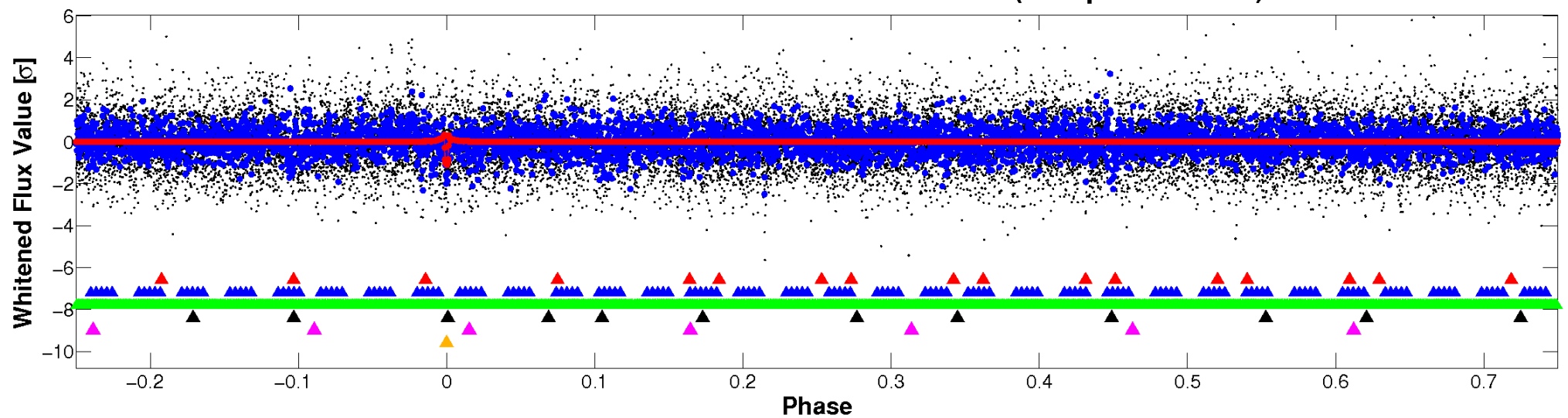


Non-Whitened Vs. Whitened Light Curve

Planet 6 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

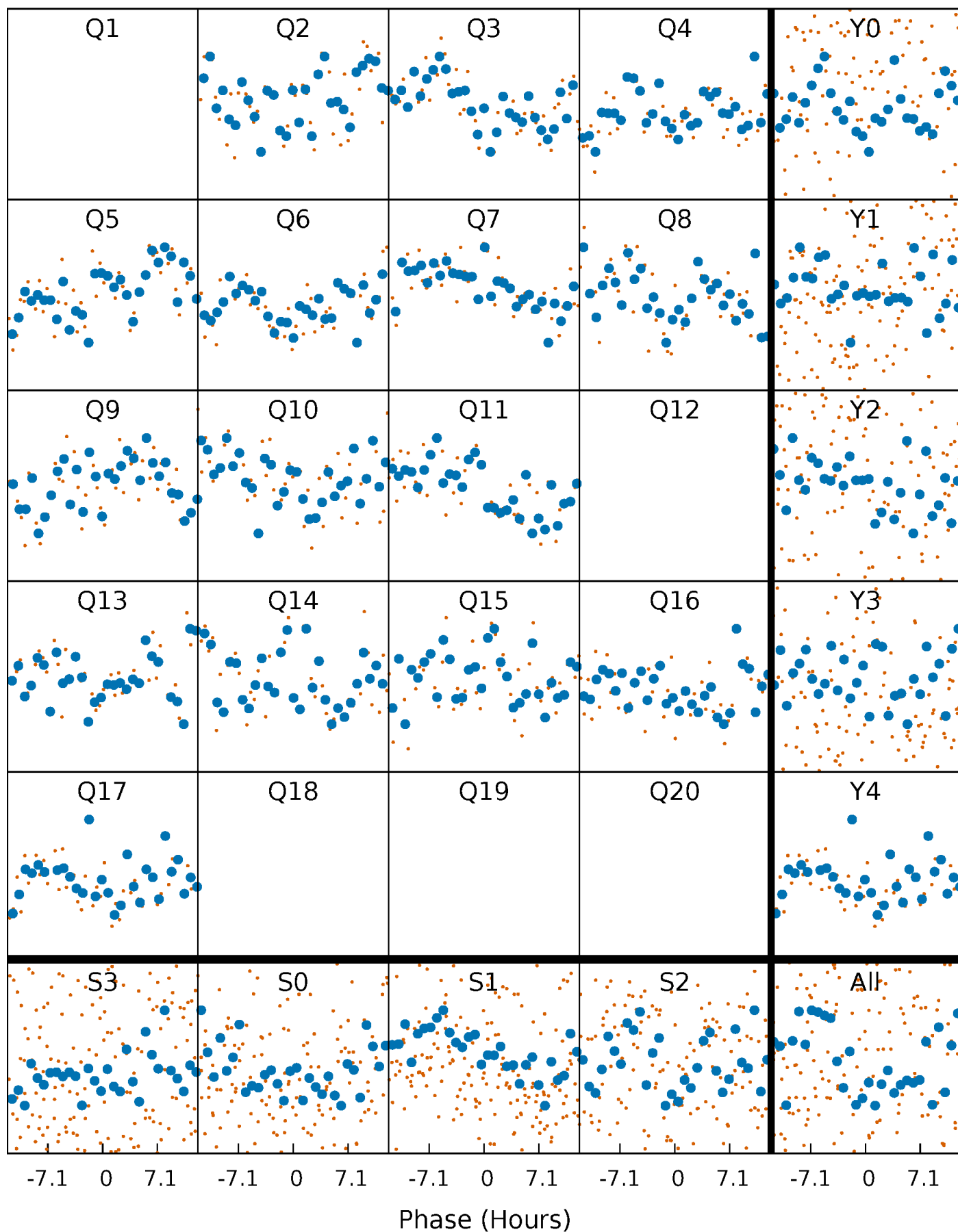


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



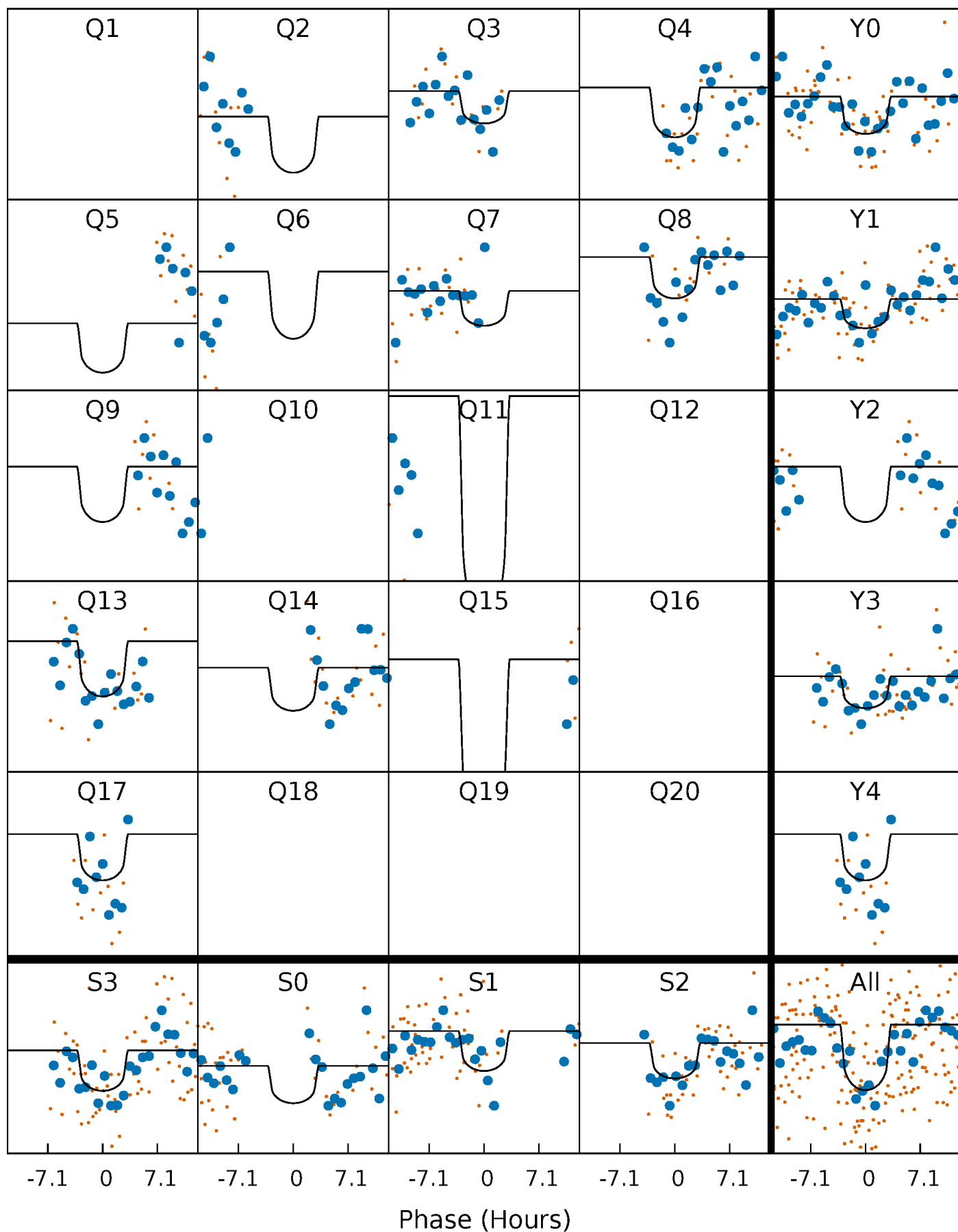
PDC Quarter-Phased Transit Curves

TCE 008552719-06 P= 97.053580 Days $T_0=214.177885$ (BKJD)



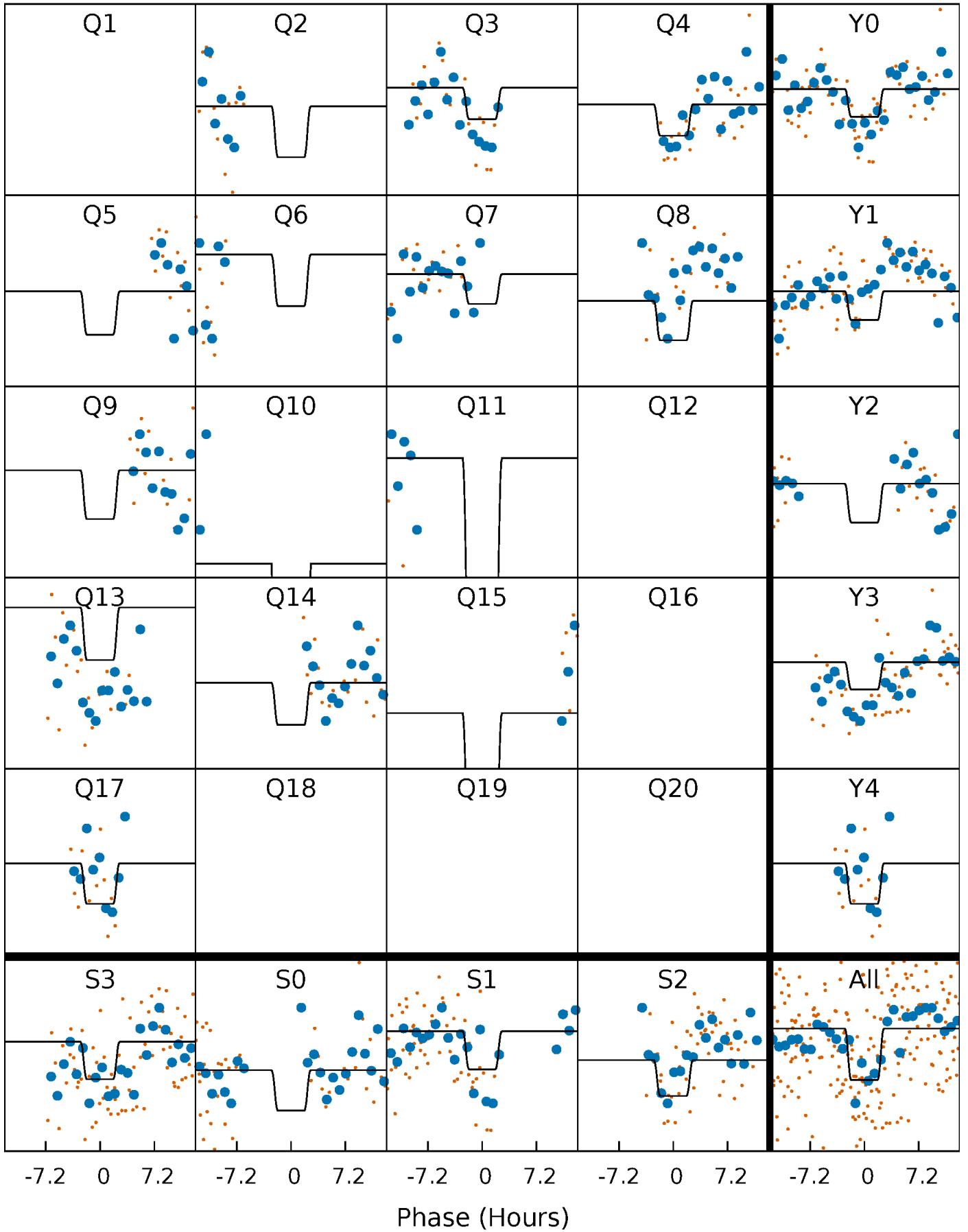
DV Quarter-Phased Transit Curves

TCE 008552719-06 P= 97.053580 Days $T_0=214.177885$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

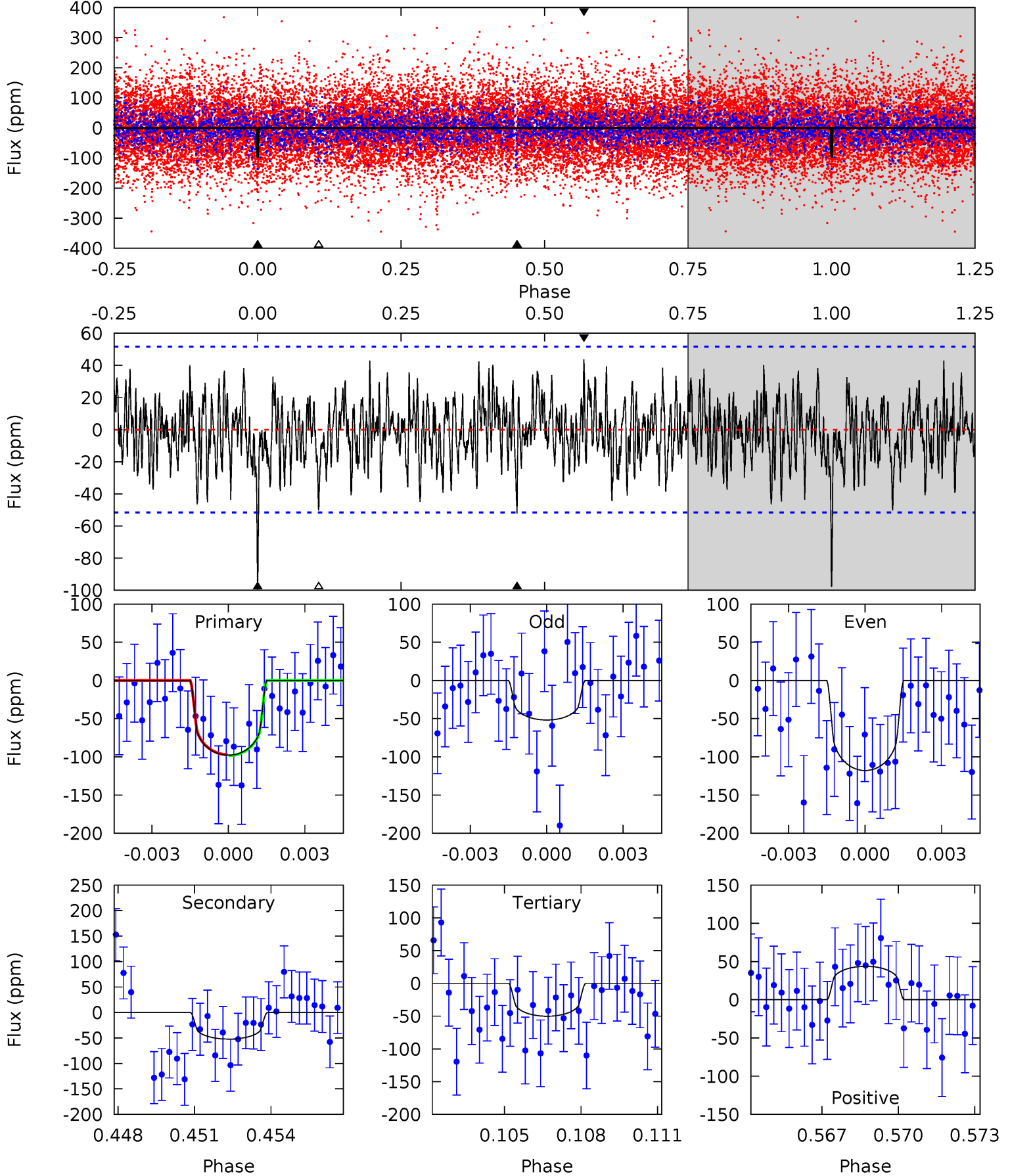
TCE 008552719-06 P= 97.053570 Days $T_0=214.185126$ (BKJD)



DV Model-Shift Uniqueness Test

008552719-06, $P = 97.053580$ Days, $E = 117.124305$ Days

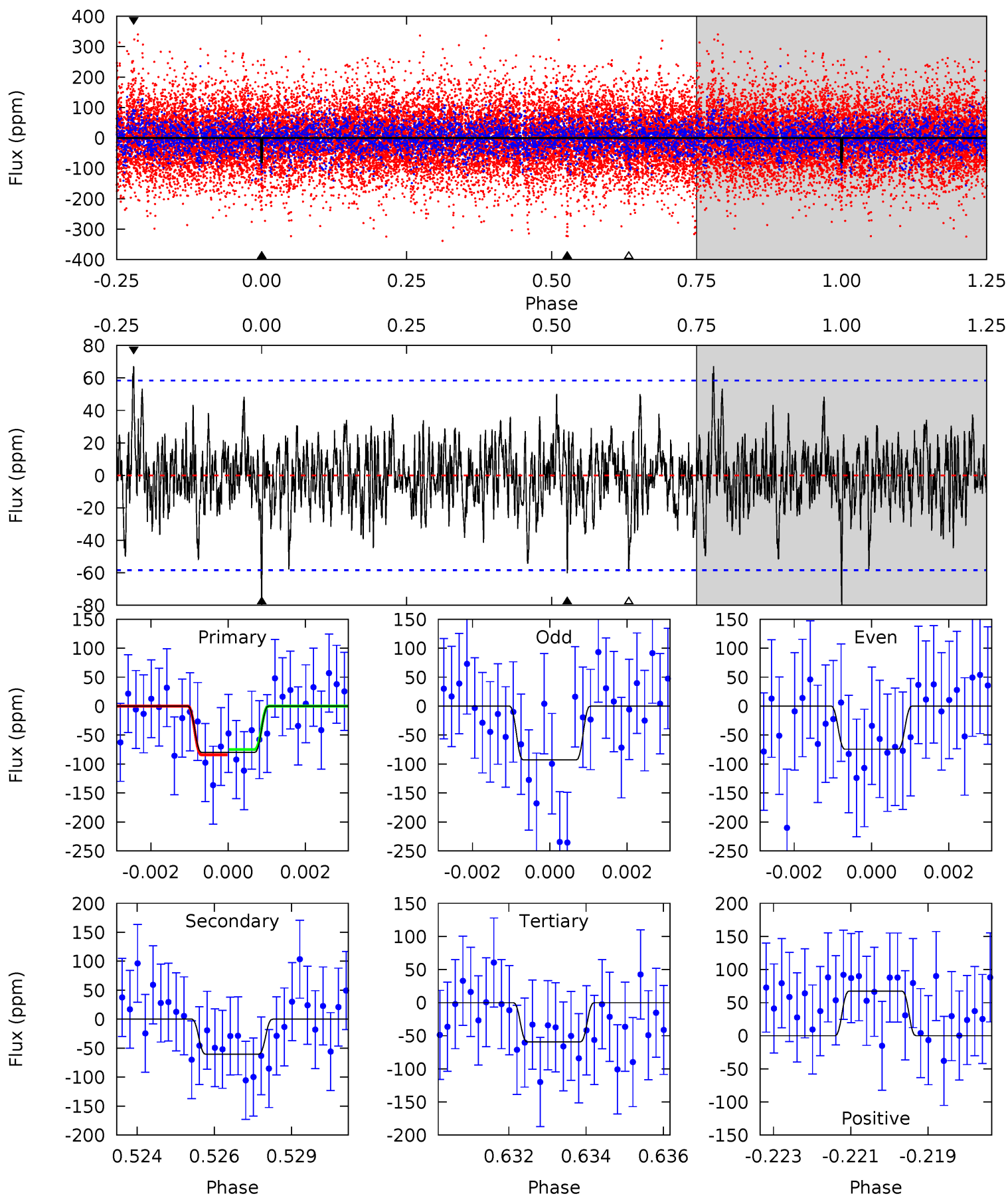
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.97	5.32	5.11	4.47	5.26	2.99	1.65	4.86	5.51	0.21	0.86	3.12	0.64	0.31	0.06



Alt Model-Shift Uniqueness Test

008552719-06, P = 97.053570 Days, E = 117.131556 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.25	5.48	5.38	6.11	5.31	3.07	1.52	1.87	1.14	0.10	-0.63	0.78	1.20	0.46	0.42



Stellar Parameters For KIC 008552719

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5611^{+100}_{-112}	$4.388^{+0.080}_{-0.120}$	$0.360^{+0.100}_{-0.150}$	$1.073^{+0.173}_{-0.106}$	$1.026^{+0.057}_{-0.057}$	$1.170^{+0.391}_{-0.412}$
	+2%/-2%	+2%/-3%	+28%/-42%	+16%/-10%	+6%/-6%	+33%/-35%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 008552719-06 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-52 ± 10	$1.51^{+1.13}_{-0.92}$	557^{+27}_{-20}	4449^{+2317}_{-836}	2217^{+11799}_{-1536}
Alt.	-60 ± 11	$1.43^{+1.16}_{-0.88}$	556^{+24}_{-20}	4602^{+2650}_{-874}	2788^{+16119}_{-1964}

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 $A_{obs} \gg 1.0$

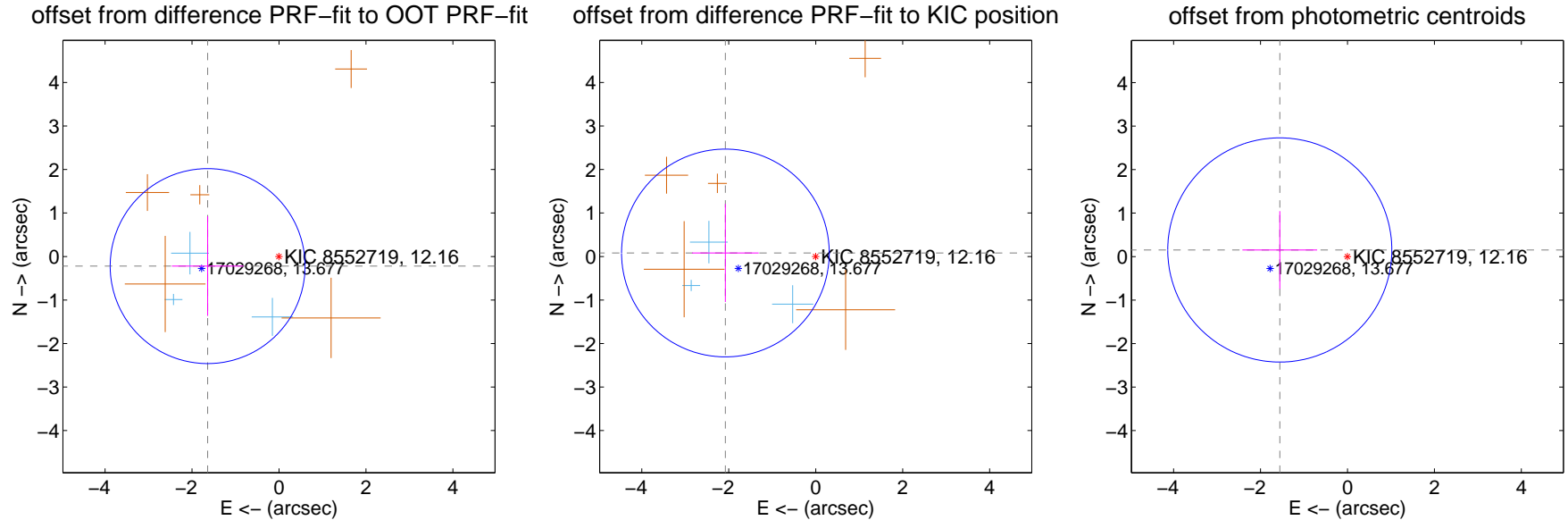
DV Centroid Data

Supplemental centroid analysis for 008552719-06. Kepler magnitude: 12.16. Transit SNR 7.96

There are 3 quarters with good PRF difference image offsets

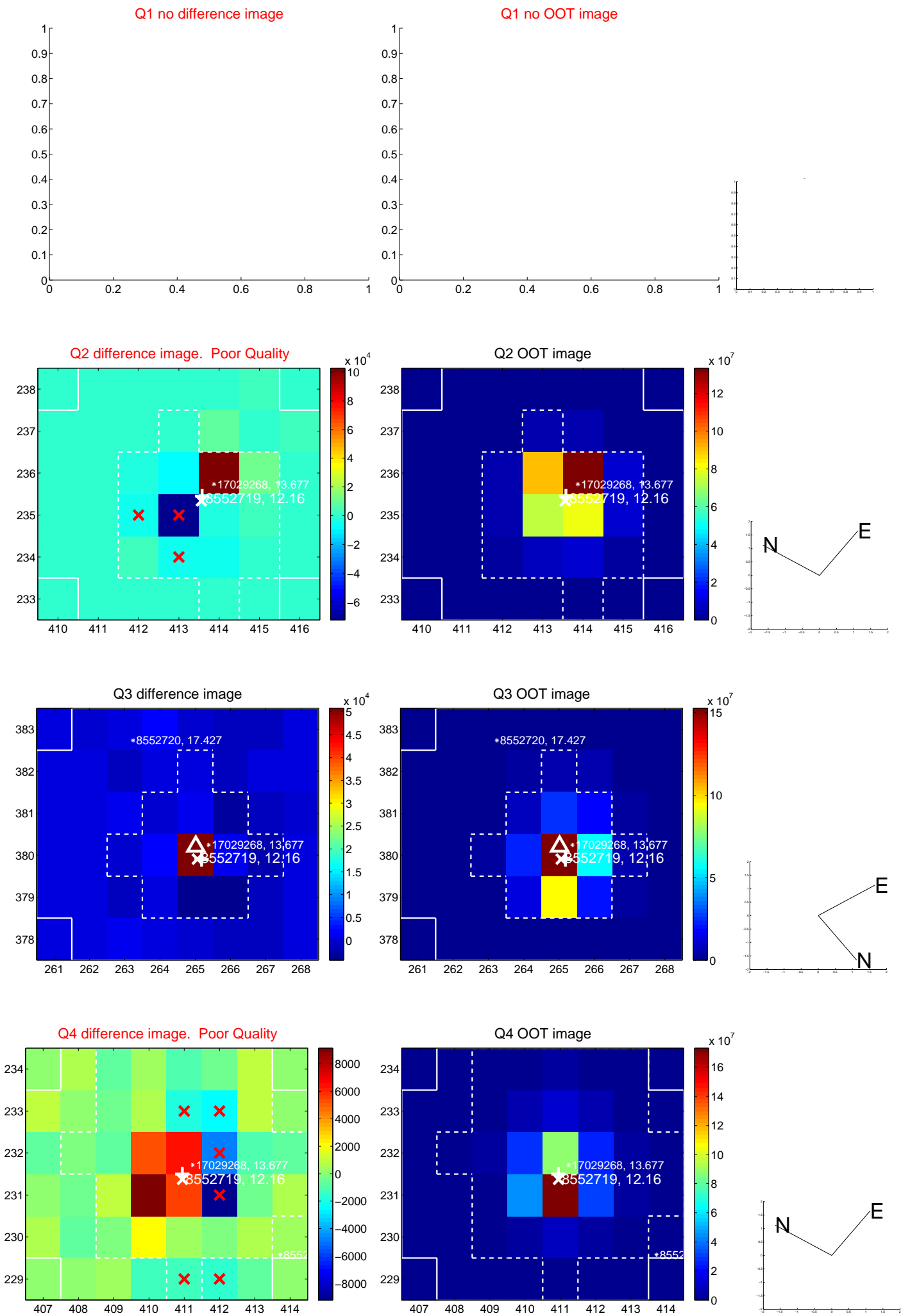
The direct PRF centroid is offset from the target star catalog position by about 0.58 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.656 ± 0.747	2.22	1.642 ± 0.823	-0.220 ± 1.145
PRF-fit source offset from KIC position	2.079 ± 0.796	2.61	2.077 ± 0.766	0.081 ± 1.127
photometric centroid source offset	1.56 ± 0.86	1.82	1.56 ± 0.86	0.15 ± 0.89

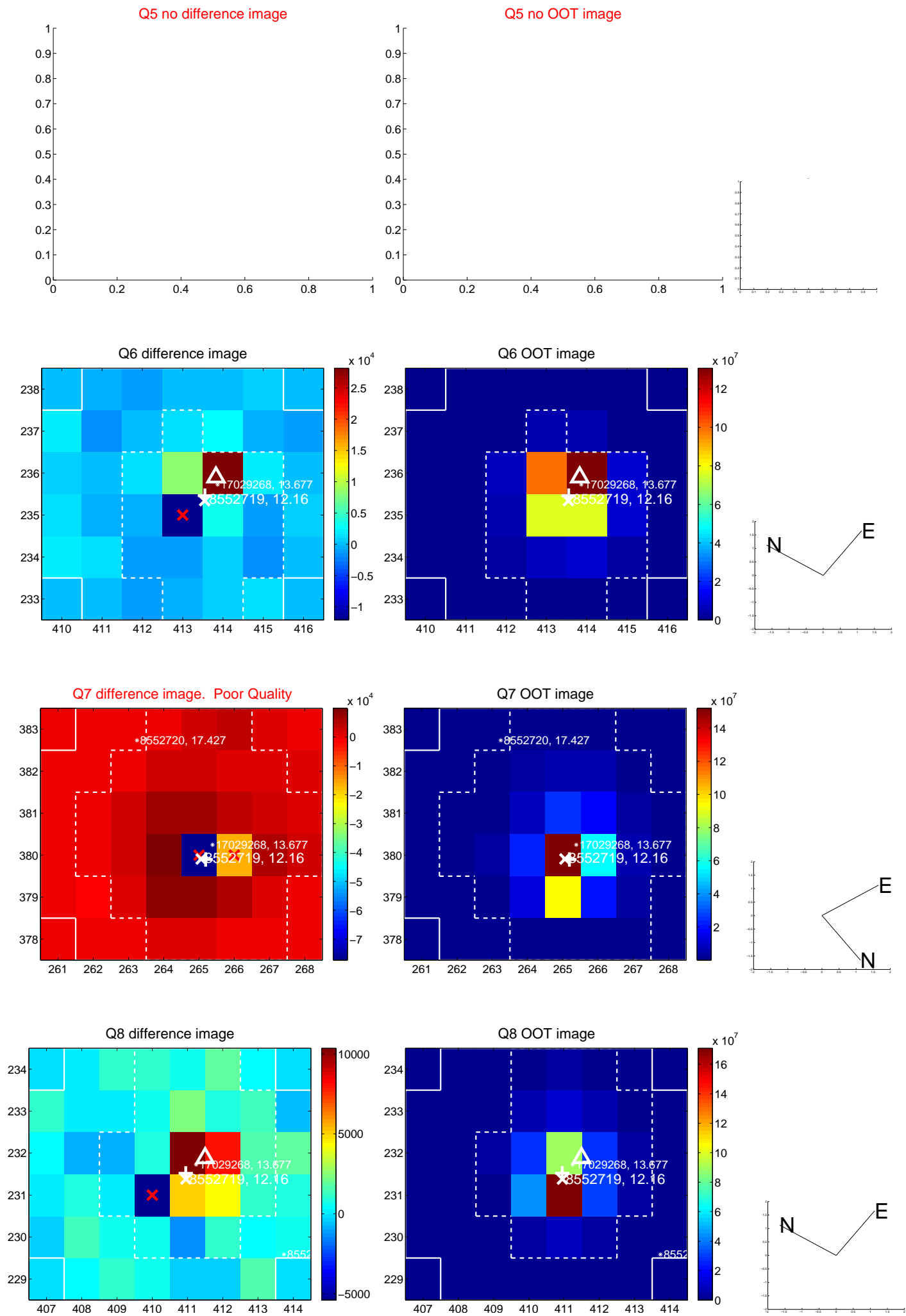


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

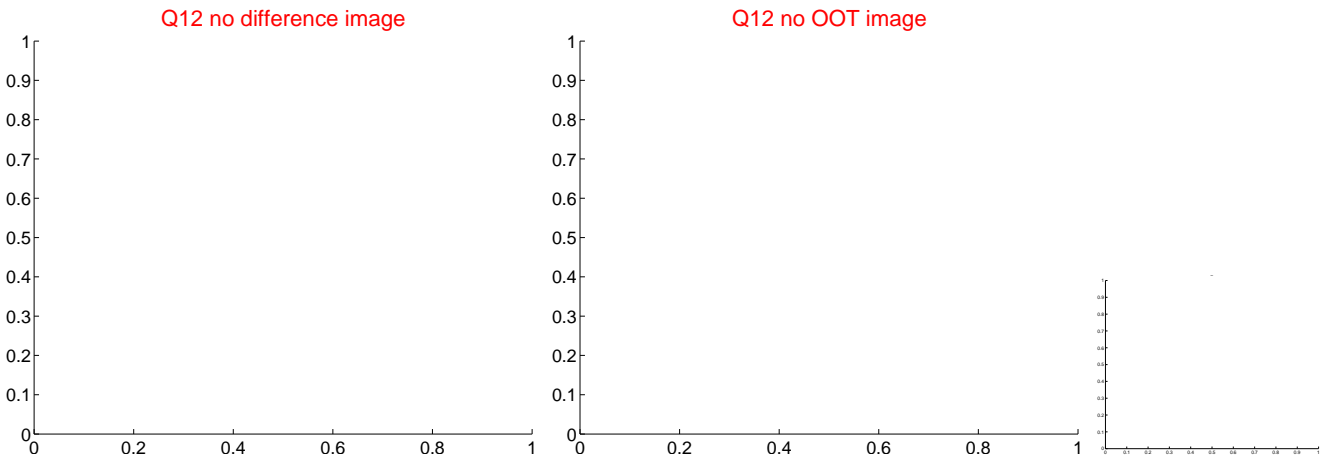
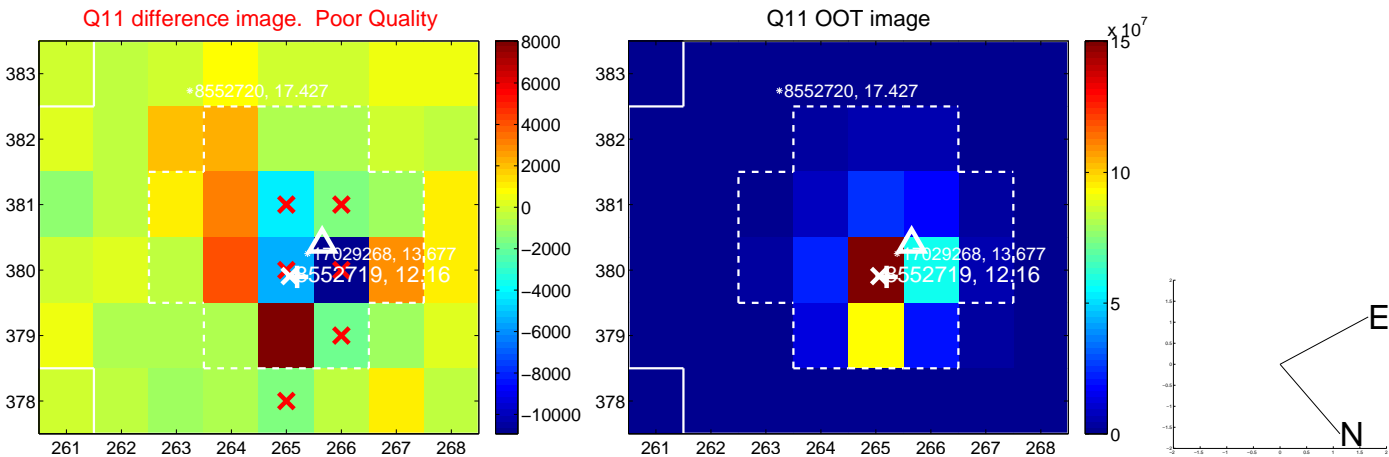
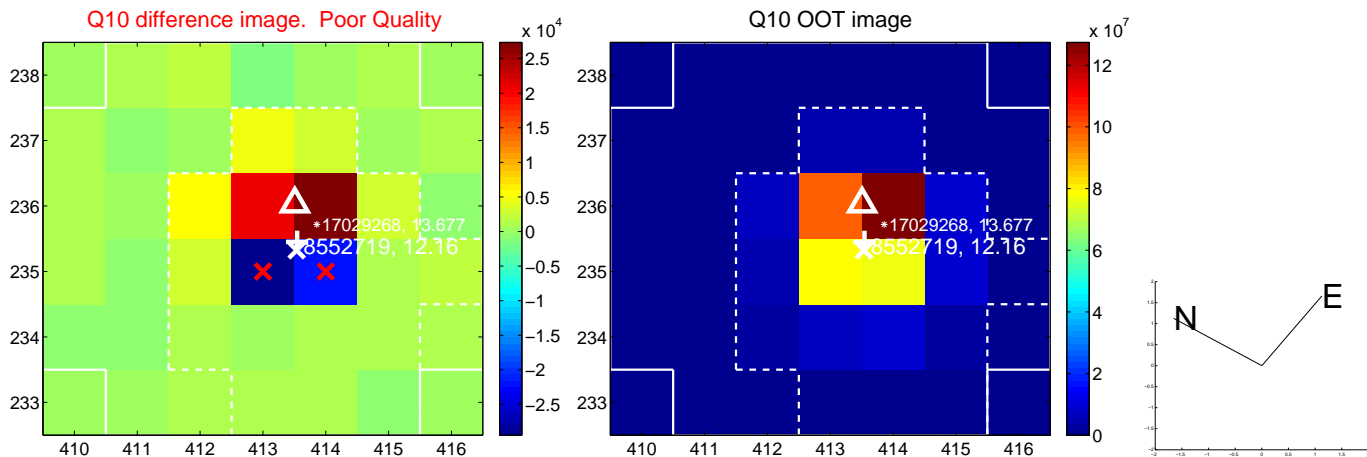
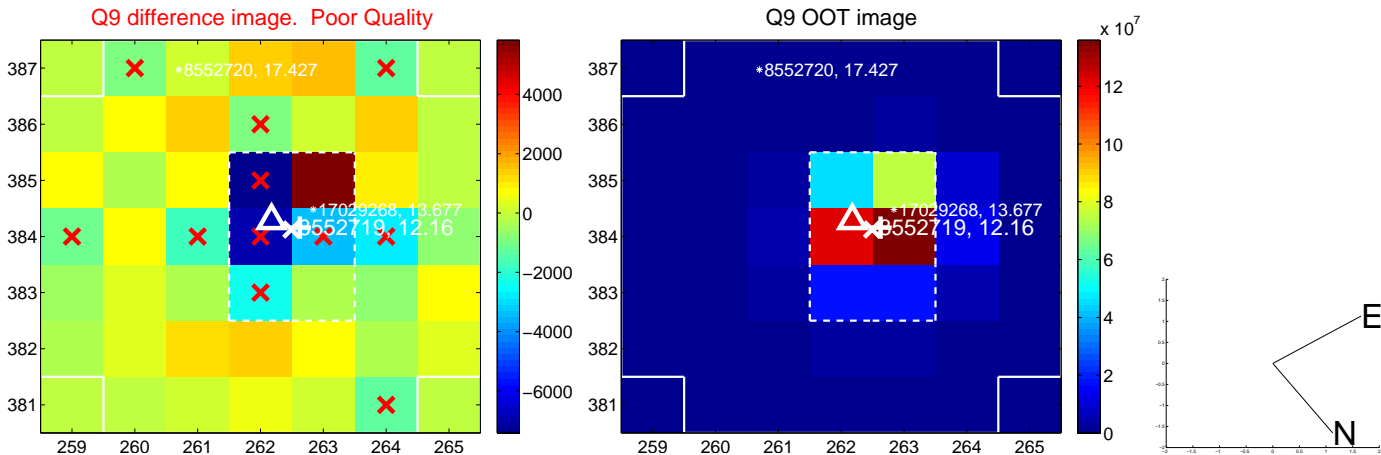
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



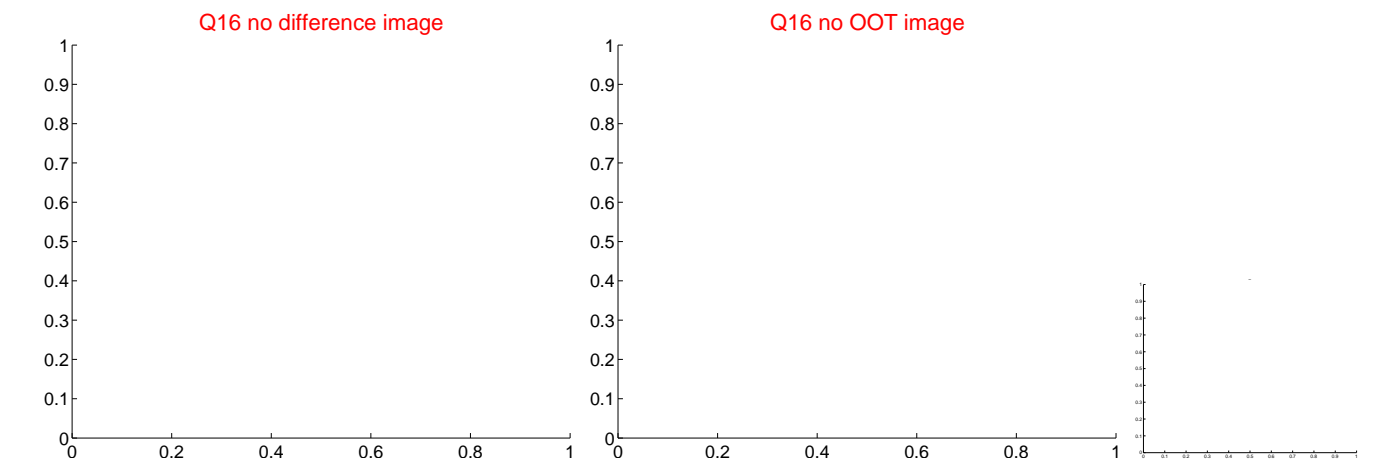
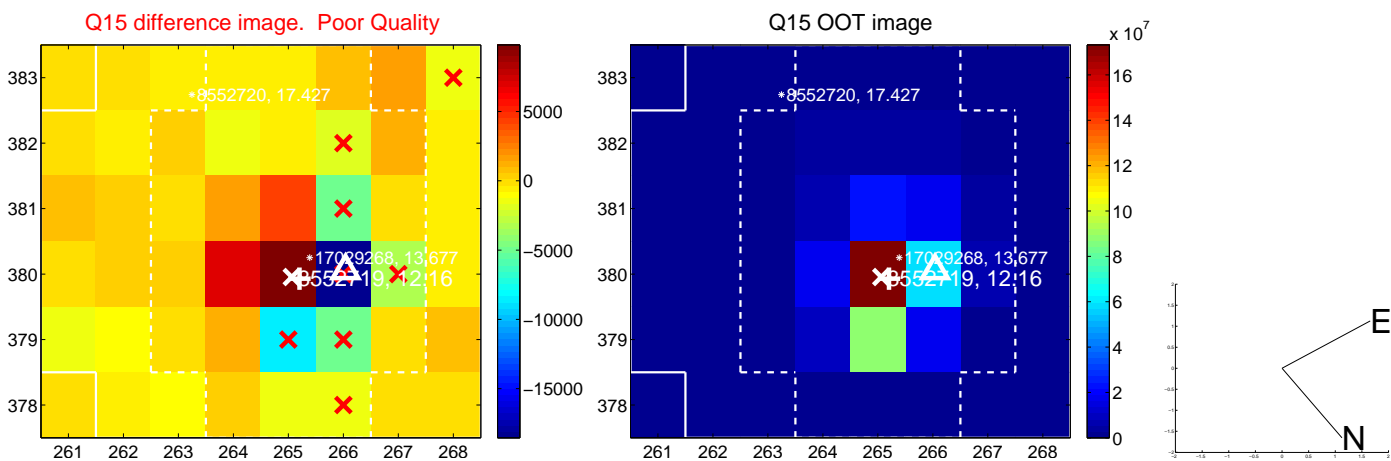
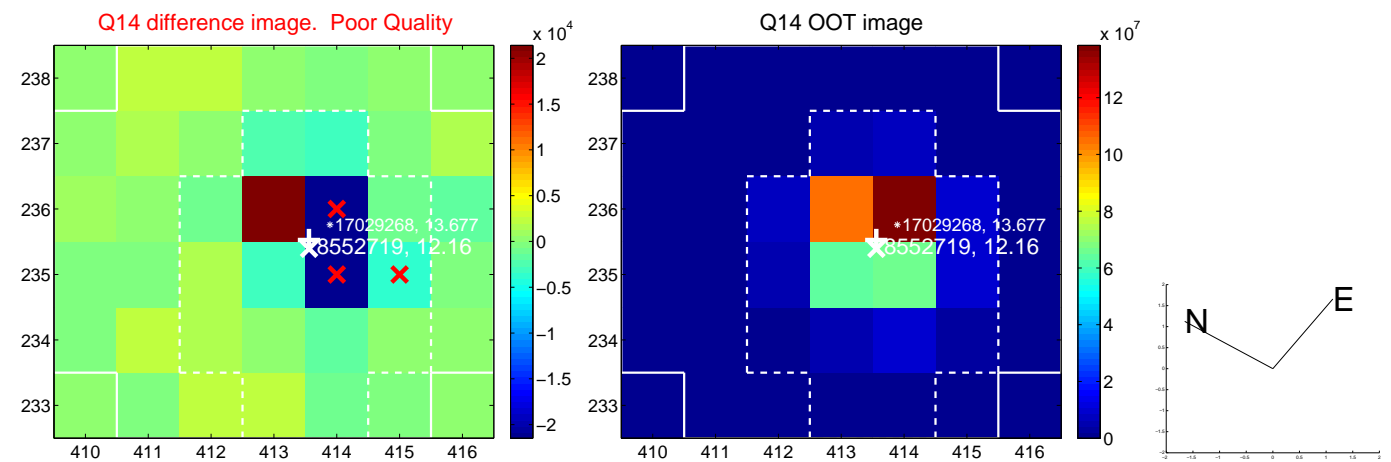
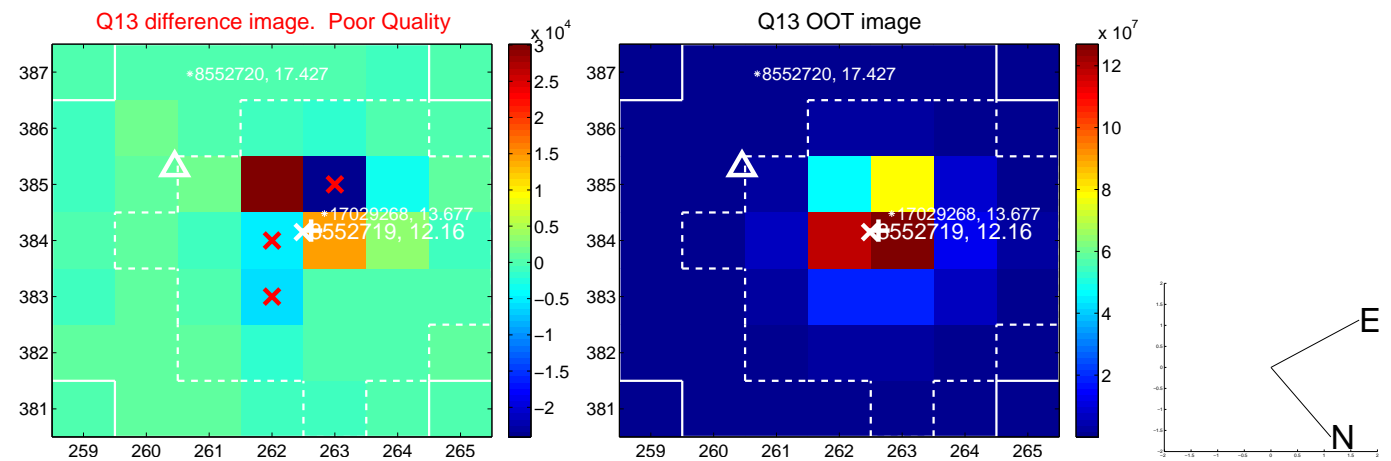
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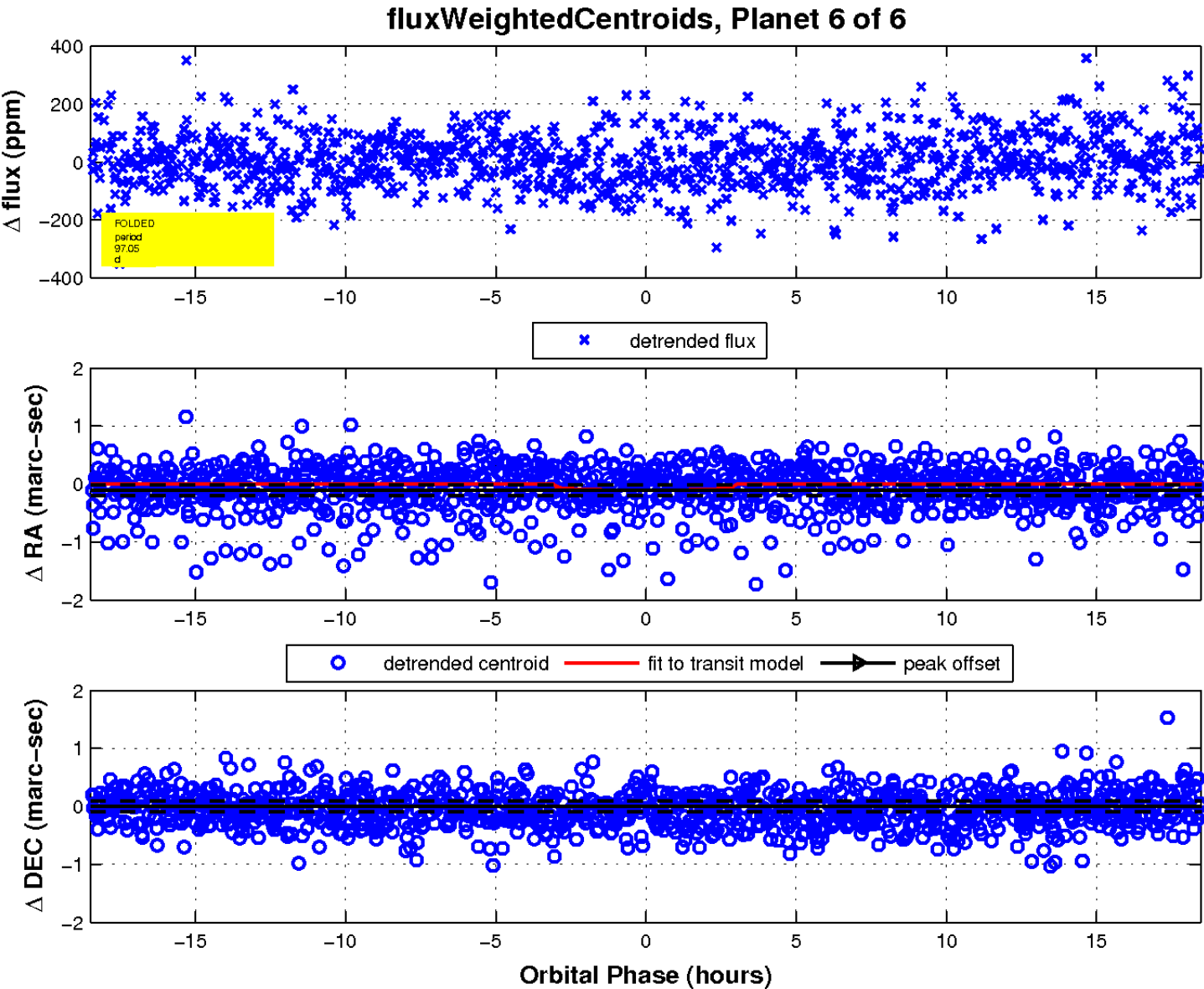
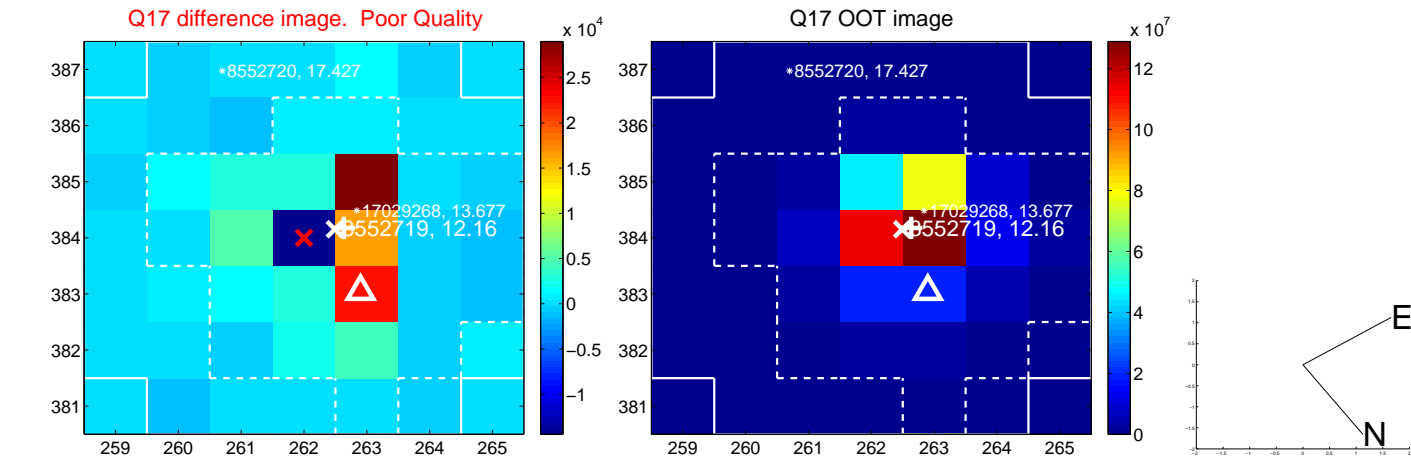
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



Declination