

KIC 010263800

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})
010263800-01	OBS	No	2.312846	132.096826	7.0	16.479	9.2	12.1	3.12	8818	0.94	24916.35
010263800-03	OBS	No	20.382162	144.932537	55.4	4.015	12.5	8.8	3.12	8818	2.58	1368.82
010263800-04	OBS	No	25.137888	137.753944	77.1	3.383	12.1	11.8	3.12	8818	3.11	1034.92
010263800-05	OBS	No	6.268994	133.056503	12.5	20.620	11.4	7.3	3.12	8818	1.24	6593.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010263800-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
010263800-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010263800-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010263800-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED

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

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

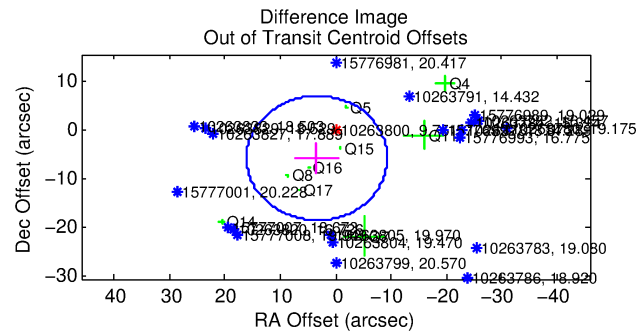
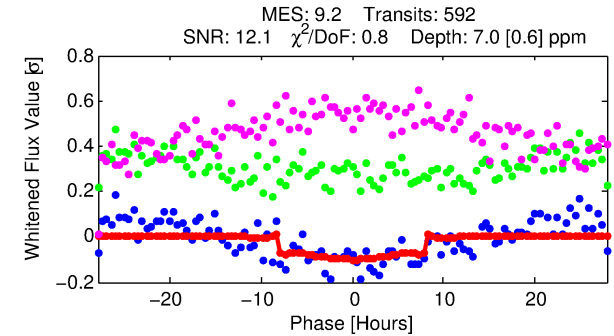
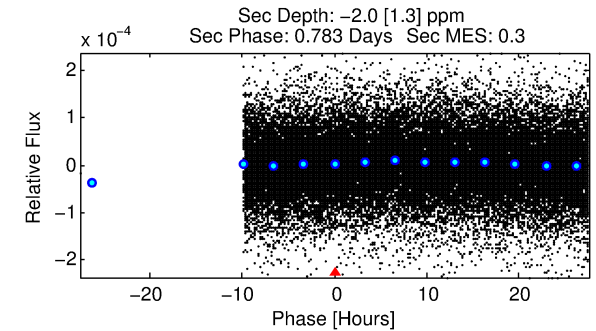
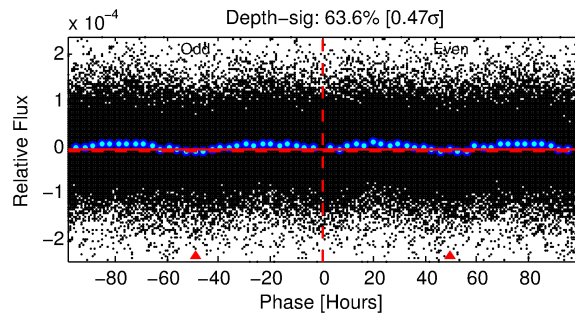
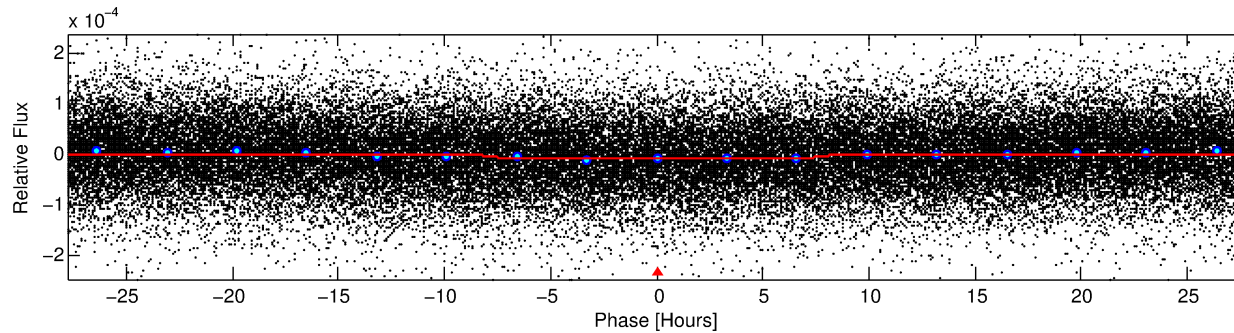
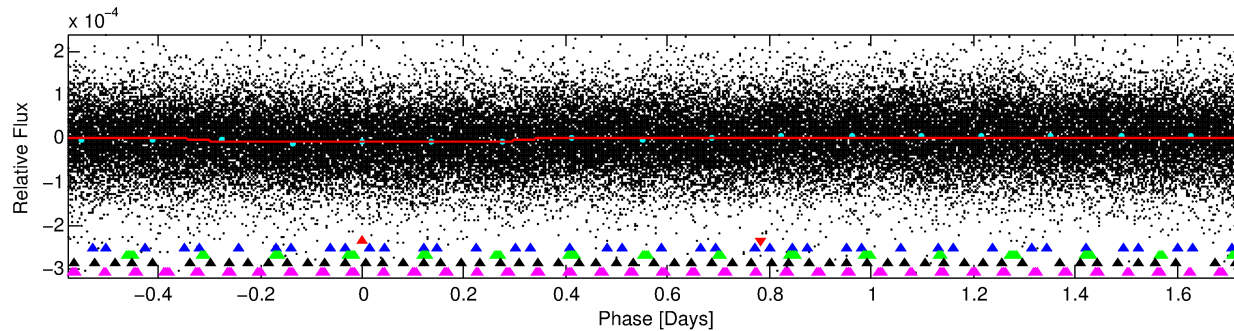
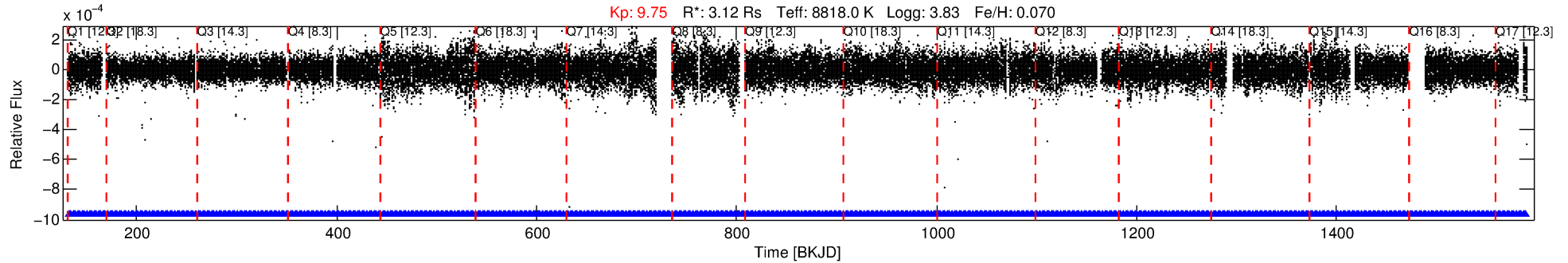
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010263800-01

No Significant Match Found

DV One-Page Summary

KIC: 10263800 Candidate: 1 of 5 Period: 2.313 d



DV Fit Results:

Period = 2.31285 [0.00003] d
Epoch = 132.0968 [0.0058] BKJD
Rp/R* = 0.0028 [0.0004]
a/R* = 1.06 [0.13]
b = 0.88 [0.26]
Seff = 24916.35 [16258.67]
Teq = 3204 [523] K
Rp = 0.94 [0.44] Re
a = 0.0459 [0.0187] AU
Ag = N/A
Teffp = N/A

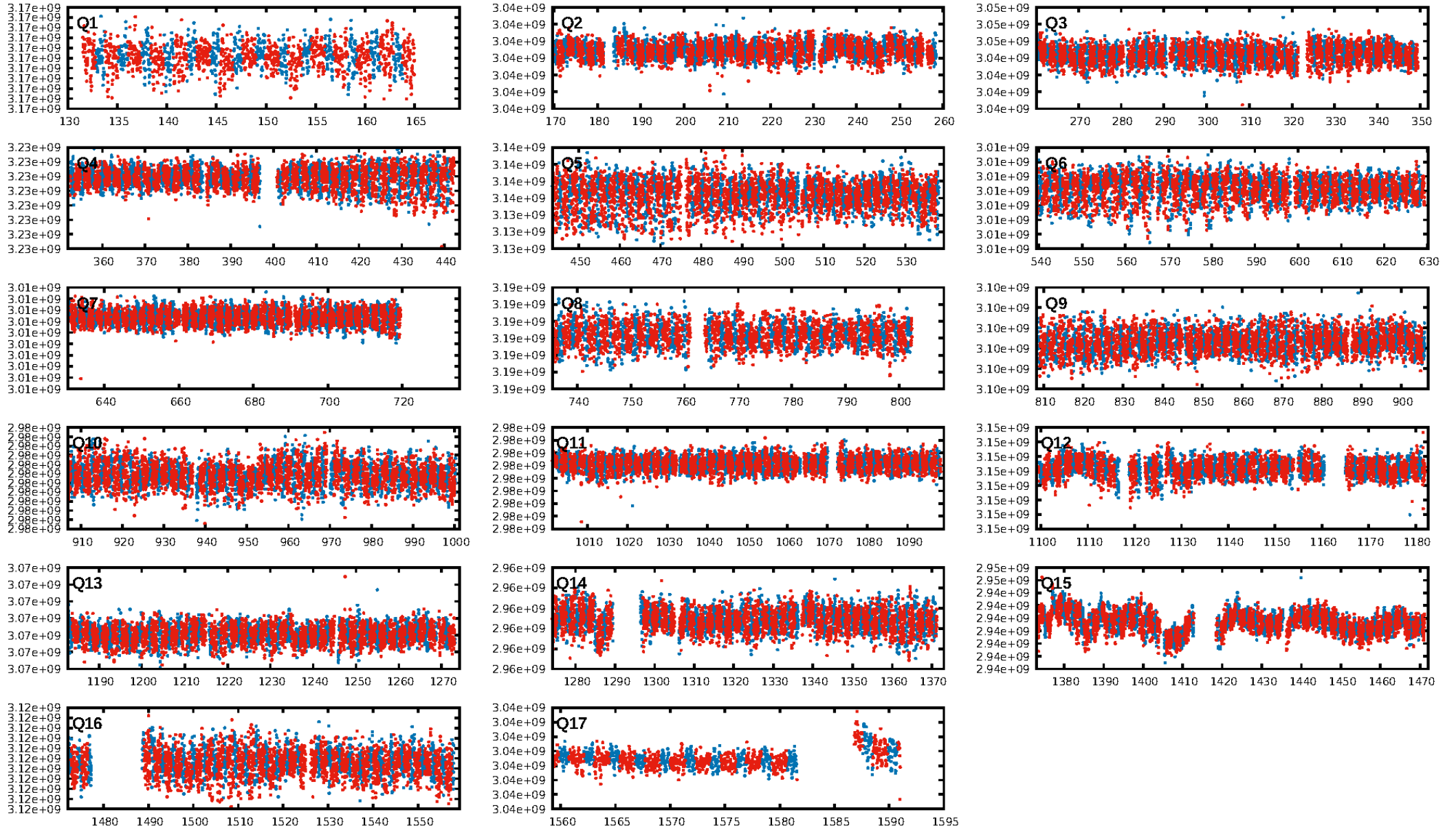
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [3.60 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [565/565]
GhostDiagnostic-chr: N/A
Centroid-sig: 18.7%
Centroid-so: 2.265 arcsec [1.69 σ]
OotOffset-rm: 6.680 arcsec [1.57 σ]
KicOffset-rm: 6.941 arcsec [1.35 σ]
OotOffset-st: 1/3/3/2 [9]
KicOffset-st: 1/3/3/2 [9]
DiffImageQuality-fgm: 0.11 [1/9]
DiffImageOverlap-fno: 1.00 [17/17]

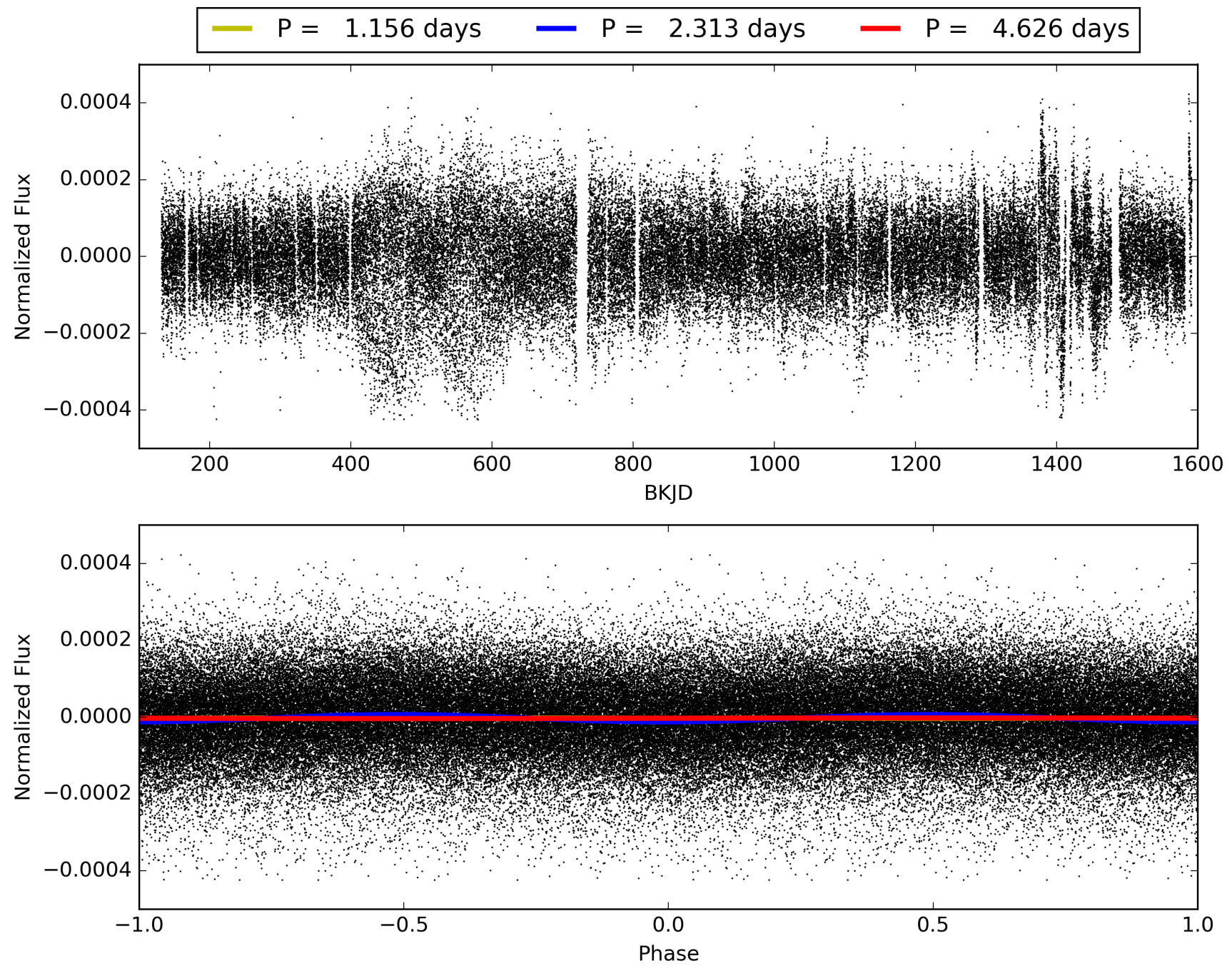
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 010263800-01, PDC Light Curves

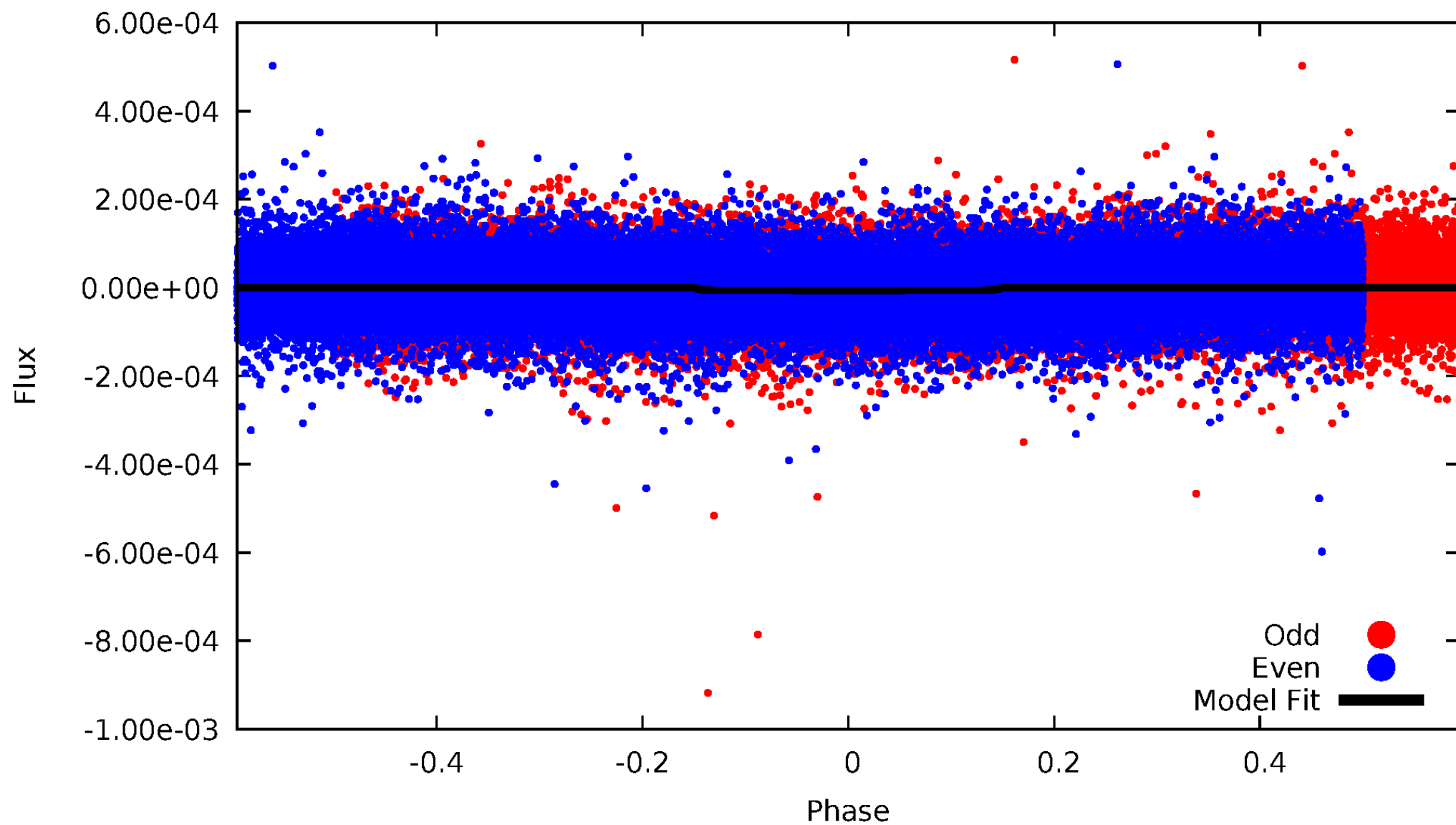


TCE 010263800-01



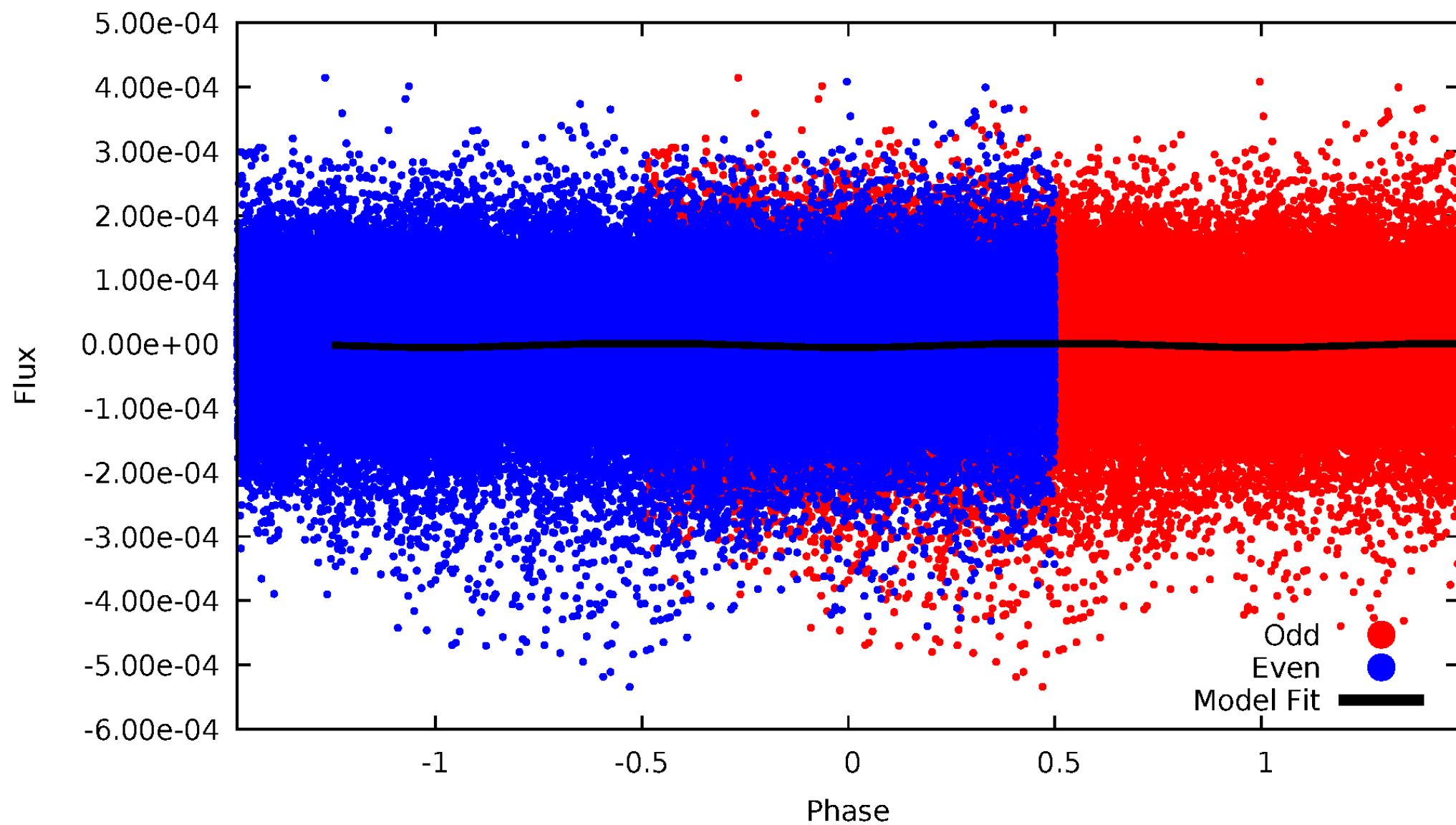
DV Odd/Even

TCE 010263800-01

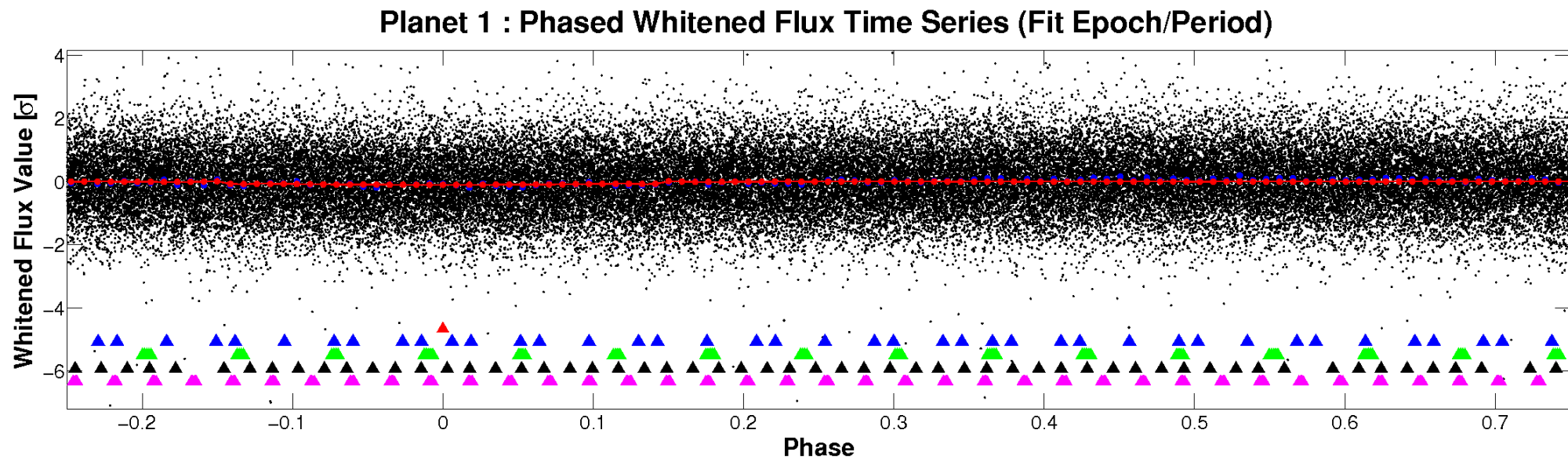
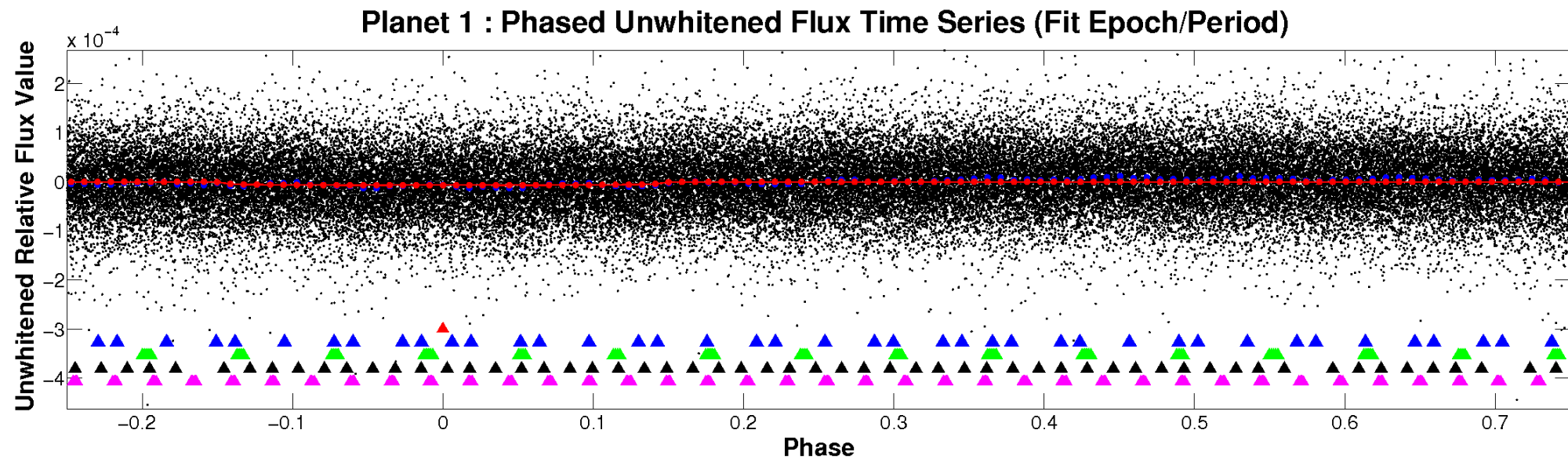


ALT Odd/Even

TCE 010263800-01

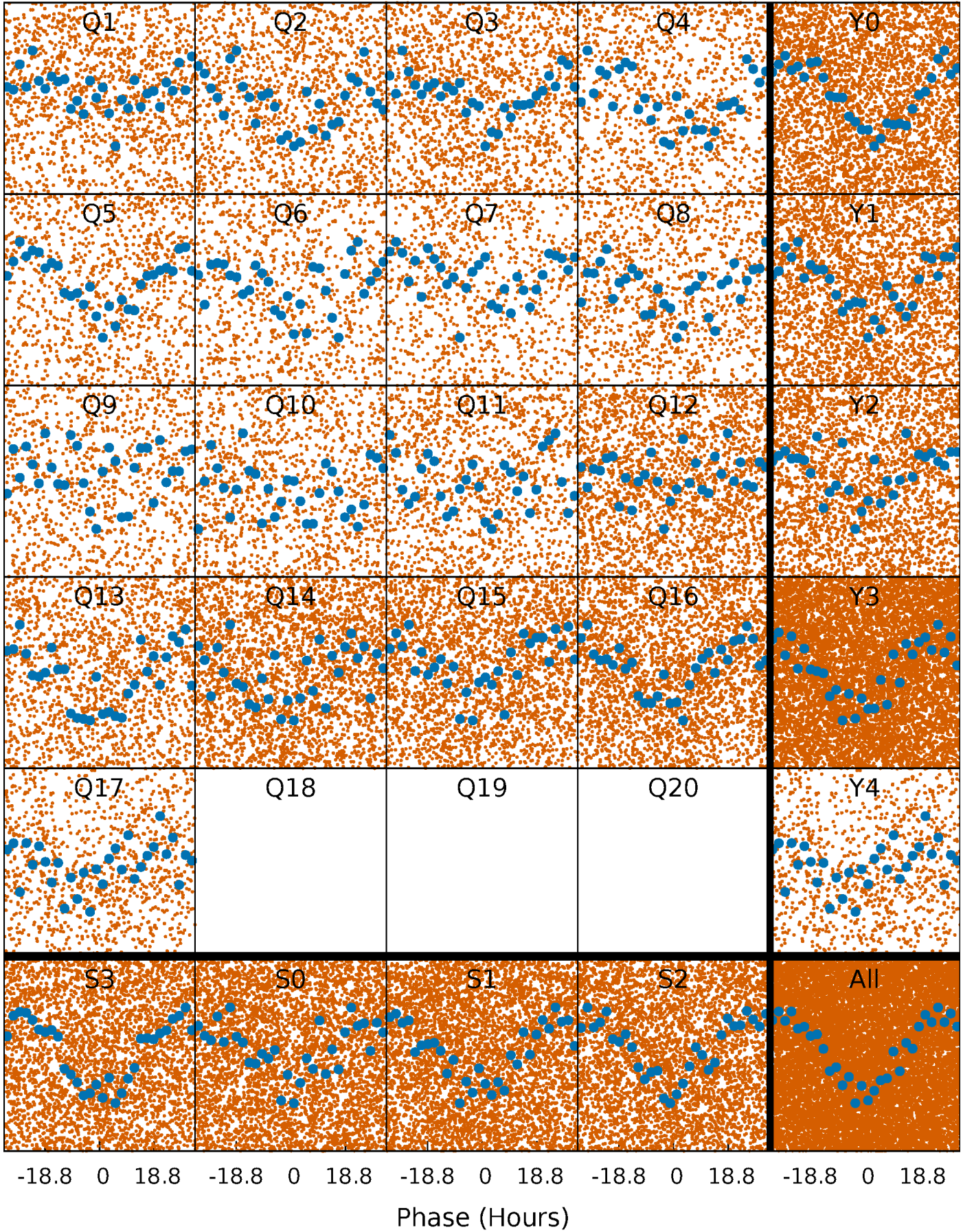


Non-Whitened Vs. Whitened Light Curve



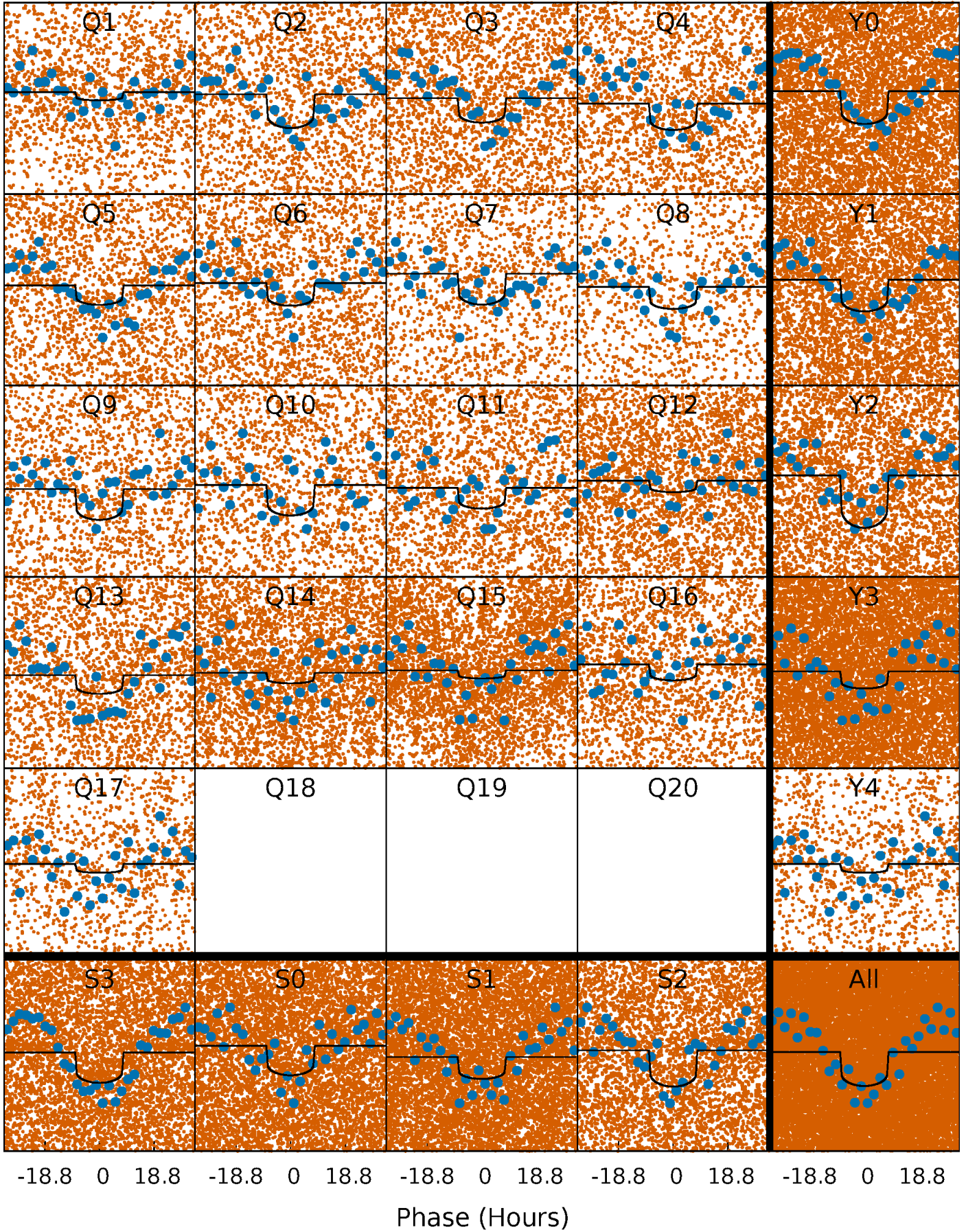
PDC Quarter-Phased Transit Curves

TCE 010263800-01 P= 2.312846 Days $T_0=132.096826$ (BKJD)



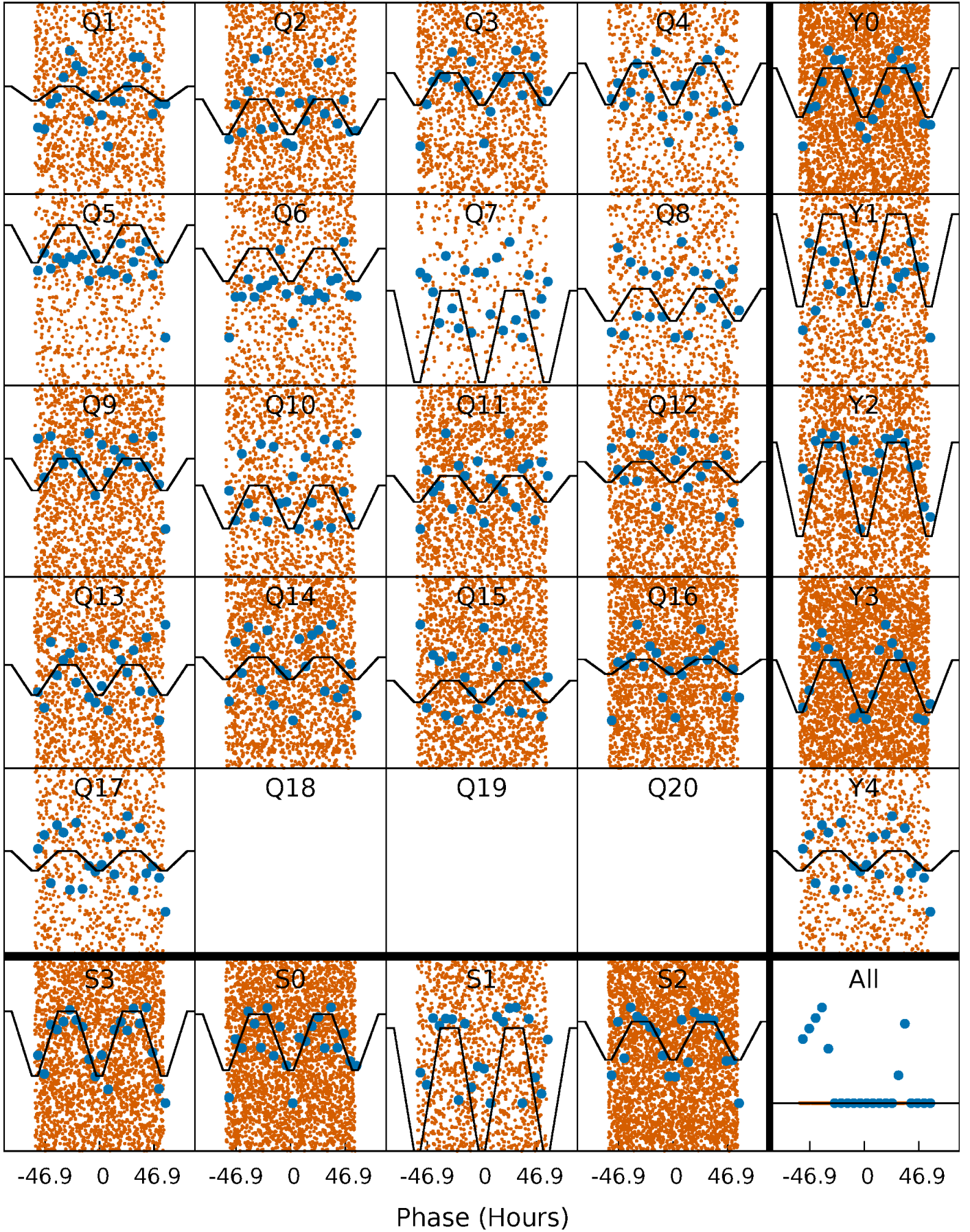
DV Quarter-Phased Transit Curves

TCE 010263800-01 P= 2.312846 Days $T_0=132.096826$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

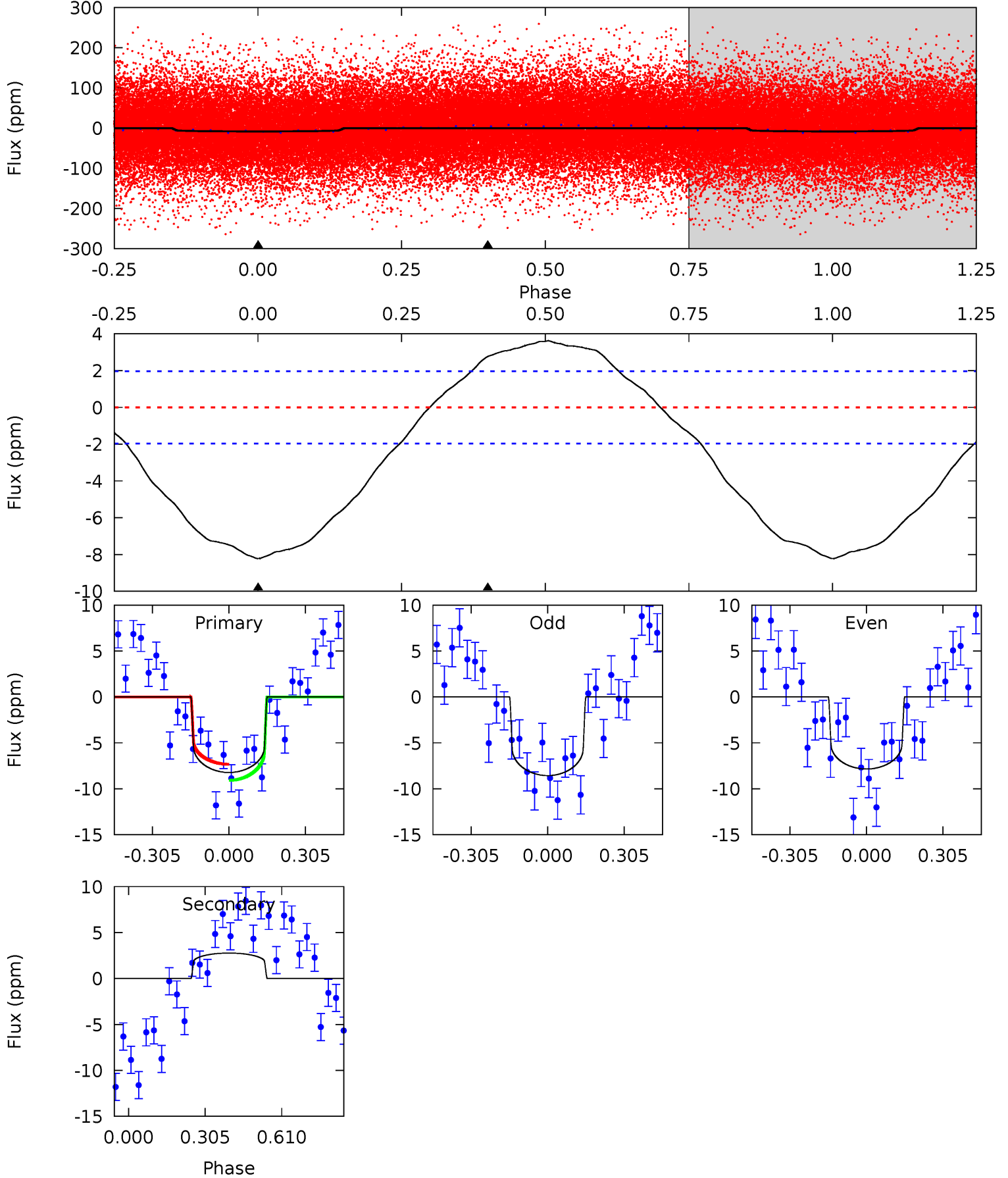
TCE 010263800-01 $P = 2.312787$ Days $T_0 = 132.100355$ (BKJD)



DV Model-Shift Uniqueness Test

010263800-01, P = 2.312846 Days, E = 129.783980 Days

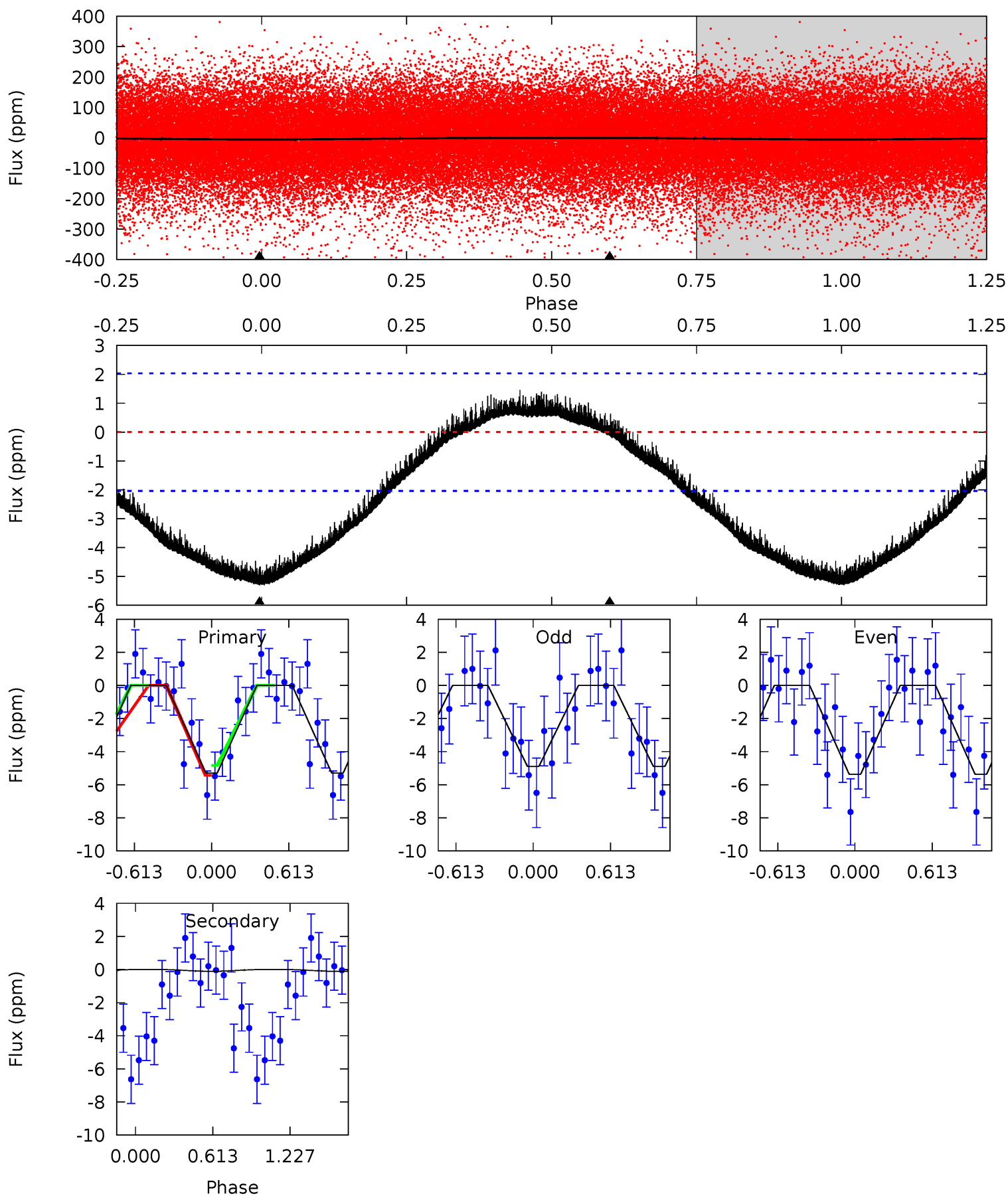
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.1	-6.09	0	0	4.33	1.03	1.89	18.1	18.1	-6.09	-6.09	0.80	1.09	0.31	1.91



Alt Model-Shift Uniqueness Test

010263800-01, P = 2.312787 Days, E = 129.787568 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.8	0.23	0	0	4.17	0.51	0.68	10.8	10.8	0.23	0.23	0.49	0.97	0.22	0.61



Stellar Parameters For KIC 010263800

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8818^{+240}_{-412}	$3.834^{+0.357}_{-0.153}$	$0.070^{+0.250}_{-0.600}$	$3.115^{+0.937}_{-1.406}$	$2.412^{+0.326}_{-0.816}$	$0.112^{+0.345}_{-0.050}$
	+3%/-5%	+9%/-4%	+357%/-857%	+30%/-45%	+14%/-34%	+307%/-44%
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 010263800-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	3 ± 0	$0.87^{+0.22}_{-0.23}$	4361^{+374}_{-495}	-6638^{+531}_{-693}	$-4.093^{+1.500}_{-3.019}$
Alt.	-0 ± 0	$0.77^{+0.21}_{-0.22}$	4358^{+406}_{-539}	-3067^{+7691}_{-1706}	$0.218^{+1.125}_{-0.894}$

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 $A_{obs} \gg 1.0$

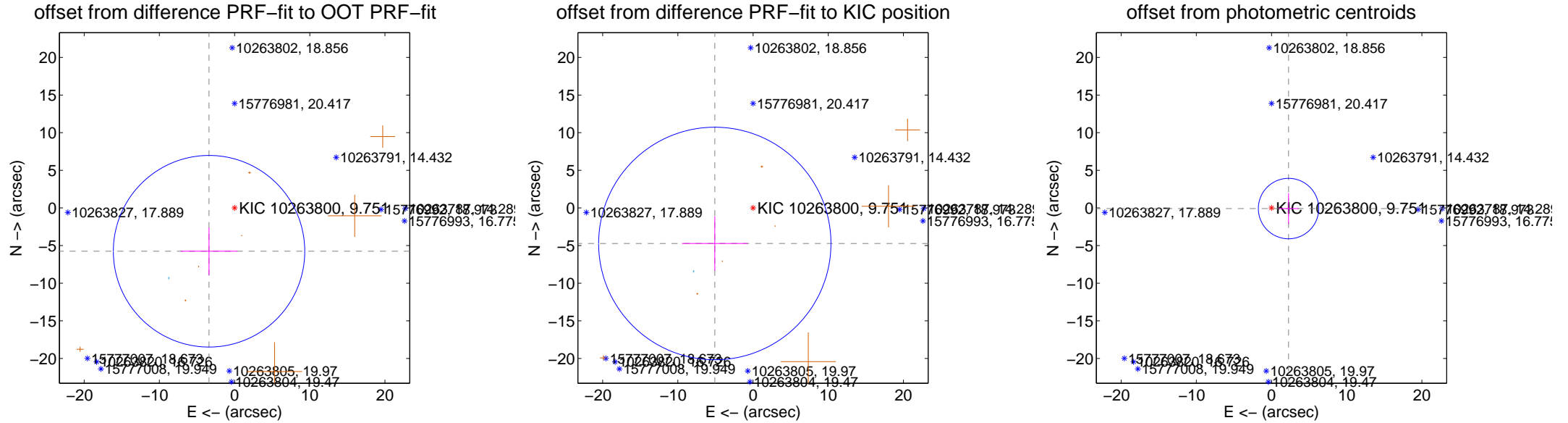
DV Centroid Data

Supplemental centroid analysis for 010263800-01. **Kepler magnitude: 9.75.** Transit SNR 12.07

There are 1 quarters with good PRF difference image offsets

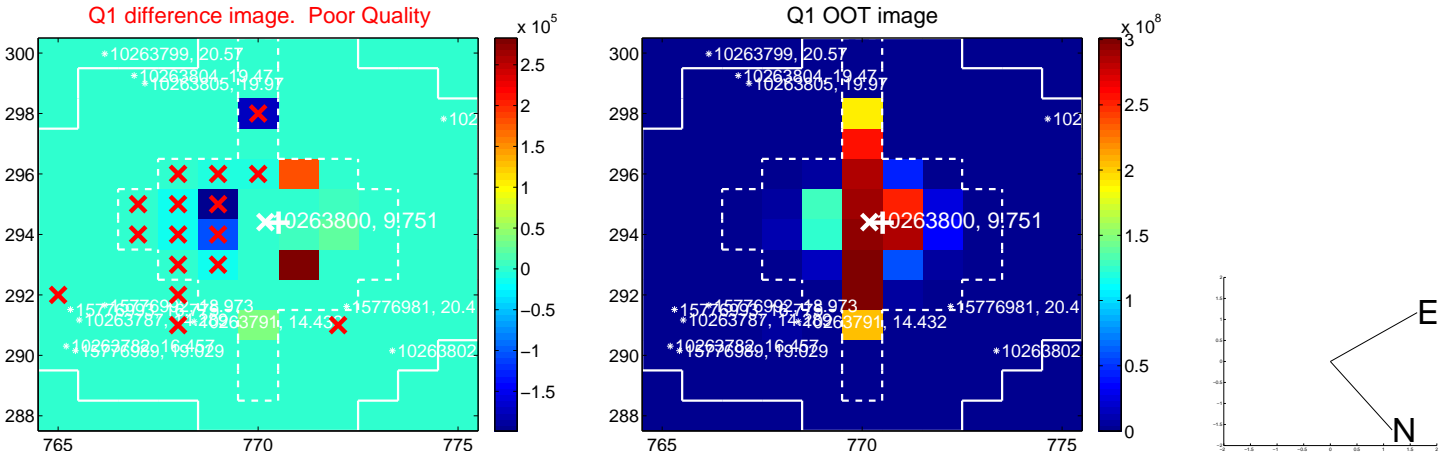
The direct PRF centroid is offset from the target star catalog position by about 1.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.680 ± 4.243	1.57	3.395 ± 3.752	-5.753 ± 3.144
PRF-fit source offset from KIC position	6.941 ± 5.150	1.35	5.088 ± 4.361	-4.721 ± 3.602
photometric centroid source offset	2.27 ± 1.34	1.69	-2.26 ± 1.34	-0.08 ± 2.04

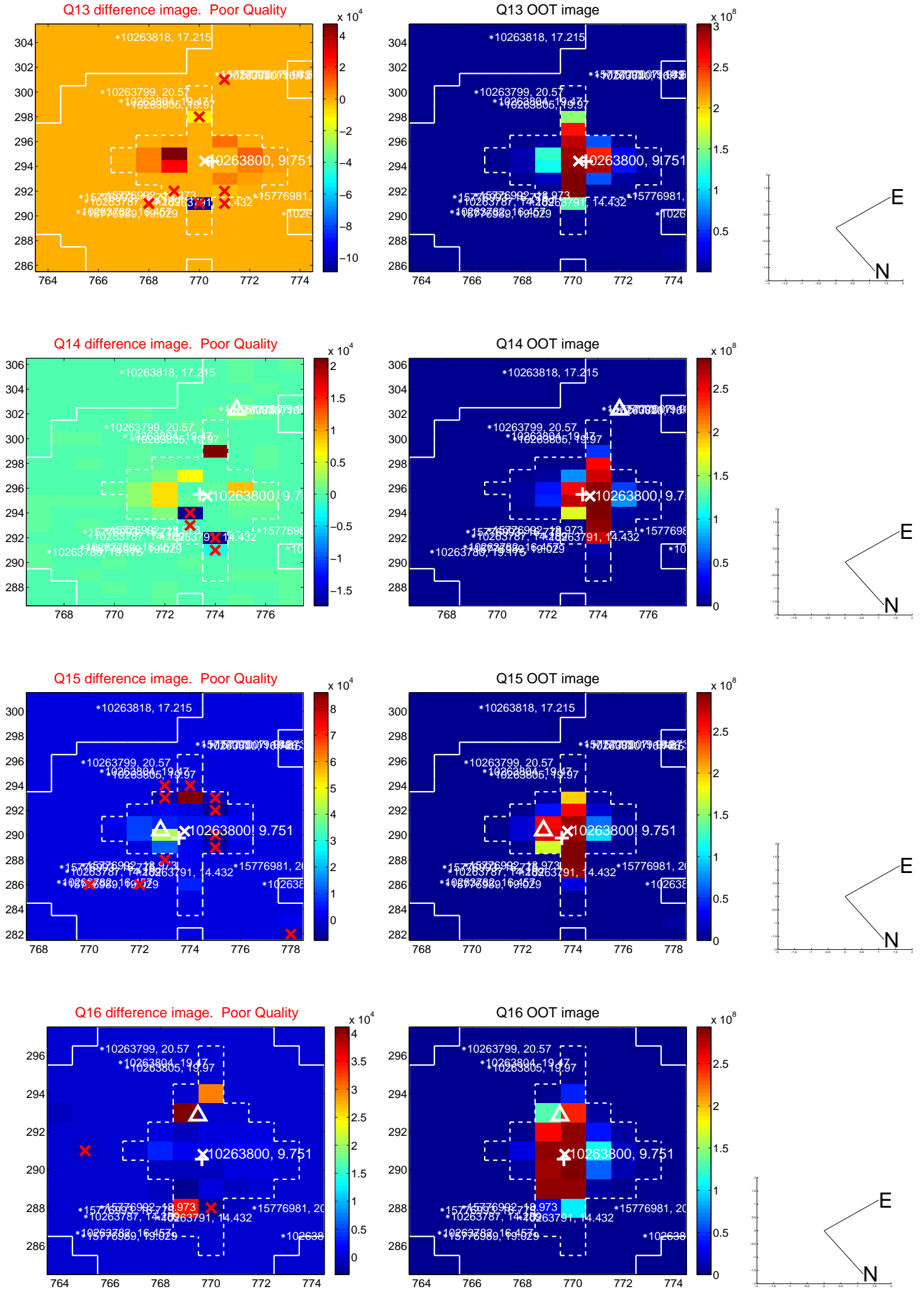


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

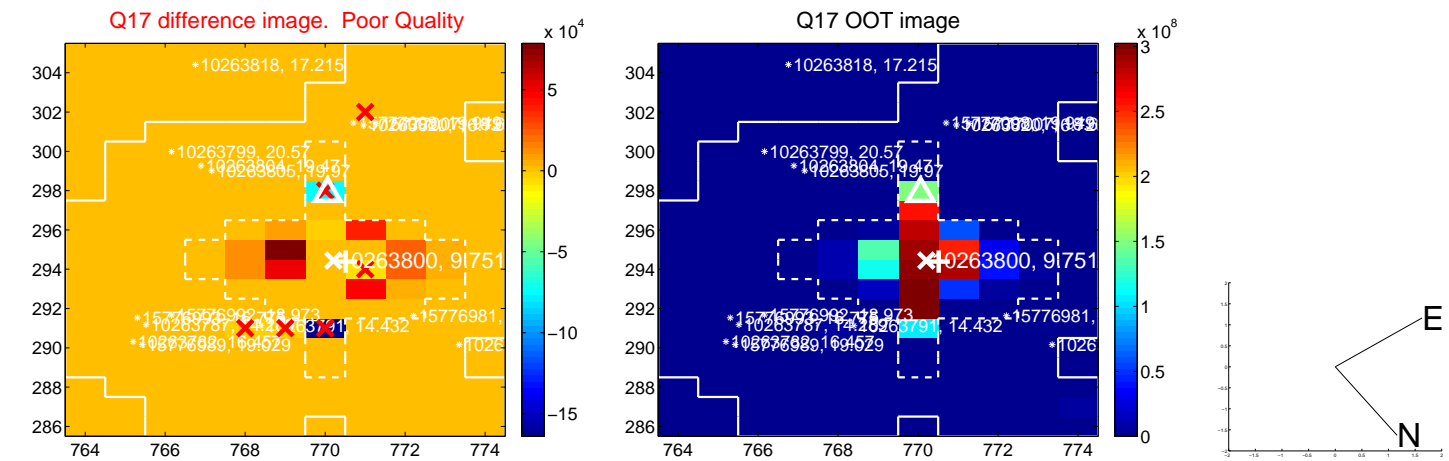
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



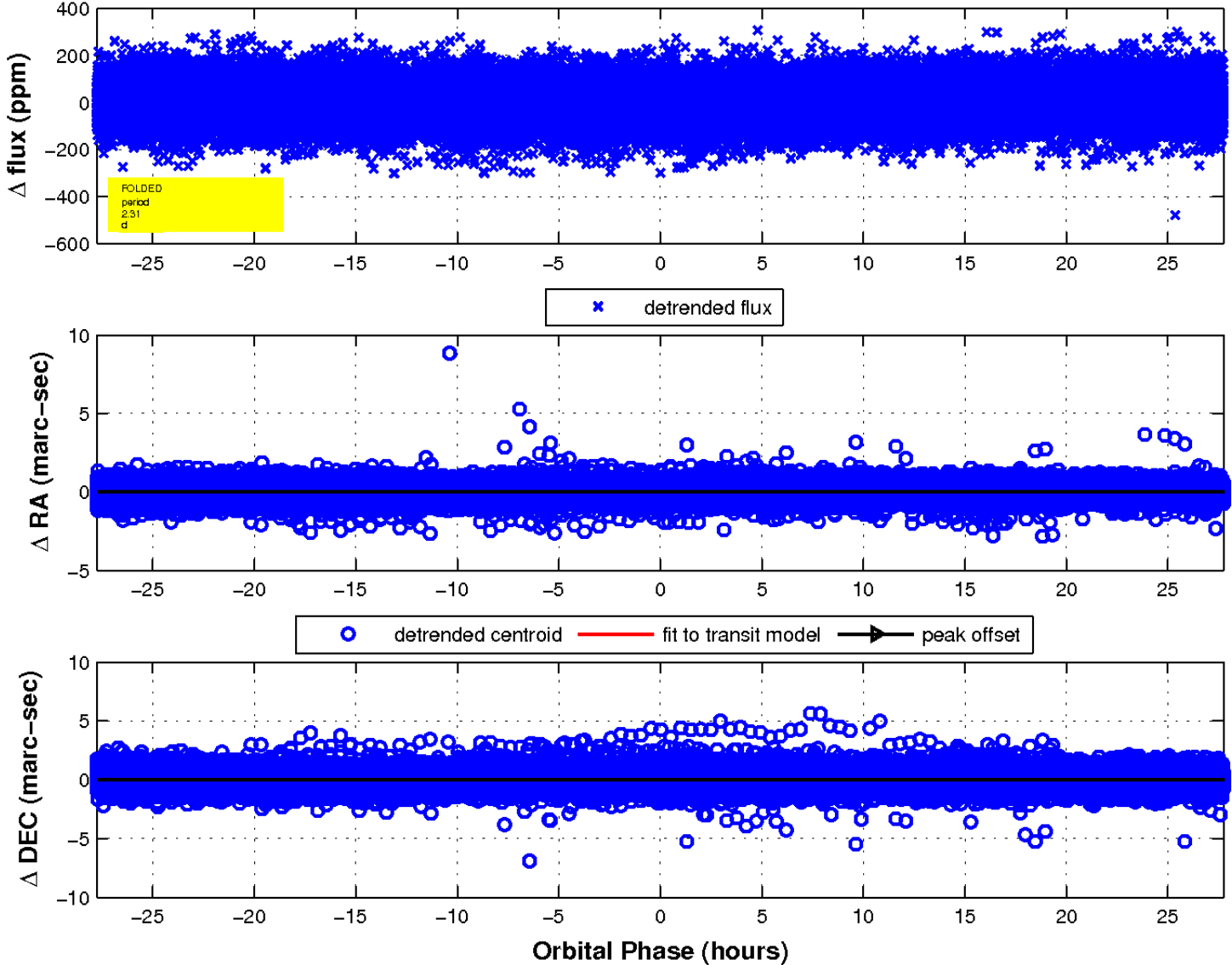
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

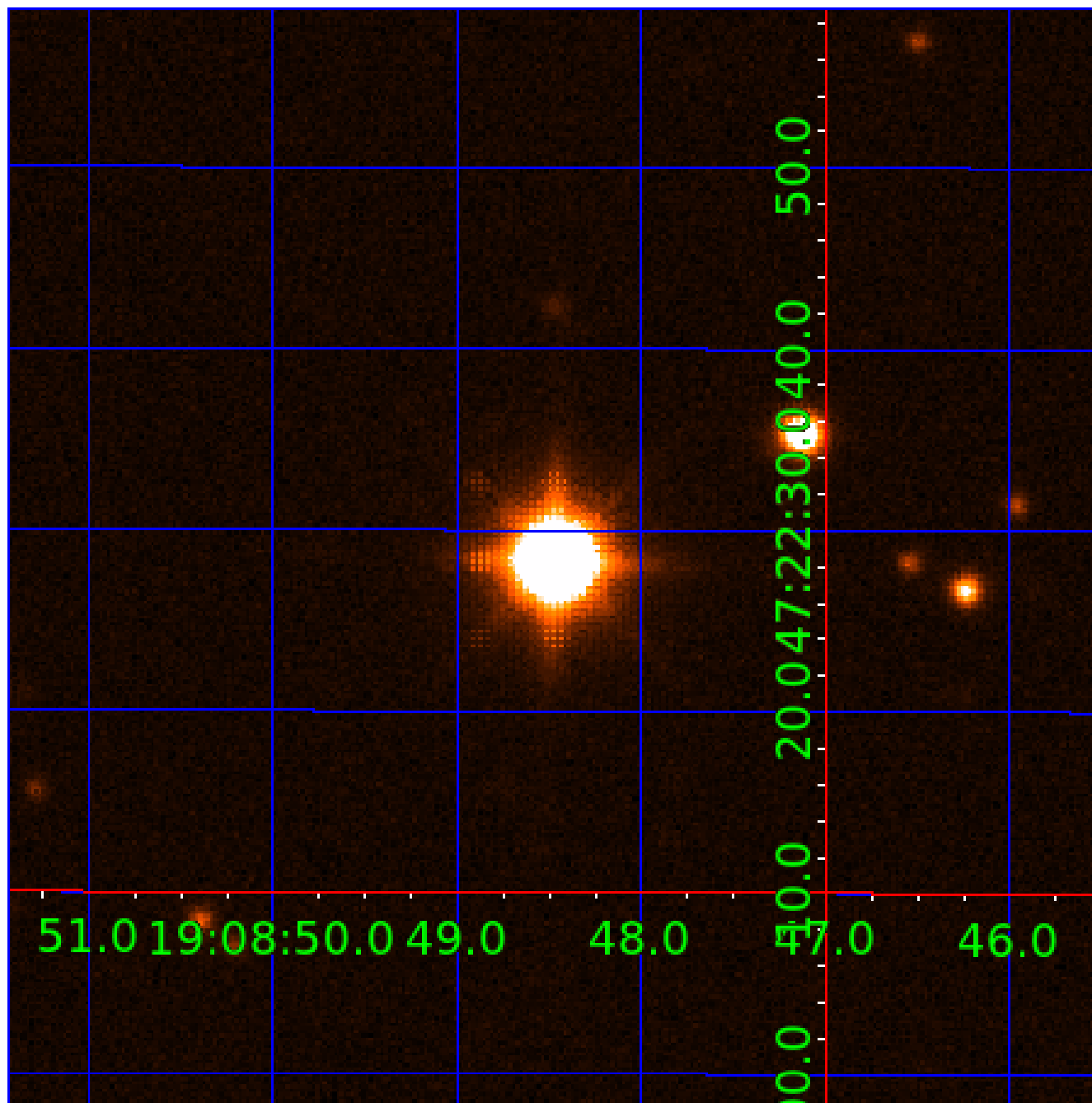


fluxWeightedCentroids, Planet 1 of 5



UKIRT Image

Declination



KIC 010263800

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})
010263800-01	OBS	No	2.312846	132.096826	7.0	16.479	9.2	12.1	3.12	8818	0.94	24916.35
010263800-03	OBS	No	20.382162	144.932537	55.4	4.015	12.5	8.8	3.12	8818	2.58	1368.82
010263800-04	OBS	No	25.137888	137.753944	77.1	3.383	12.1	11.8	3.12	8818	3.11	1034.92
010263800-05	OBS	No	6.268994	133.056503	12.5	20.620	11.4	7.3	3.12	8818	1.24	6593.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010263800-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
010263800-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010263800-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010263800-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED

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

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

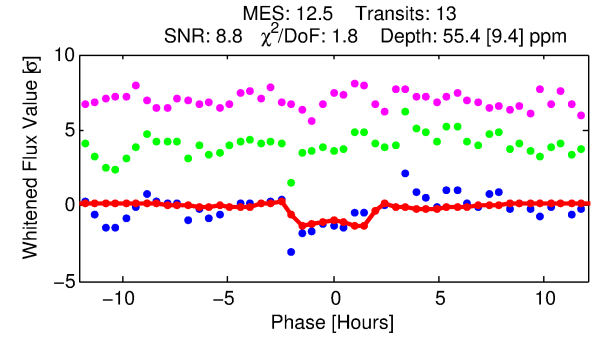
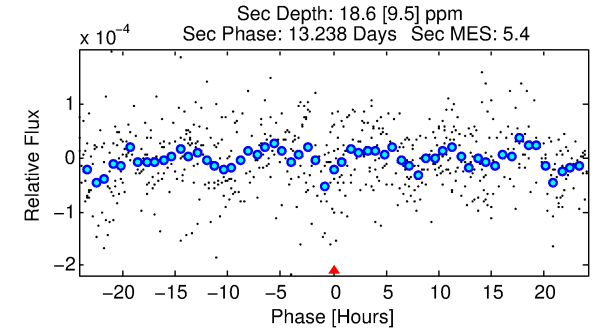
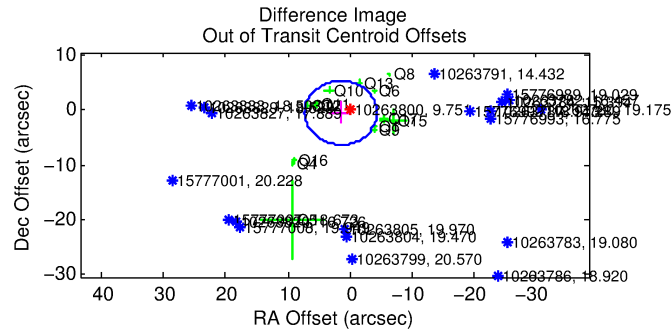
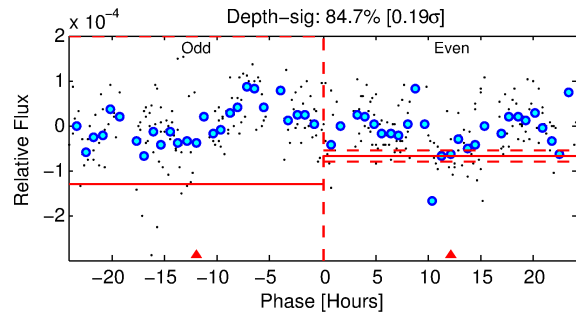
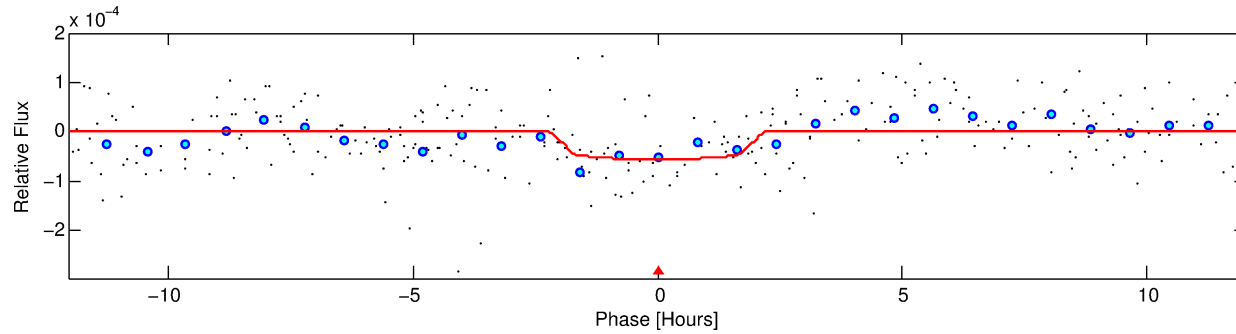
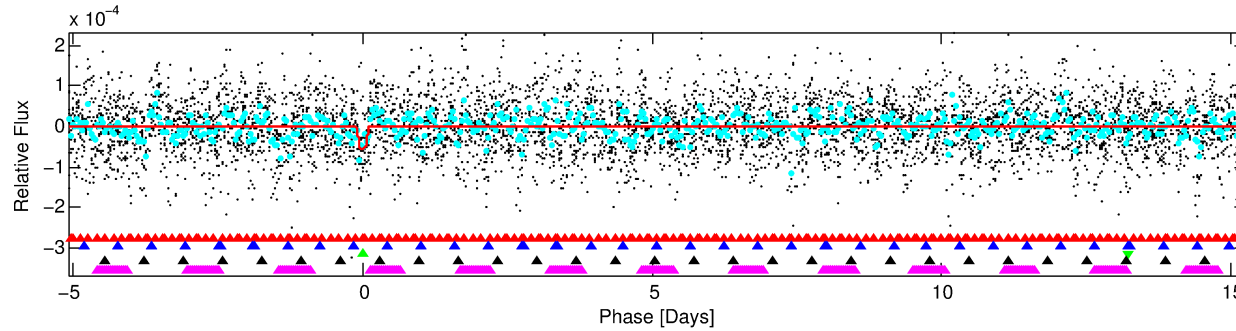
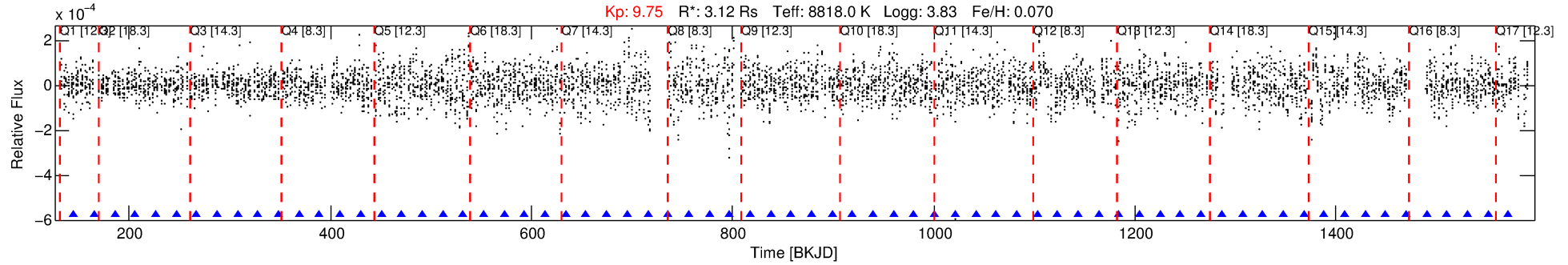
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010263800-03

No Significant Match Found

DV One-Page Summary

KIC: 10263800 Candidate: 3 of 5 Period: 20.382 d



DV Fit Results:

Period = 20.38216 [0.00021] d
Epoch = 144.9325 [0.0075] BKJD
Rp/R* = 0.0076 [0.0024]
a/R* = 22.72 [46.74]
b = 0.82 [0.83]
Seff = 1368.82 [893.20]
Teq = 1551 [253] K
Rp = 2.58 [1.42] Re
a = 0.1960 [0.0798] AU
Ag = 59.16 [60.77] [0.96 σ]
Teff = 6651 [1390] K [3.61 σ]

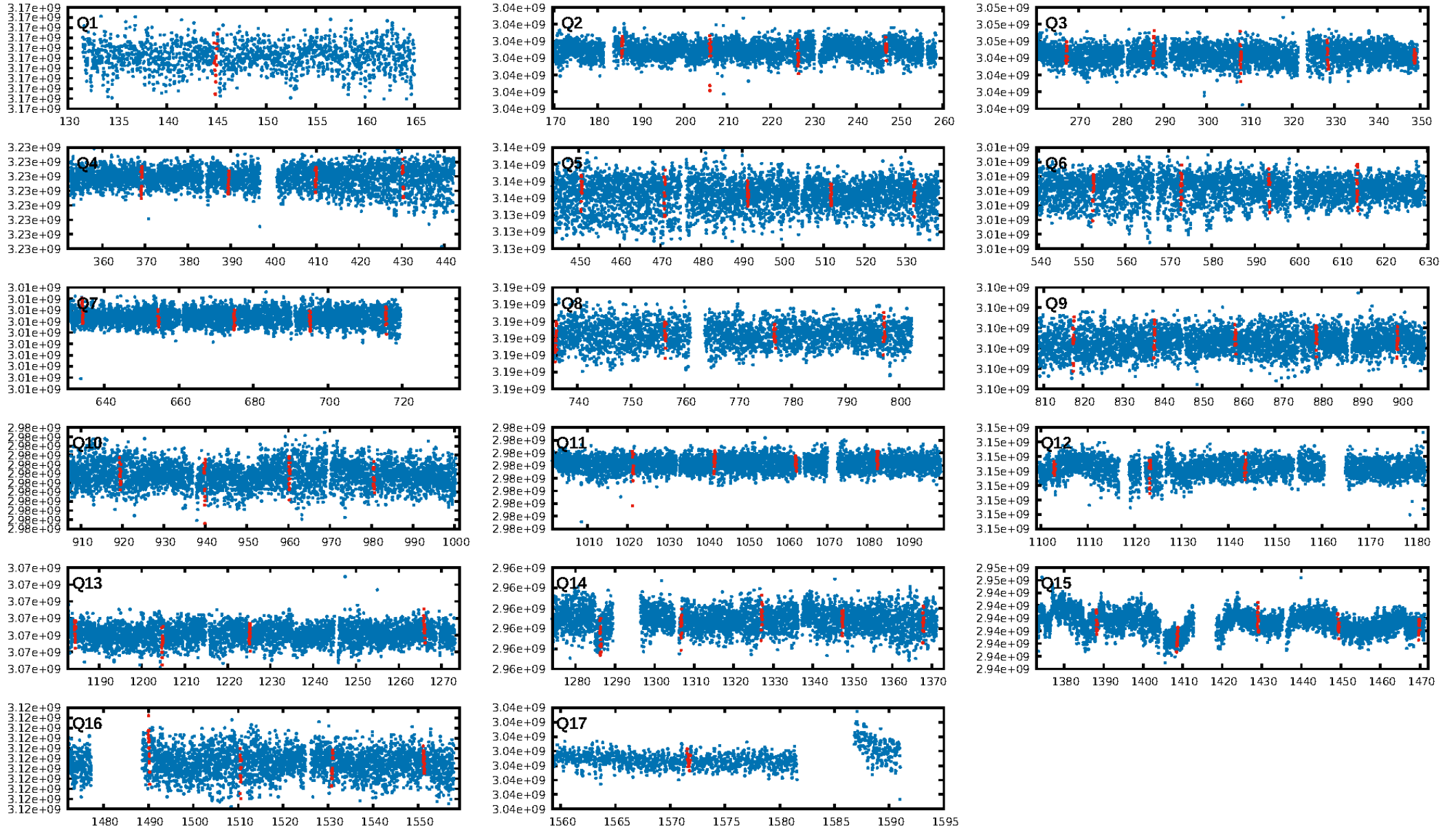
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [16.12 σ]
LongPeriod-sig: 100.0% [21.74 σ]
ModelChiSquare2-sig: 0.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [11/11]
GhostDiagnostic-chr: N/A
Centroid-sig: 10.9%
Centroid-so: 1.456 arcsec [1.59 σ]
OotOffset-rm: 1.599 arcsec [0.82 σ]
OotOffset-st: 2/3/4/5 [14]
KicOffset-rm: 2.069 arcsec [1.34 σ]
KicOffset-st: 2/3/4/5 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 0.71 [12/17]

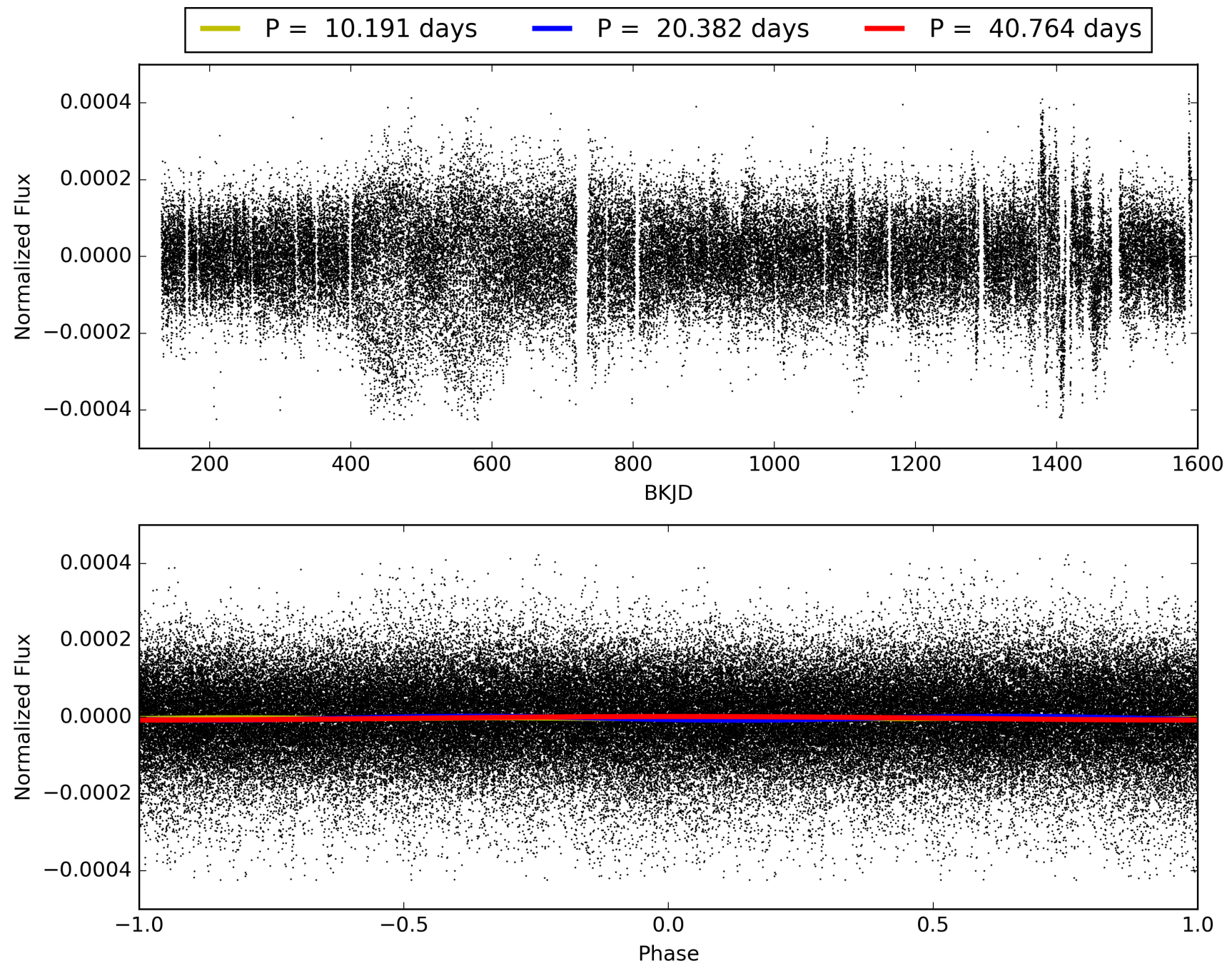
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 010263800-03, PDC Light Curves

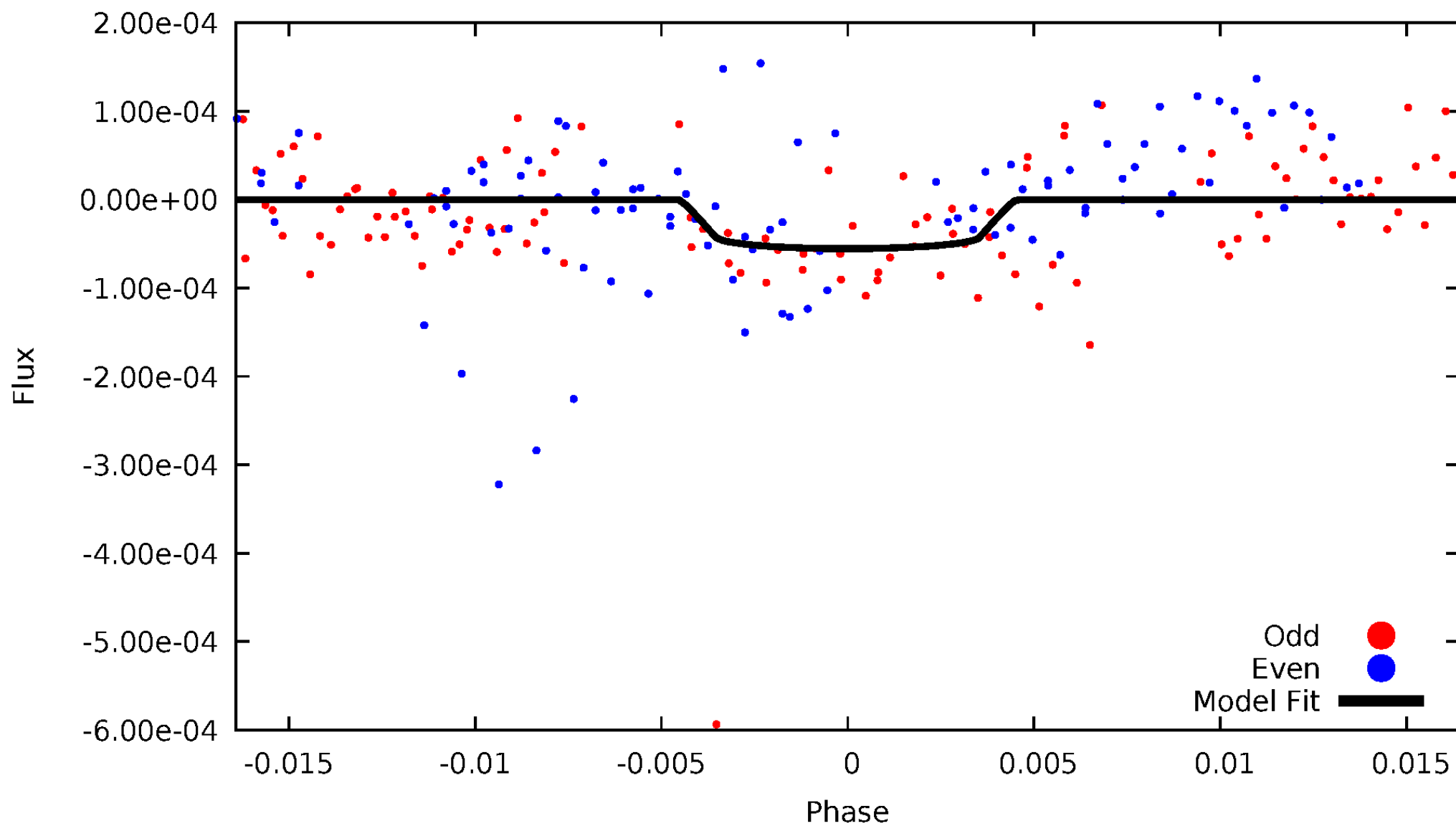


TCE 010263800-03



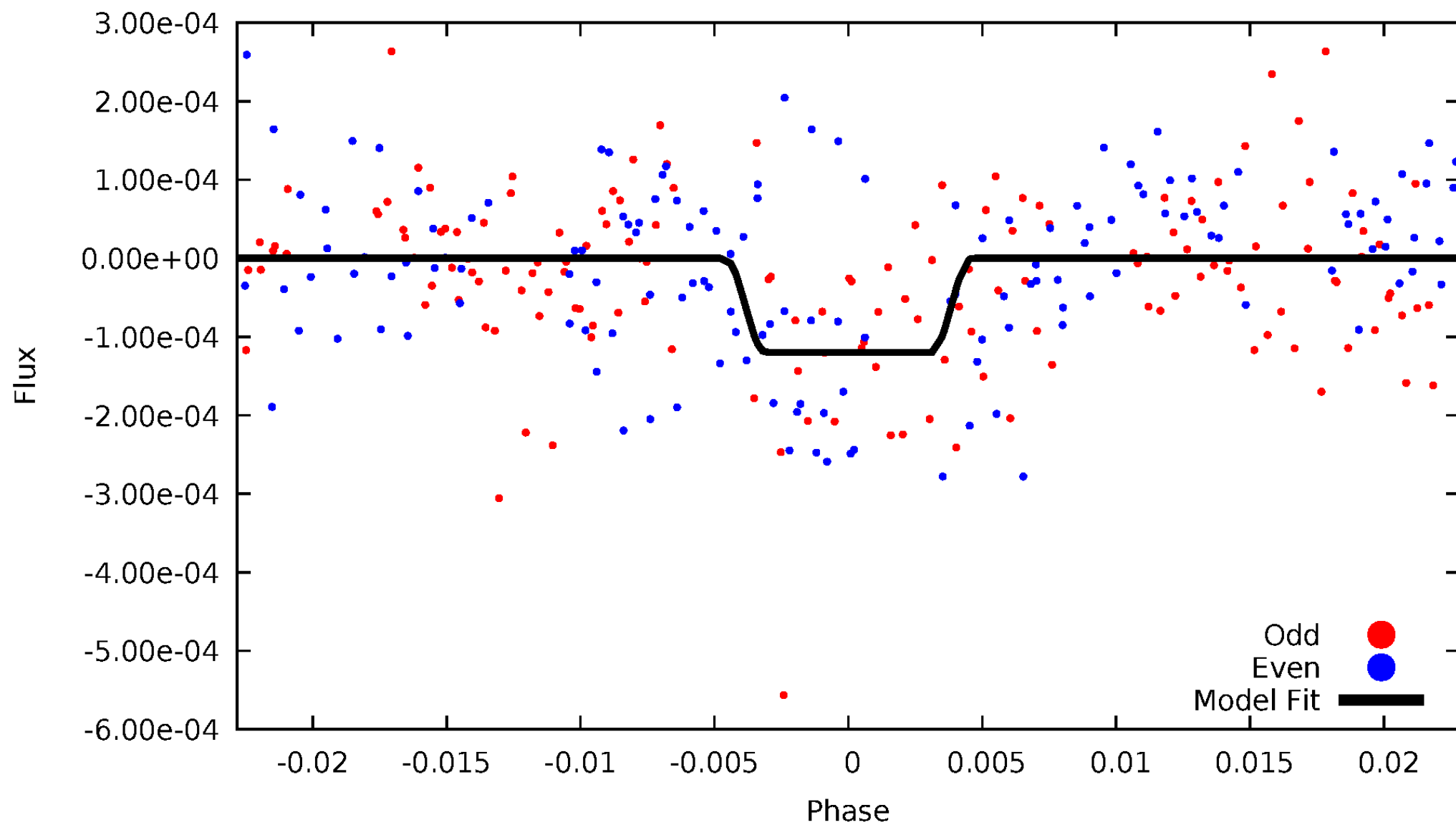
DV Odd/Even

TCE 010263800-03



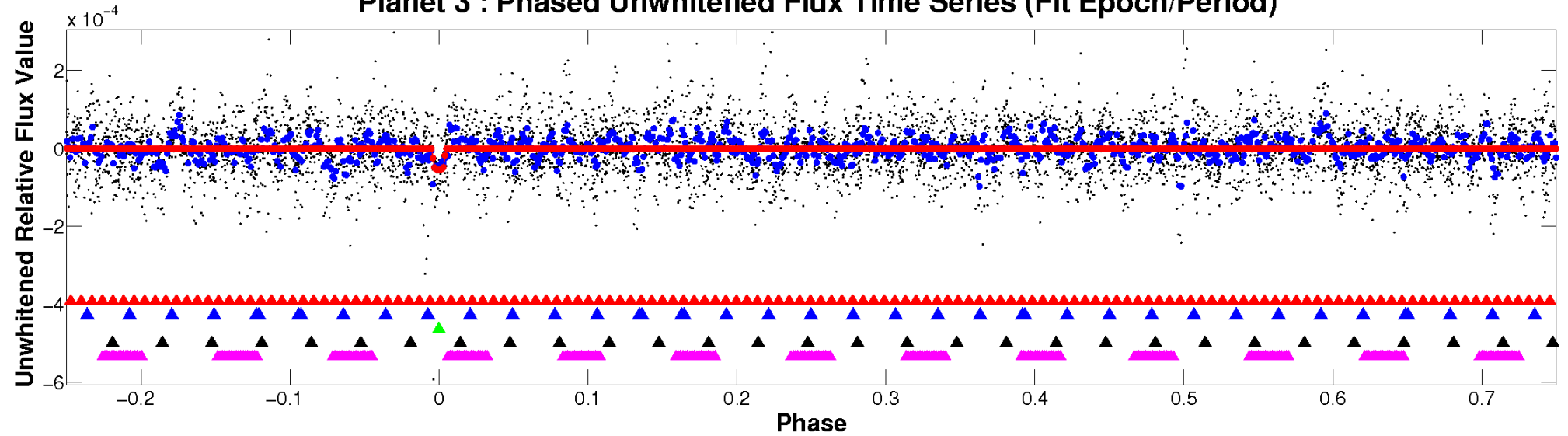
ALT Odd/Even

TCE 010263800-03

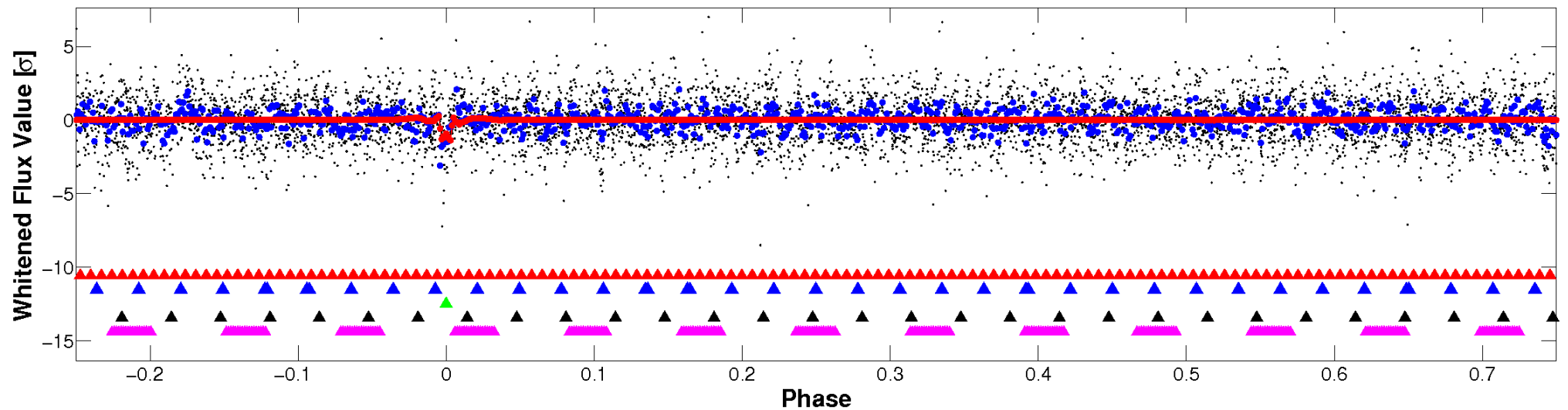


Non-Whitened Vs. Whitened Light Curve

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

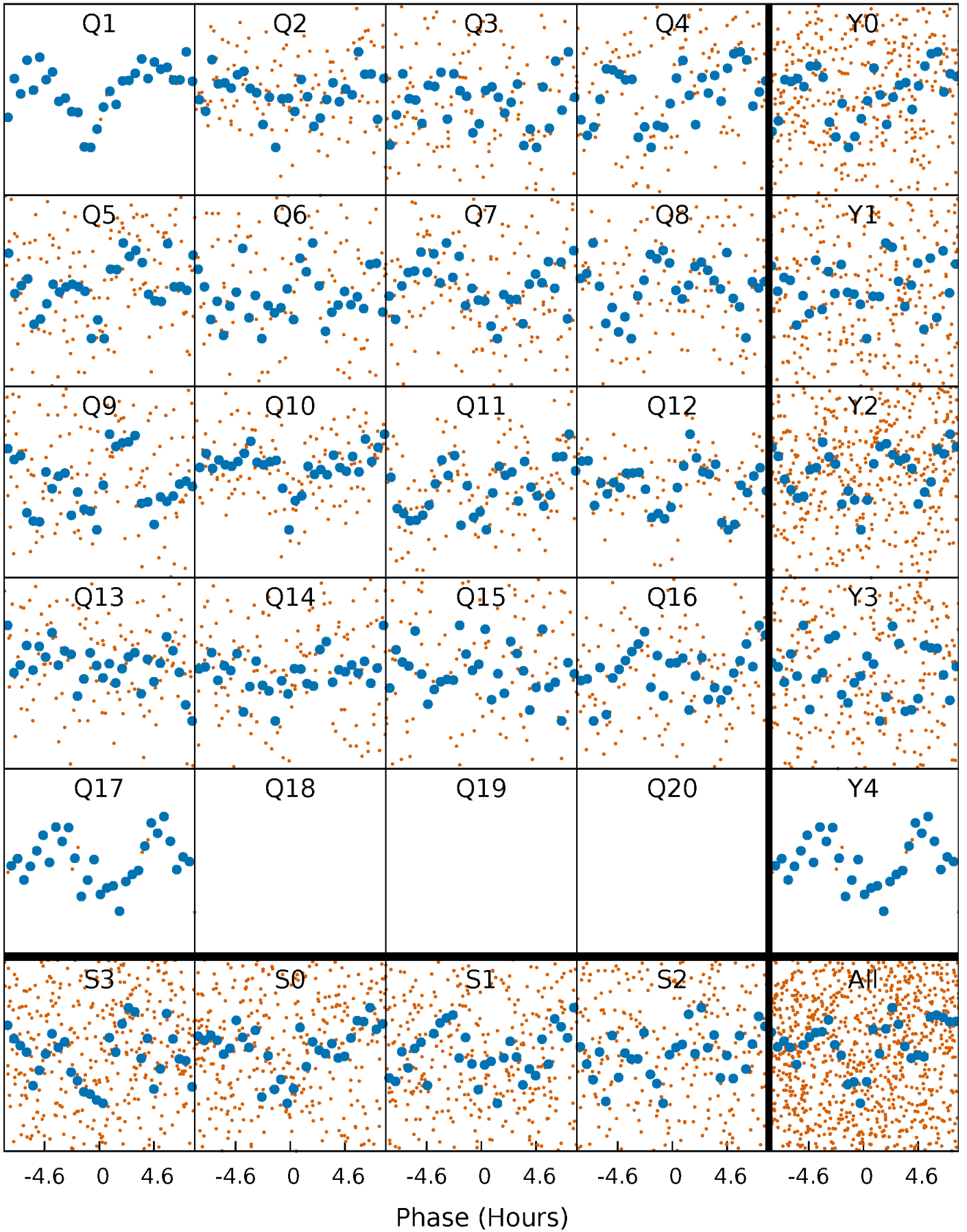


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



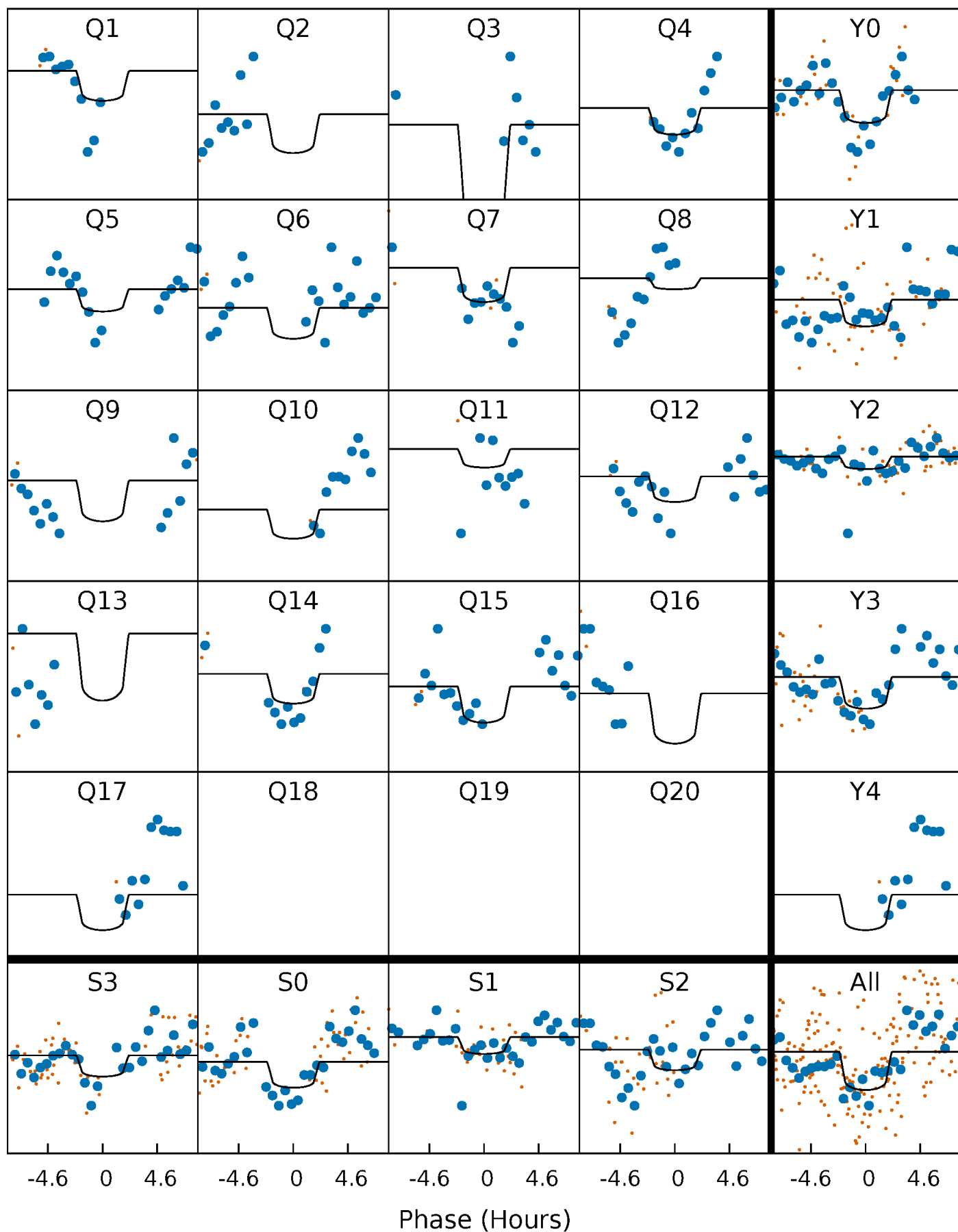
PDC Quarter-Phased Transit Curves

TCE 010263800-03 P= 20.382162 Days $T_0=144.932537$ (BKJD)



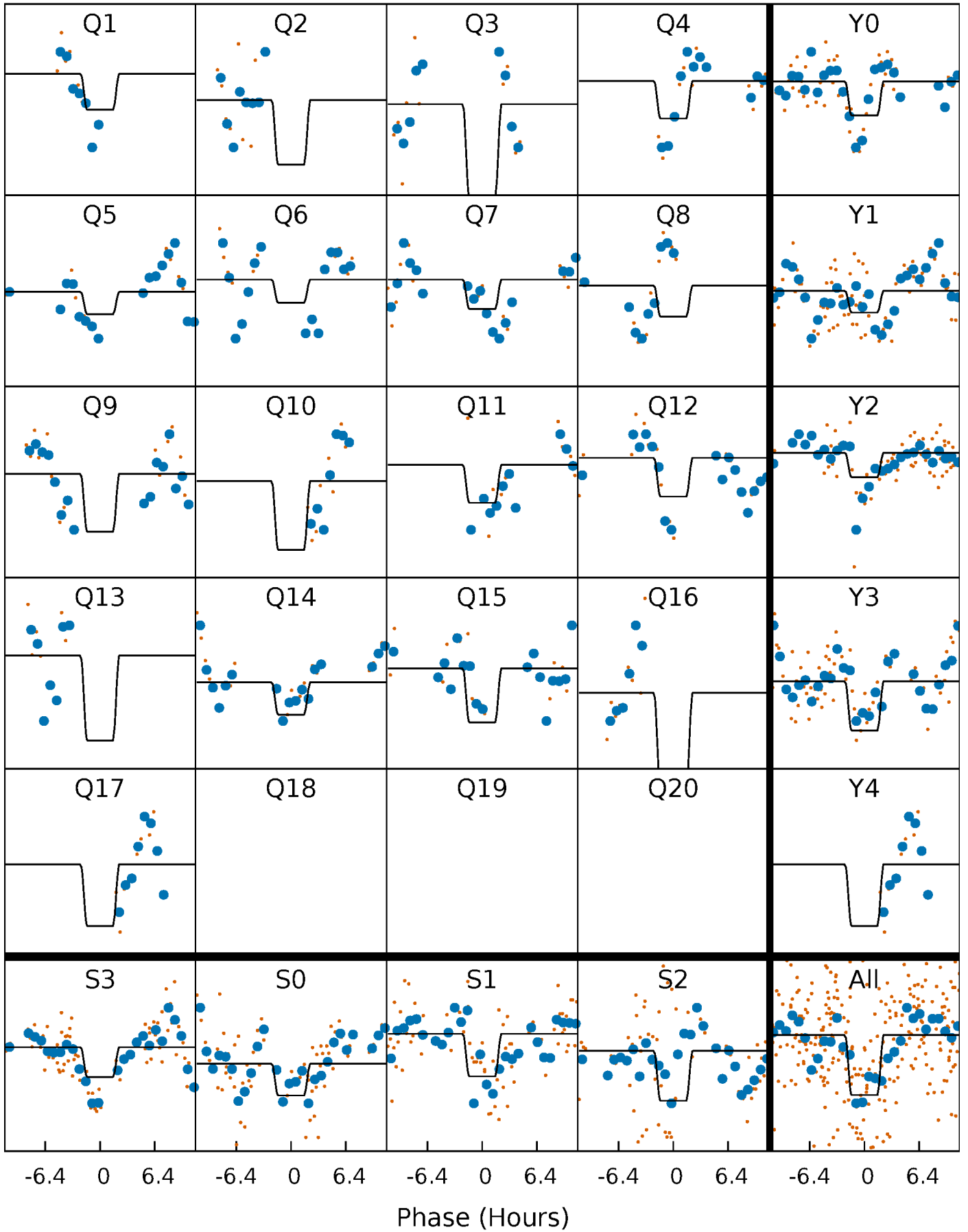
DV Quarter-Phased Transit Curves

TCE 010263800-03 P= 20.382162 Days $T_0=144.932537$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

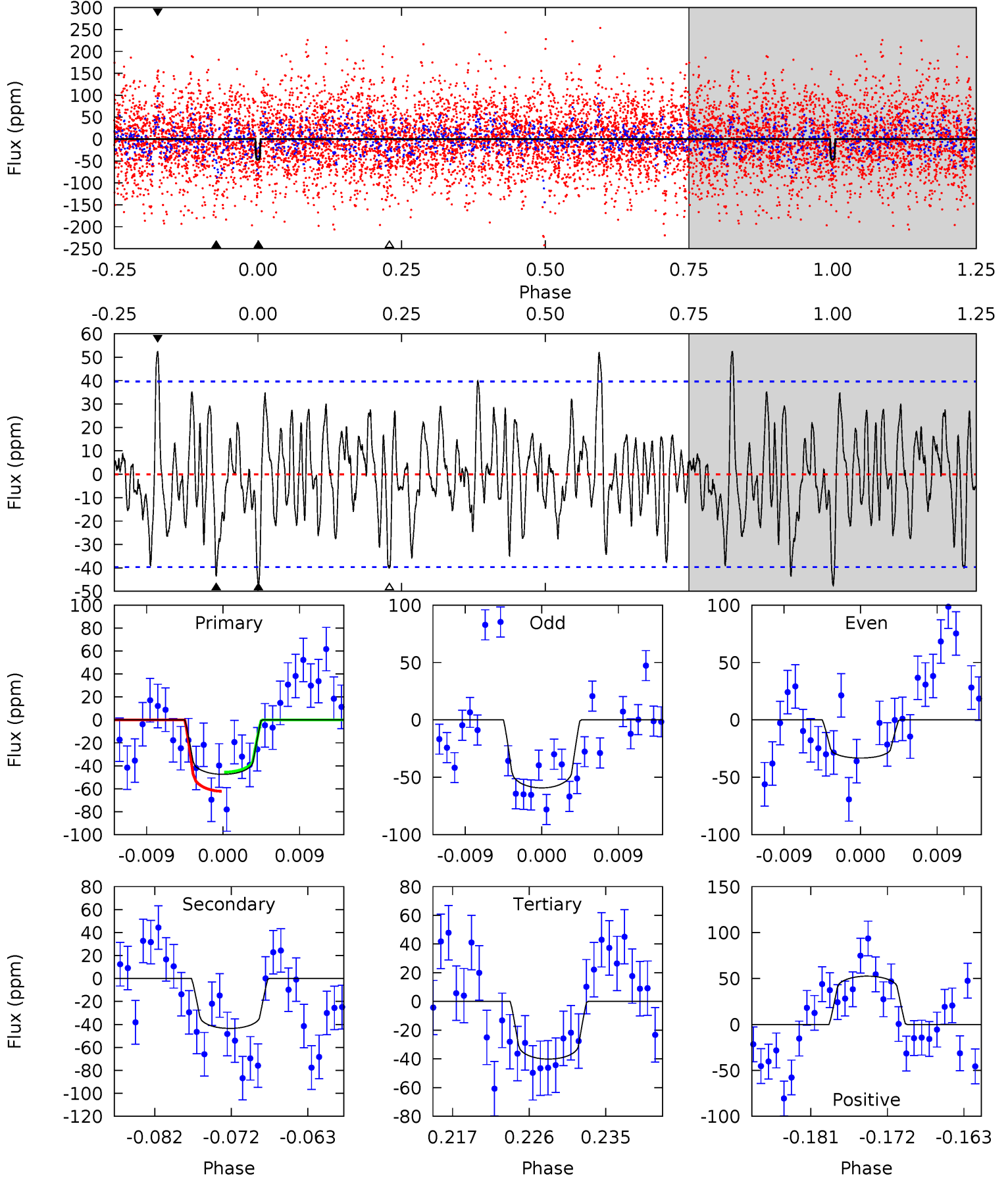
TCE 010263800-03 $P = 20.381905$ Days $T_0 = 144.921157$ (BKJD)



DV Model-Shift Uniqueness Test

010263800-03, P = 20.382162 Days, E = 124.550375 Days

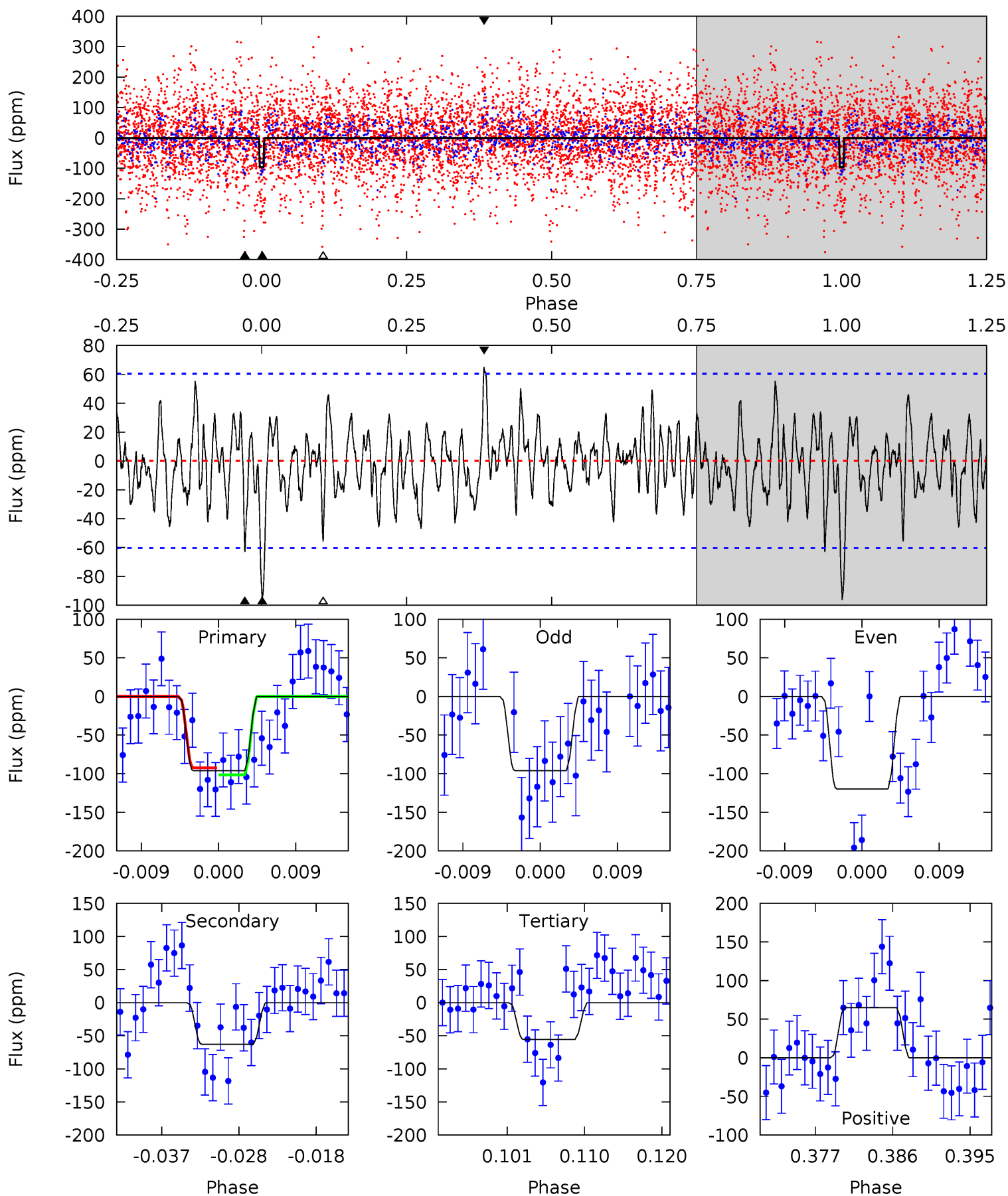
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.04	5.53	5.11	6.69	5.05	2.61	2.00	0.93	-0.65	0.42	-1.16	1.65	0.81	0.53	1.04



Alt Model-Shift Uniqueness Test

010263800-03, P = 20.381905 Days, E = 124.539252 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.04	5.27	4.65	5.43	5.04	2.60	1.62	3.38	2.61	0.61	-0.17	0.96	0.90	0.40	0.39



Stellar Parameters For KIC 010263800

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8818^{+240}_{-412}	$3.834^{+0.357}_{-0.153}$	$0.070^{+0.250}_{-0.600}$	$3.115^{+0.937}_{-1.406}$	$2.412^{+0.326}_{-0.816}$	$0.112^{+0.345}_{-0.050}$
	+3%/-5%	+9%/-4%	+357%/-857%	+30%/-45%	+14%/-34%	+307%/-44%
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 010263800-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-43 ± 8	$2.37^{+0.97}_{-0.88}$	2121^{+186}_{-234}	7948^{+2713}_{-1195}	157^{+254}_{-76}
Alt.	-63 ± 12	$3.40^{+1.30}_{-0.97}$	2110^{+168}_{-244}	7199^{+1145}_{-894}	110^{+97}_{-50}

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 $A_{obs} \gg 1.0$

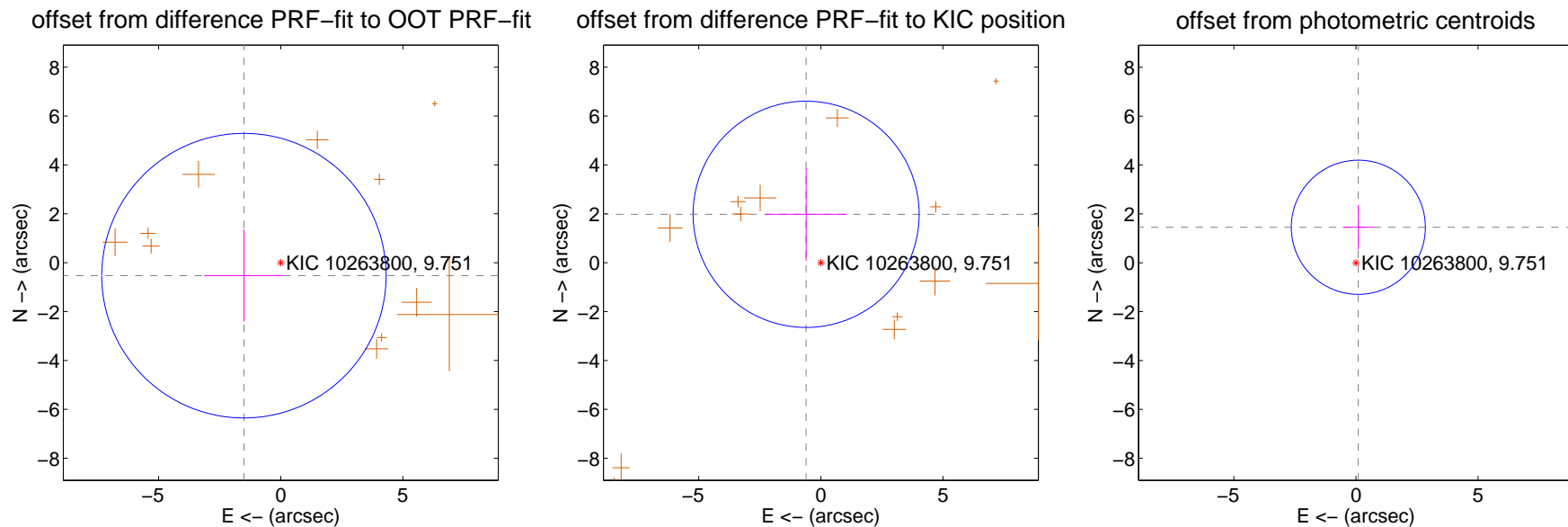
DV Centroid Data

Supplemental centroid analysis for 010263800-03. **Kepler magnitude: 9.75.** Transit SNR 8.78

There are 0 quarters with good PRF difference image offsets

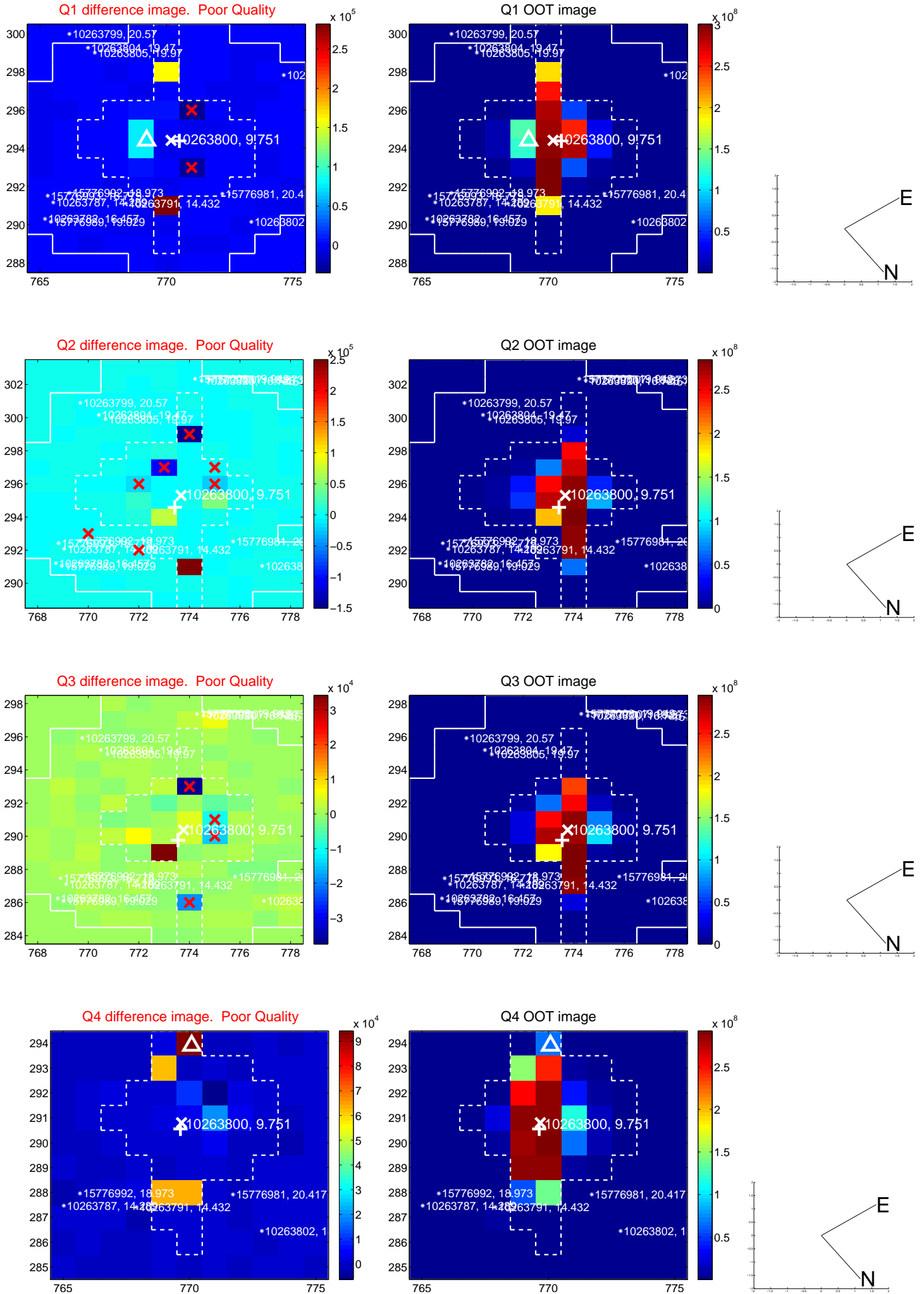
The direct PRF centroid is offset from the target star catalog position by about 1.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.599 ± 1.941	0.82	1.508 ± 1.627	-0.531 ± 1.883
PRF-fit source offset from KIC position	2.069 ± 1.543	1.34	0.603 ± 1.673	1.979 ± 1.898
photometric centroid source offset	1.46 ± 0.92	1.59	-0.10 ± 0.64	1.45 ± 0.92

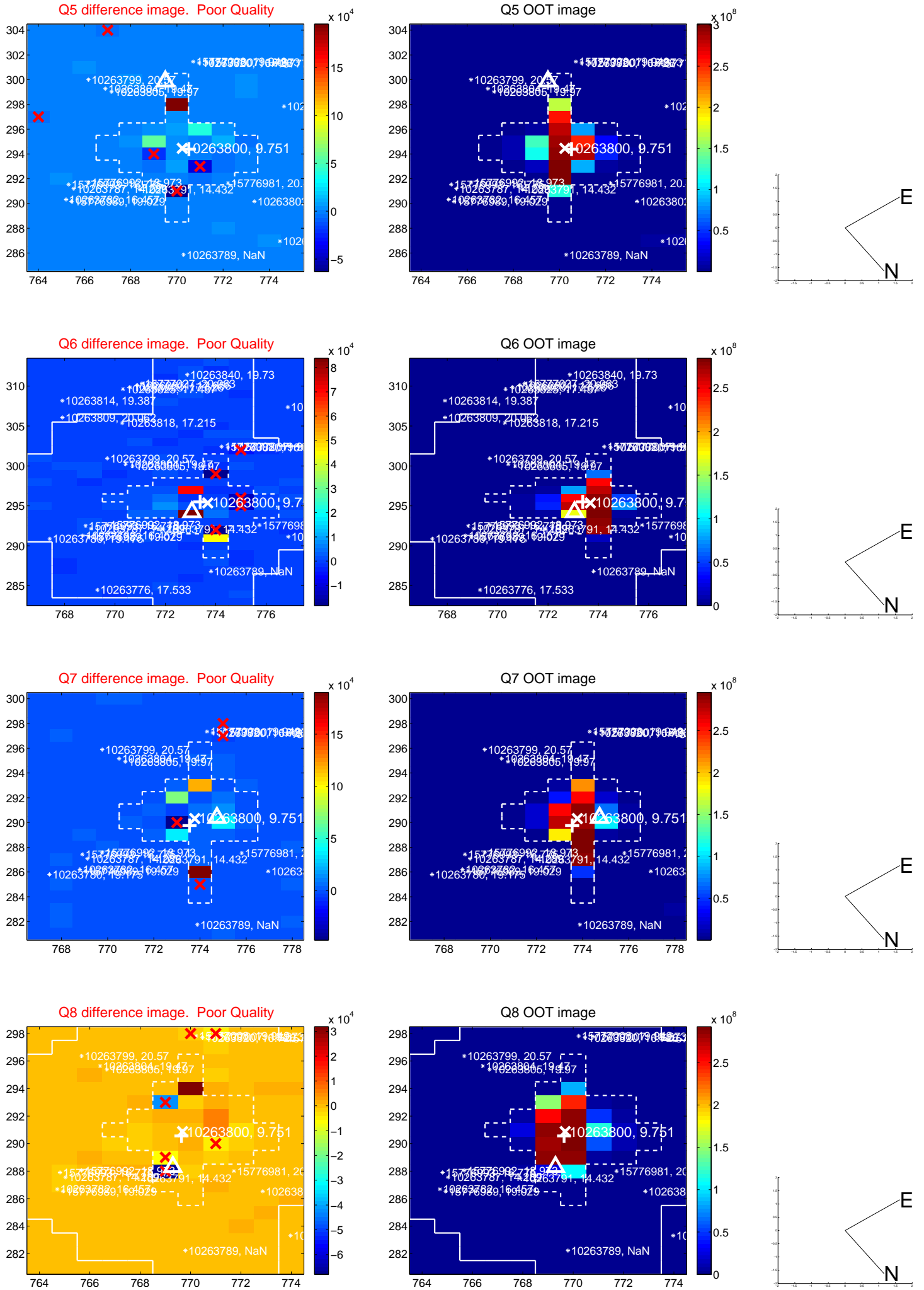


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

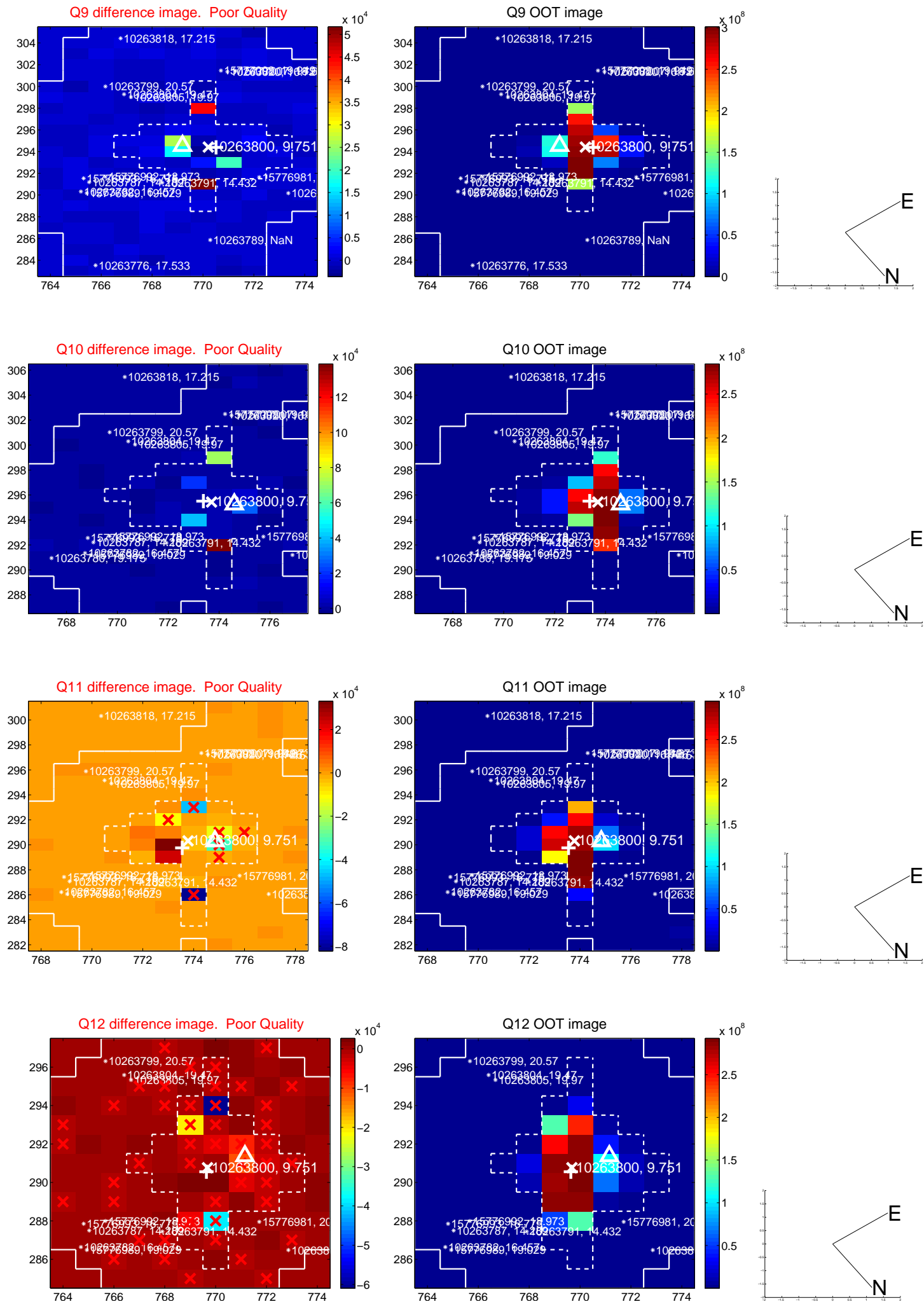
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



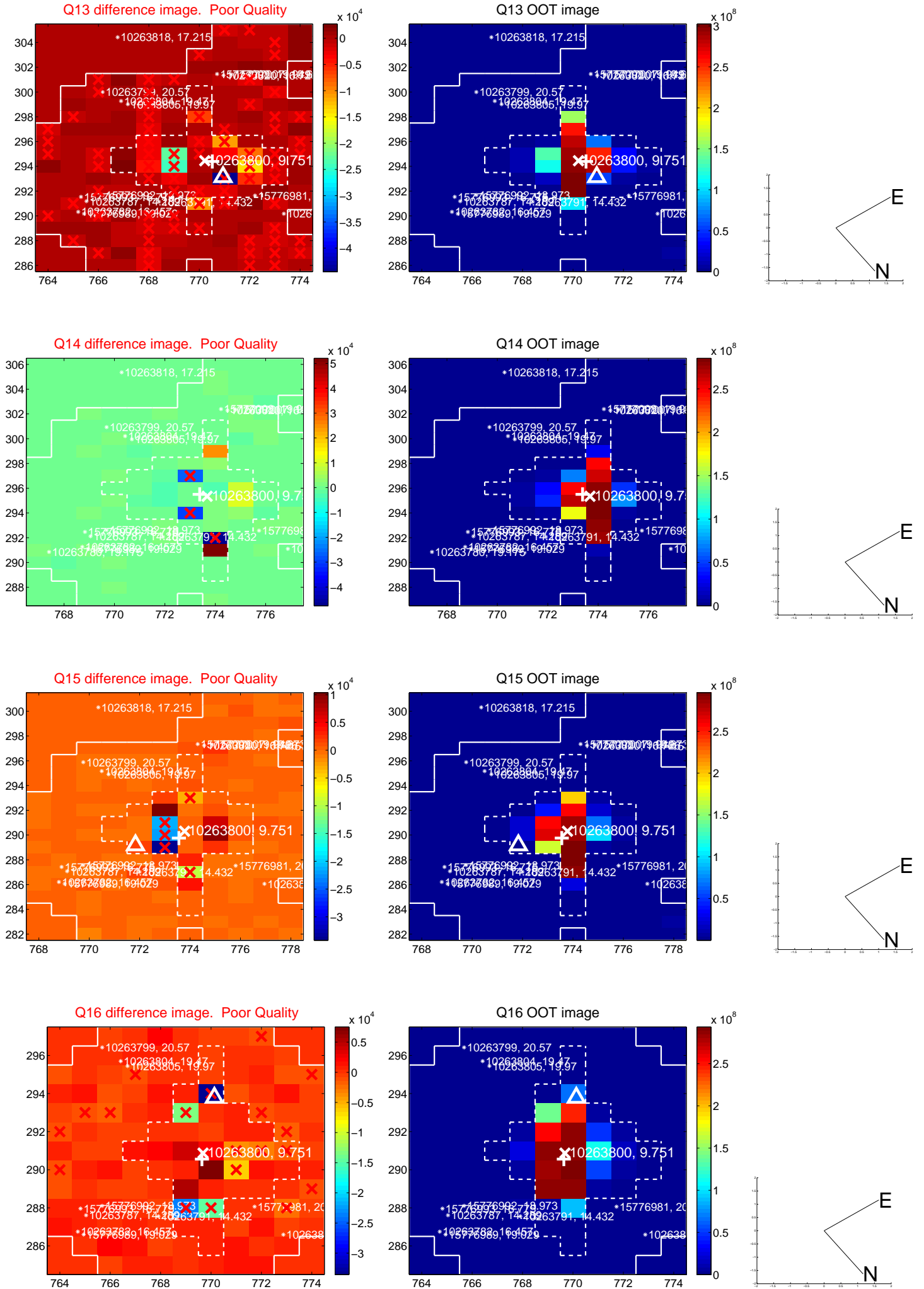
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

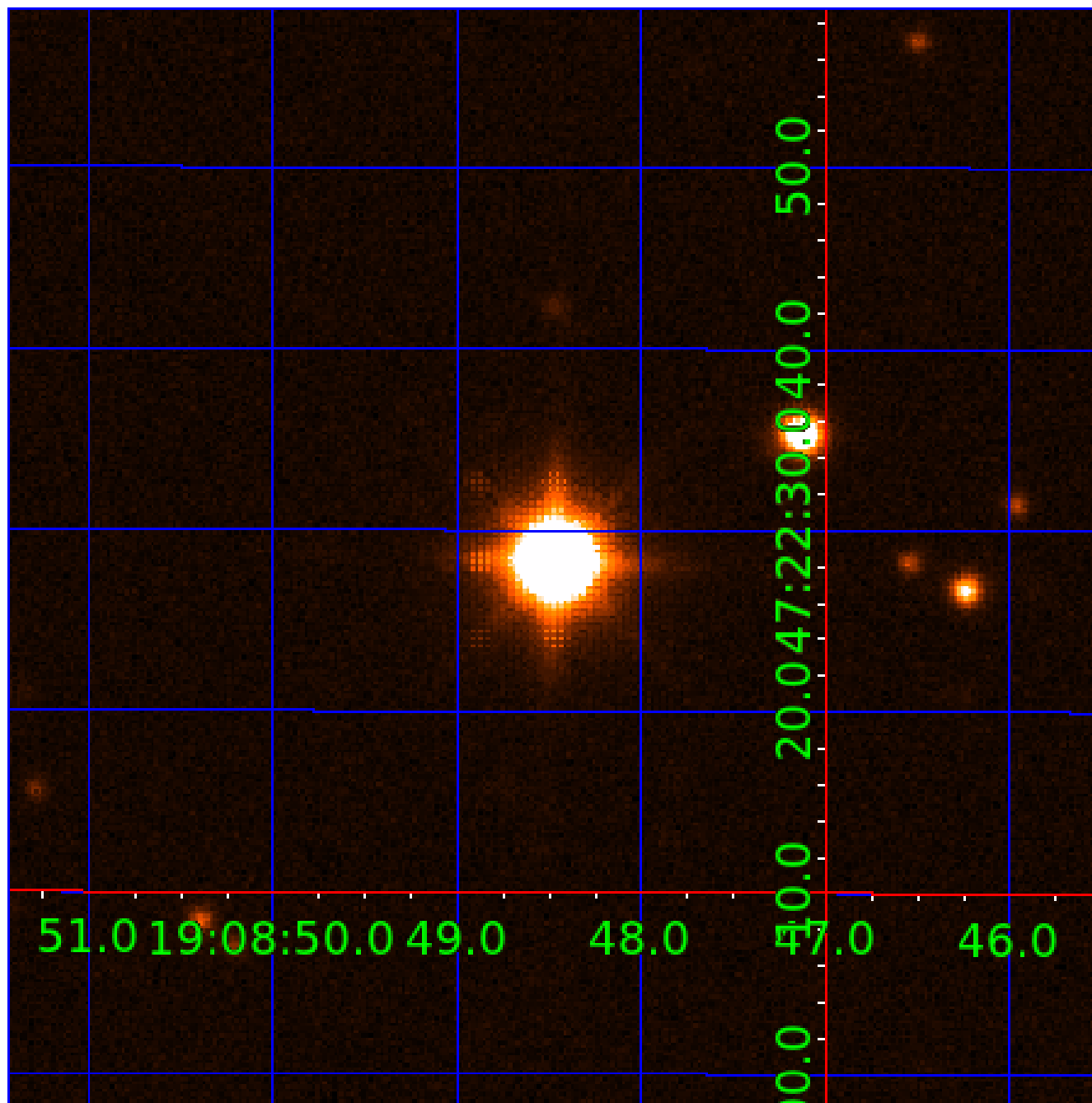


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010263800

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})
010263800-01	OBS	No	2.312846	132.096826	7.0	16.479	9.2	12.1	3.12	8818	0.94	24916.35
010263800-03	OBS	No	20.382162	144.932537	55.4	4.015	12.5	8.8	3.12	8818	2.58	1368.82
010263800-04	OBS	No	25.137888	137.753944	77.1	3.383	12.1	11.8	3.12	8818	3.11	1034.92
010263800-05	OBS	No	6.268994	133.056503	12.5	20.620	11.4	7.3	3.12	8818	1.24	6593.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010263800-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
010263800-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010263800-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010263800-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED

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

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

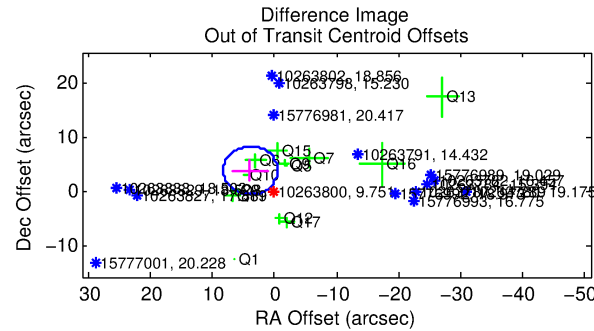
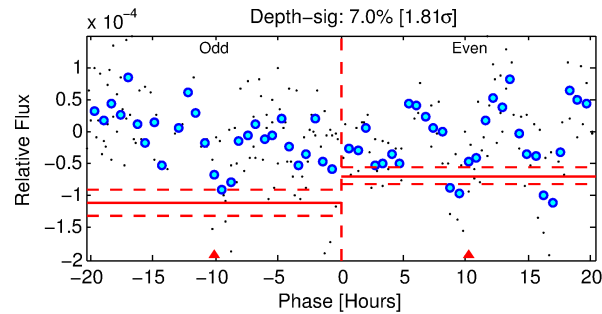
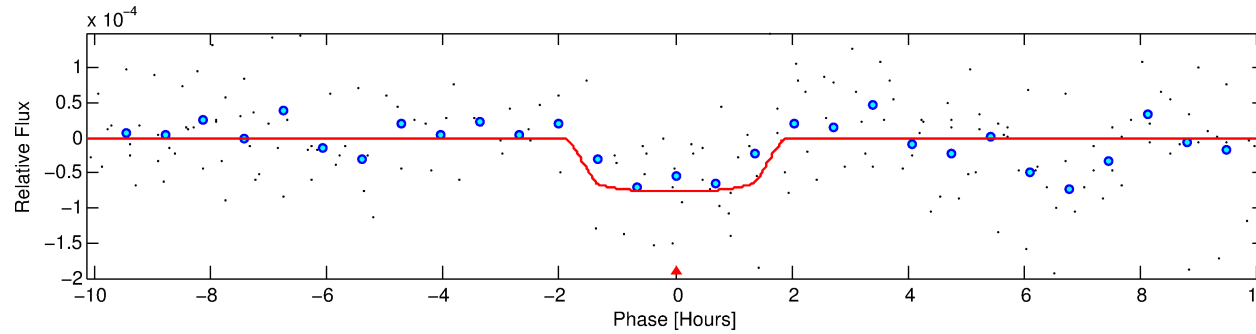
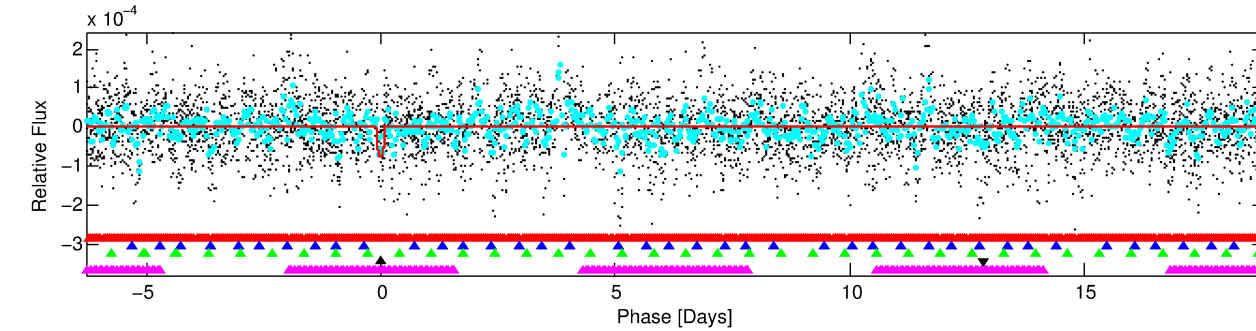
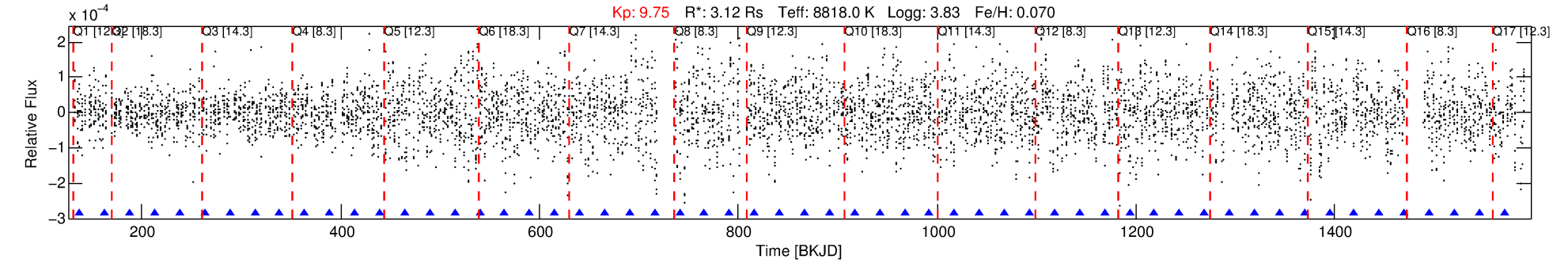
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010263800-04

No Significant Match Found

DV One-Page Summary

KIC: 10263800 Candidate: 4 of 5 Period: 25.138 d



DV Fit Results:

Period = 25.13789 [0.00044] d
Epoch = 137.7539 [0.0097] BKJD
Rp/R* = 0.0092 [0.0059]
a/R* = 28.52 [129.00]
b = 0.88 [1.21]
Seff = 1034.92 [675.32]
Teq = 1446 [236] K
Rp = 3.11 [2.45] Re
a = 0.2254 [0.0917] AU
Ag = 162.15 [235.55] [0.68 σ]
Teff = 7979 [2642] K [2.46 σ]

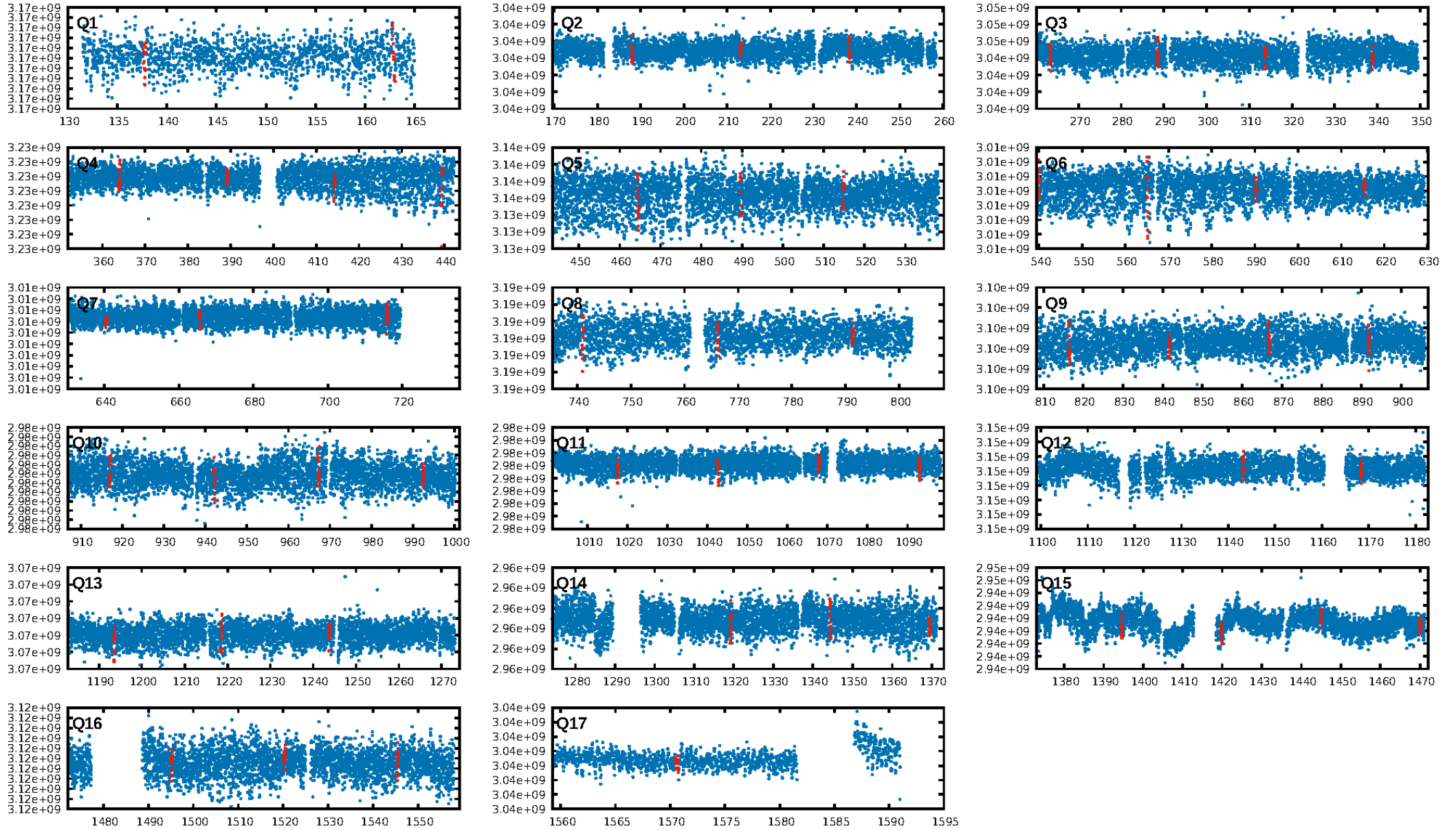
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [21.74 σ]
LongPeriod-sig: 100.0% [51.68 σ]
ModelChiSquare2-sig: 0.9%
ModelChiSquareGof-sig: 63.9%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.1%
Centroid-so: 2.262 arcsec [3.23 σ]
OotOffset-rm: 5.540 arcsec [3.80 σ]
KicOffset-rm: 3.783 arcsec [2.33 σ]
OotOffset-st: 2/3/3/5 [13]
KicOffset-st: 2/3/3/5 [13]
DiffImageQuality-fgm: 0.00 [0/13]
DiffImageOverlap-fno: 0.38 [6/16]

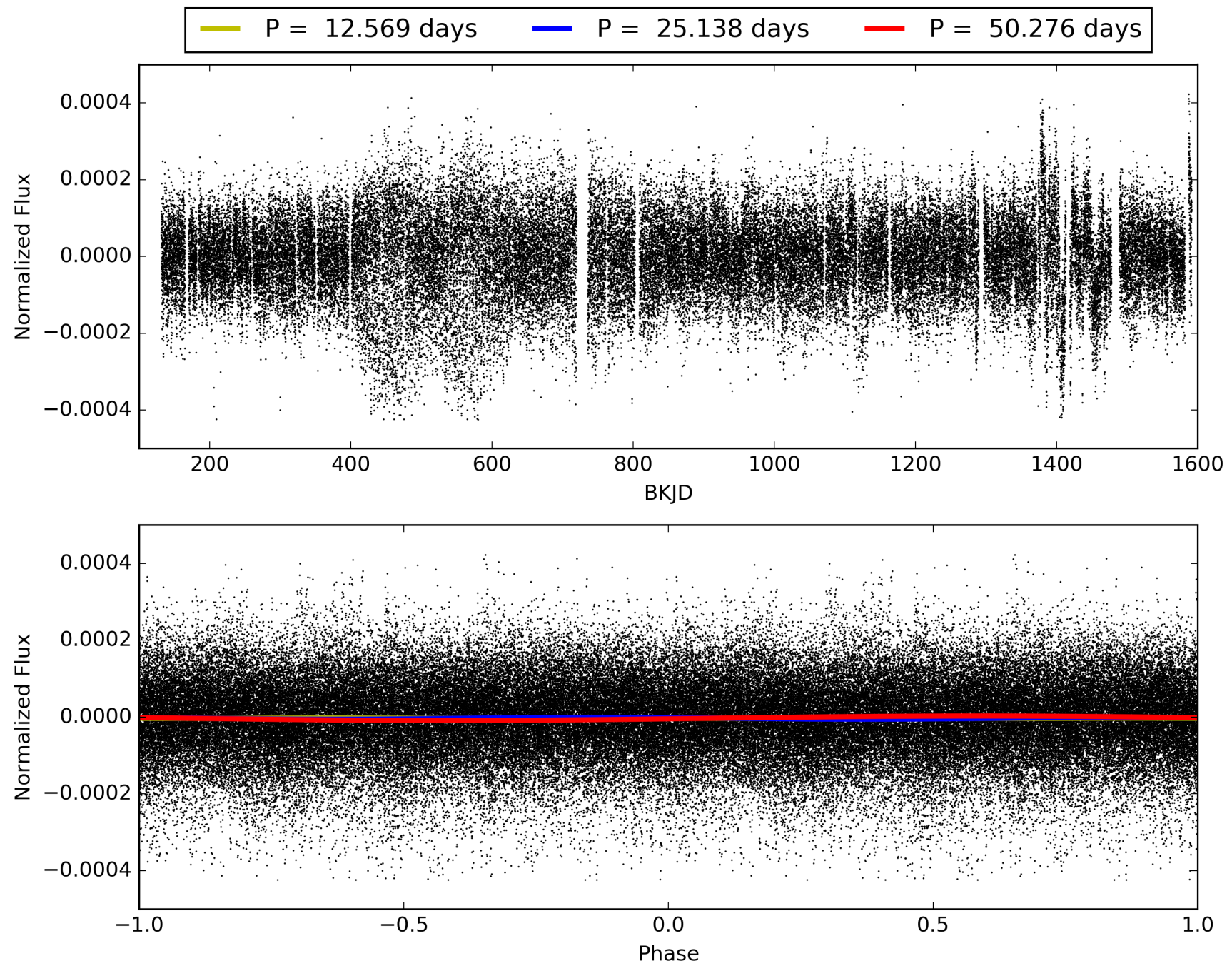
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 12:46:18 Z

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

TCE 010263800-04, PDC Light Curves

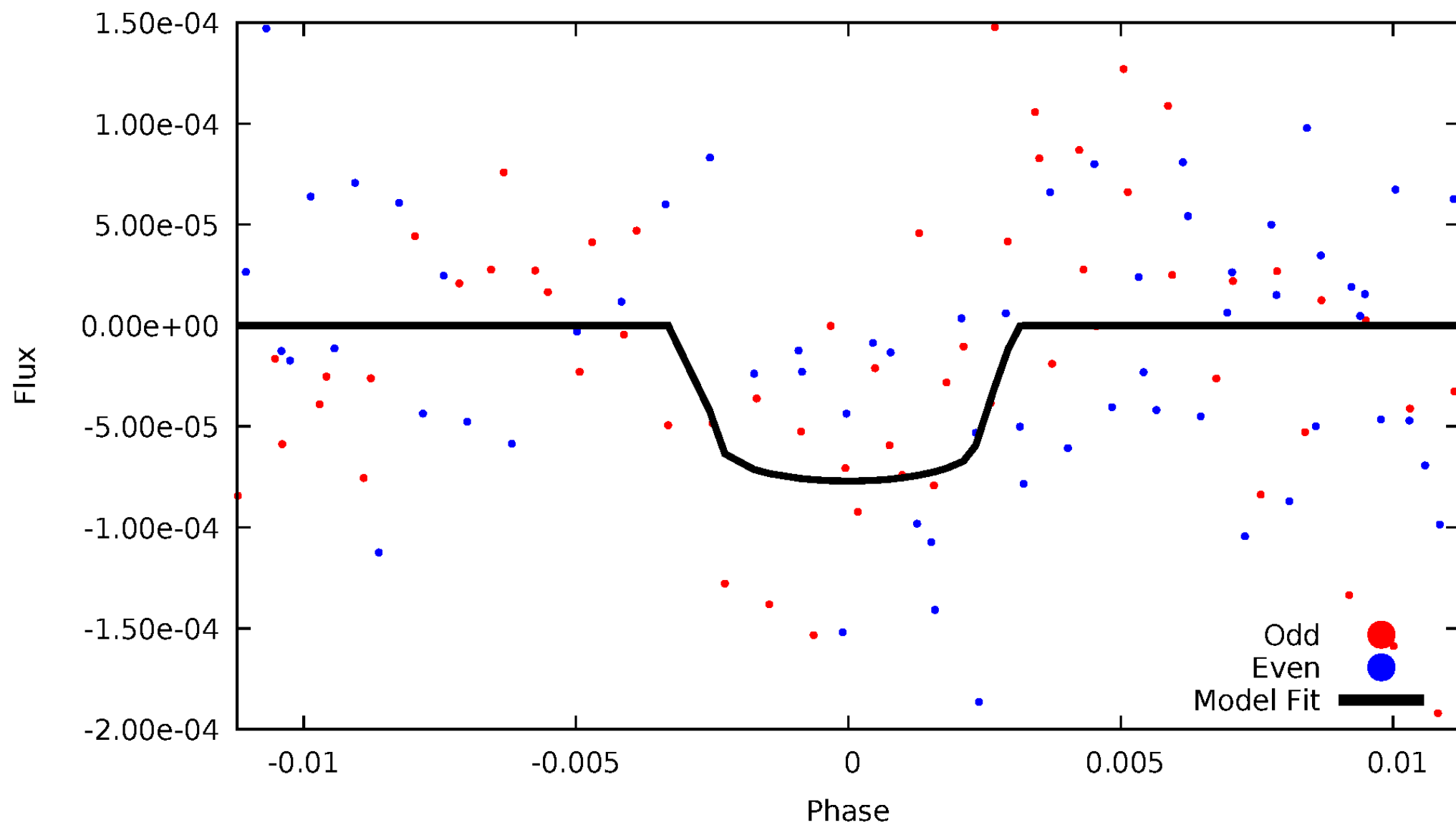


TCE 010263800-04



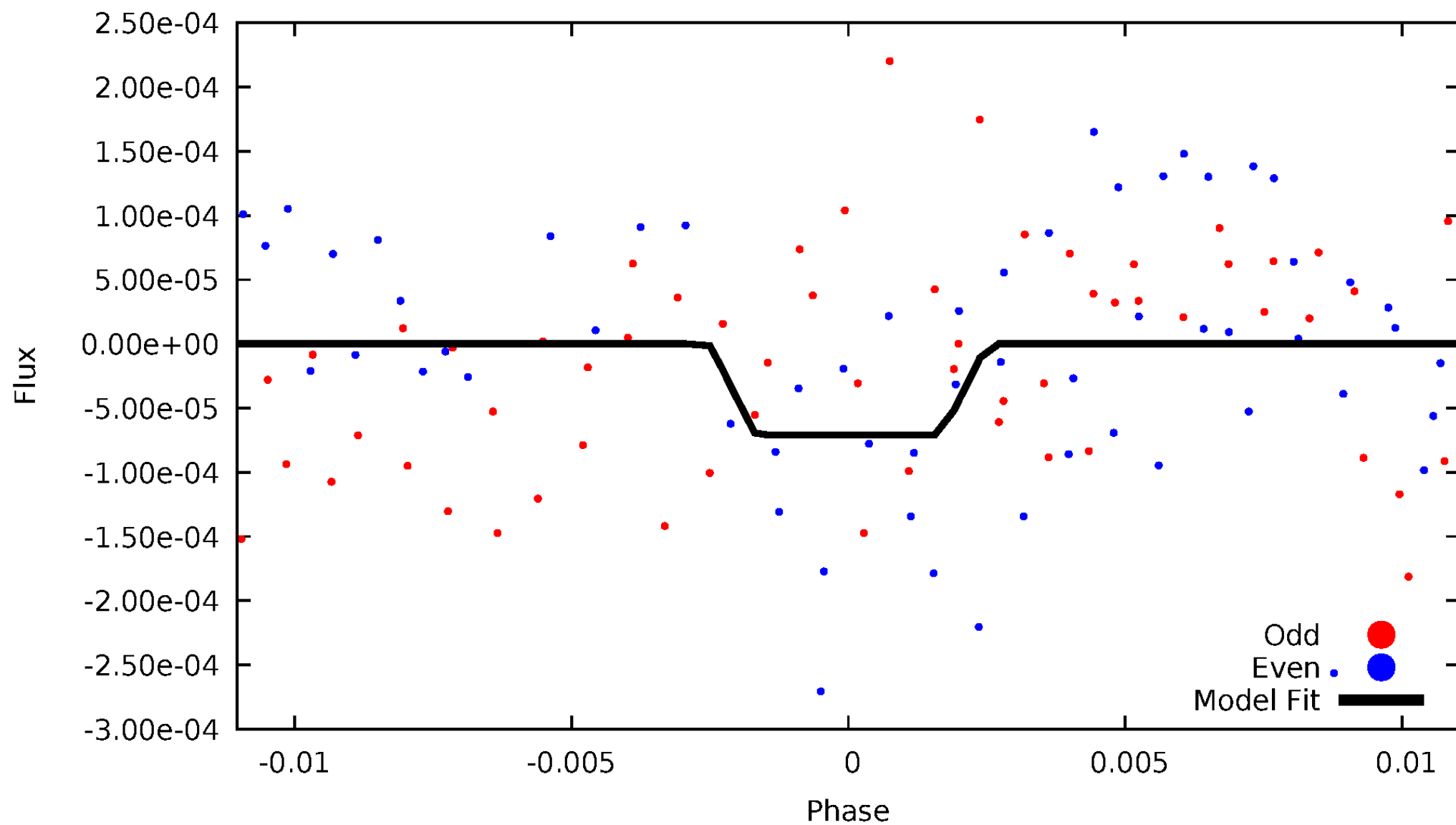
DV Odd/Even

TCE 010263800-04



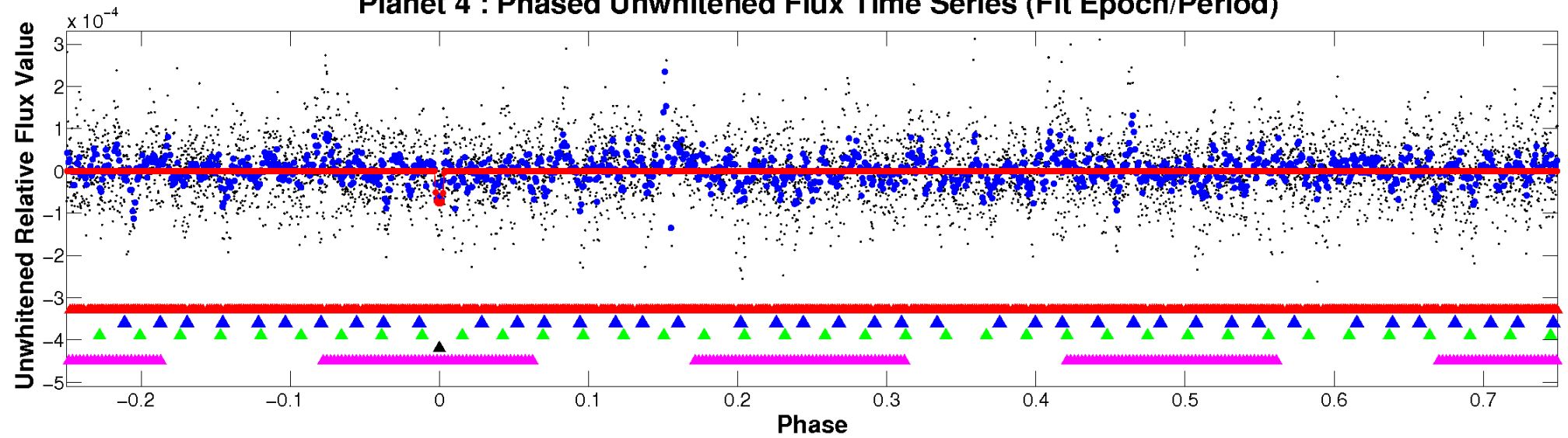
ALT Odd/Even

TCE 010263800-04

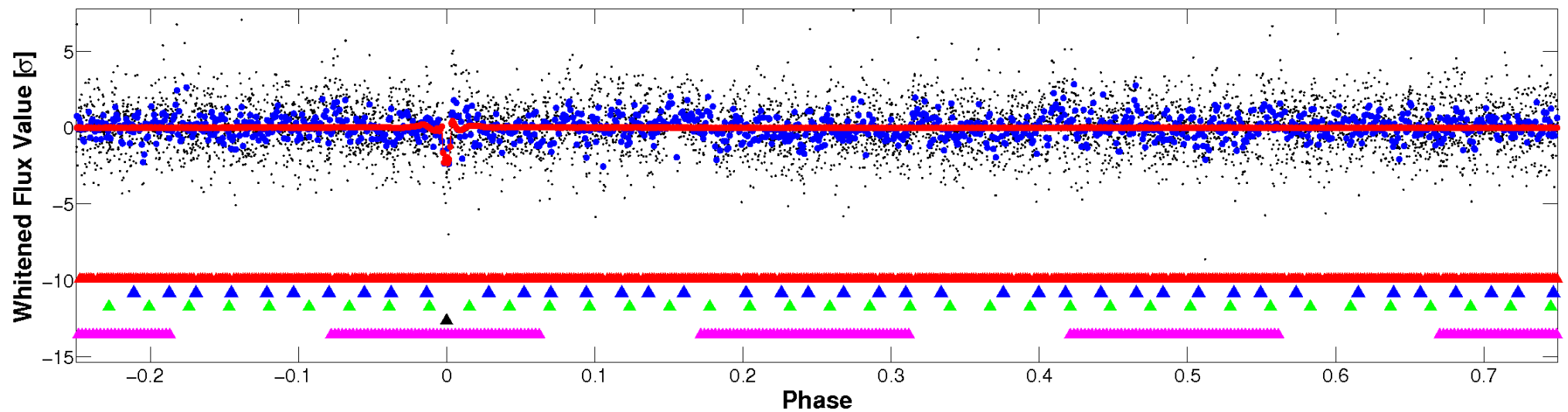


Non-Whitened Vs. Whitened Light Curve

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

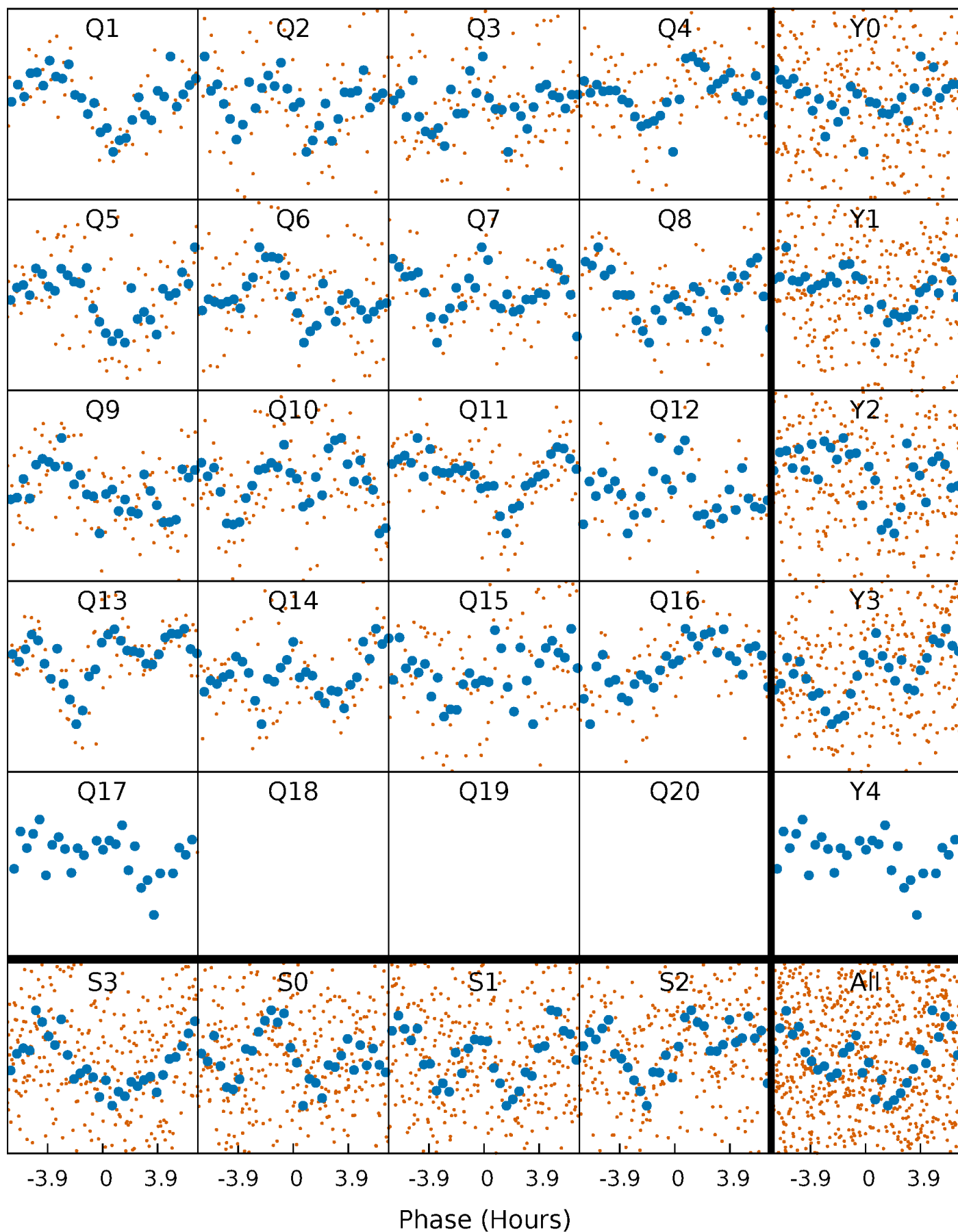


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



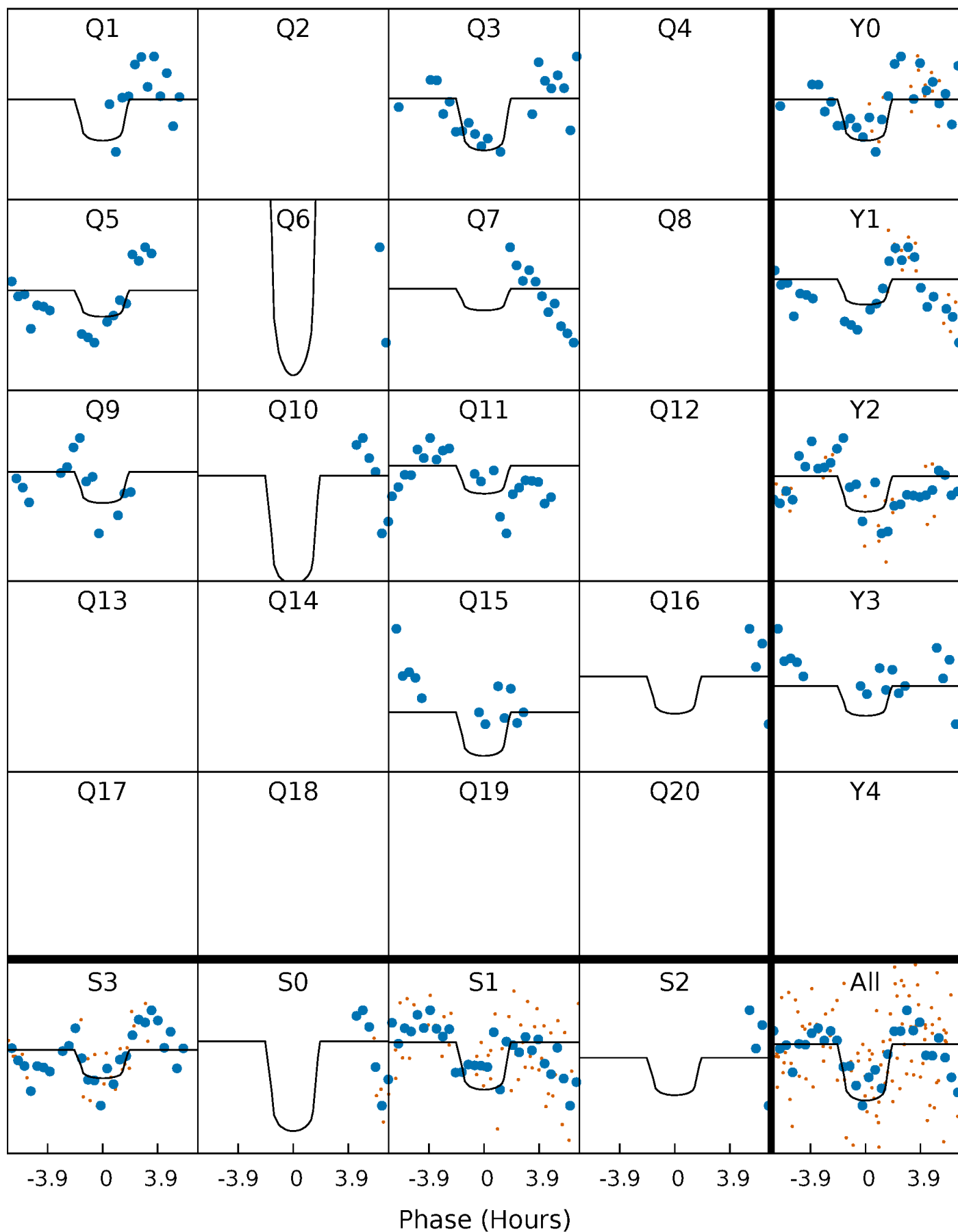
PDC Quarter-Phased Transit Curves

TCE 010263800-04 $P = 25.137888$ Days $T_0 = 137.753944$ (BKJD)



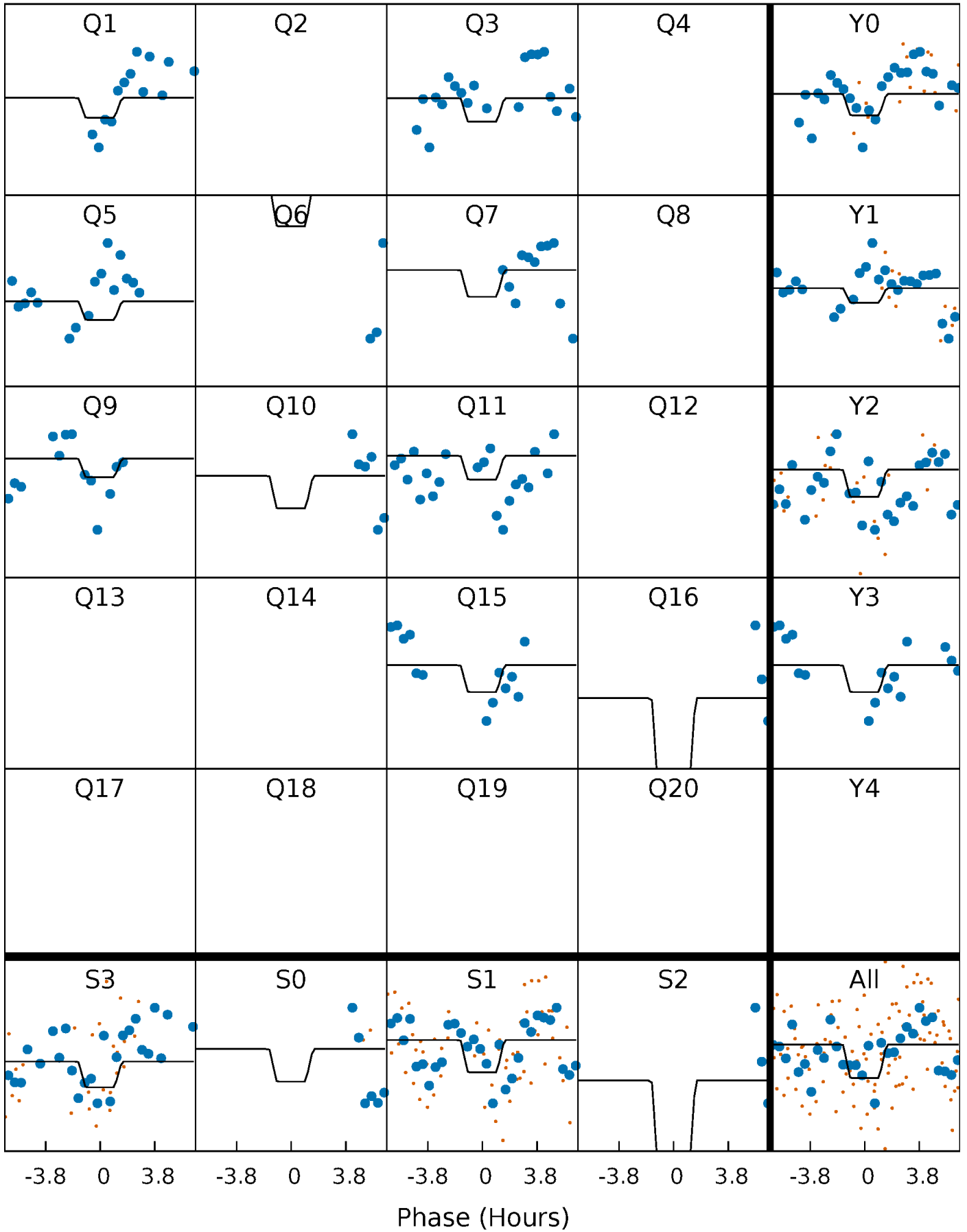
DV Quarter-Phased Transit Curves

TCE 010263800-04 $P = 25.137888$ Days $T_0 = 137.753944$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

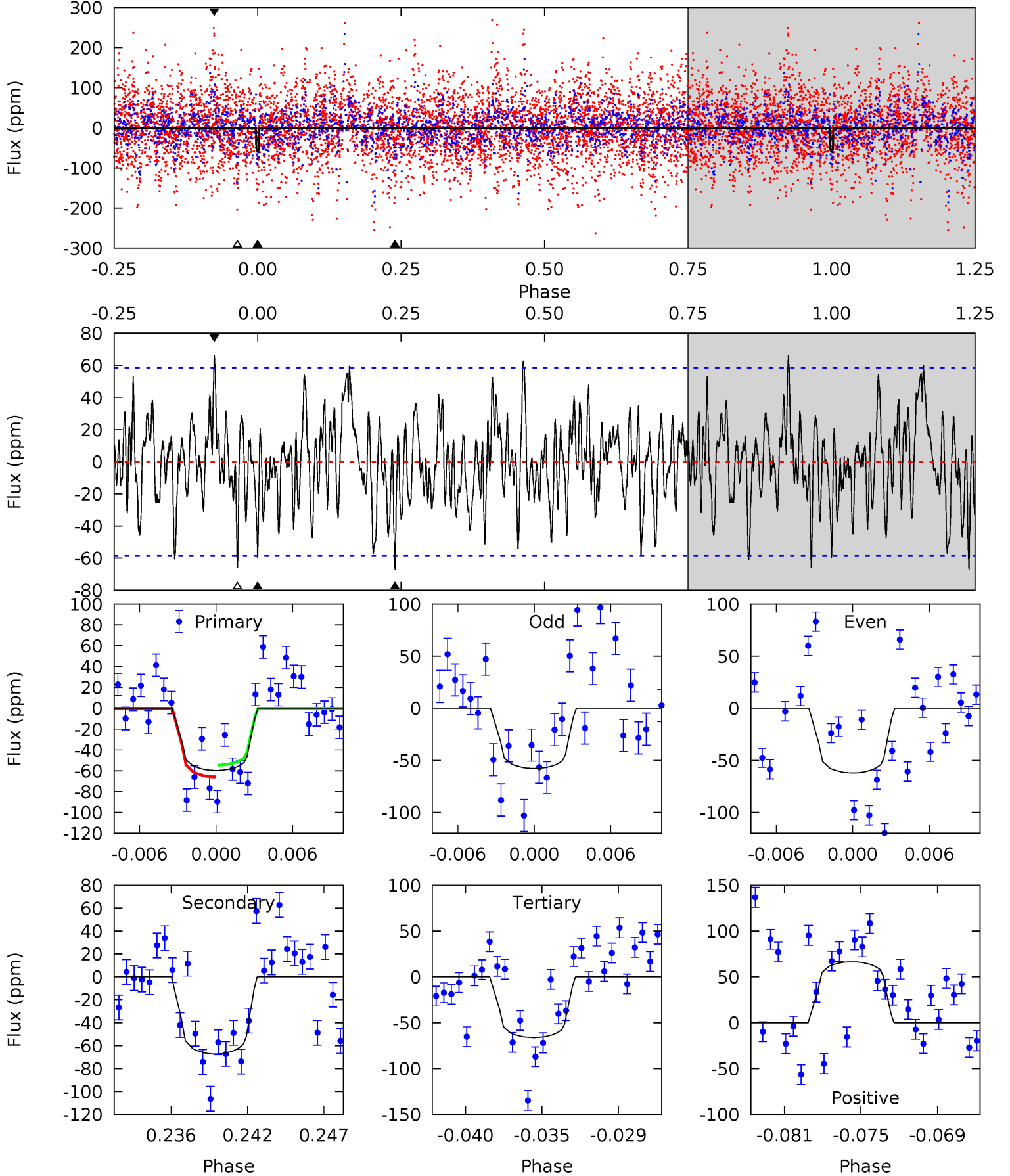
TCE 010263800-04 P= 25.136793 Days $T_0=137.796809$ (BKJD)



DV Model-Shift Uniqueness Test

010263800-04, P = 25.137888 Days, E = 112.616056 Days

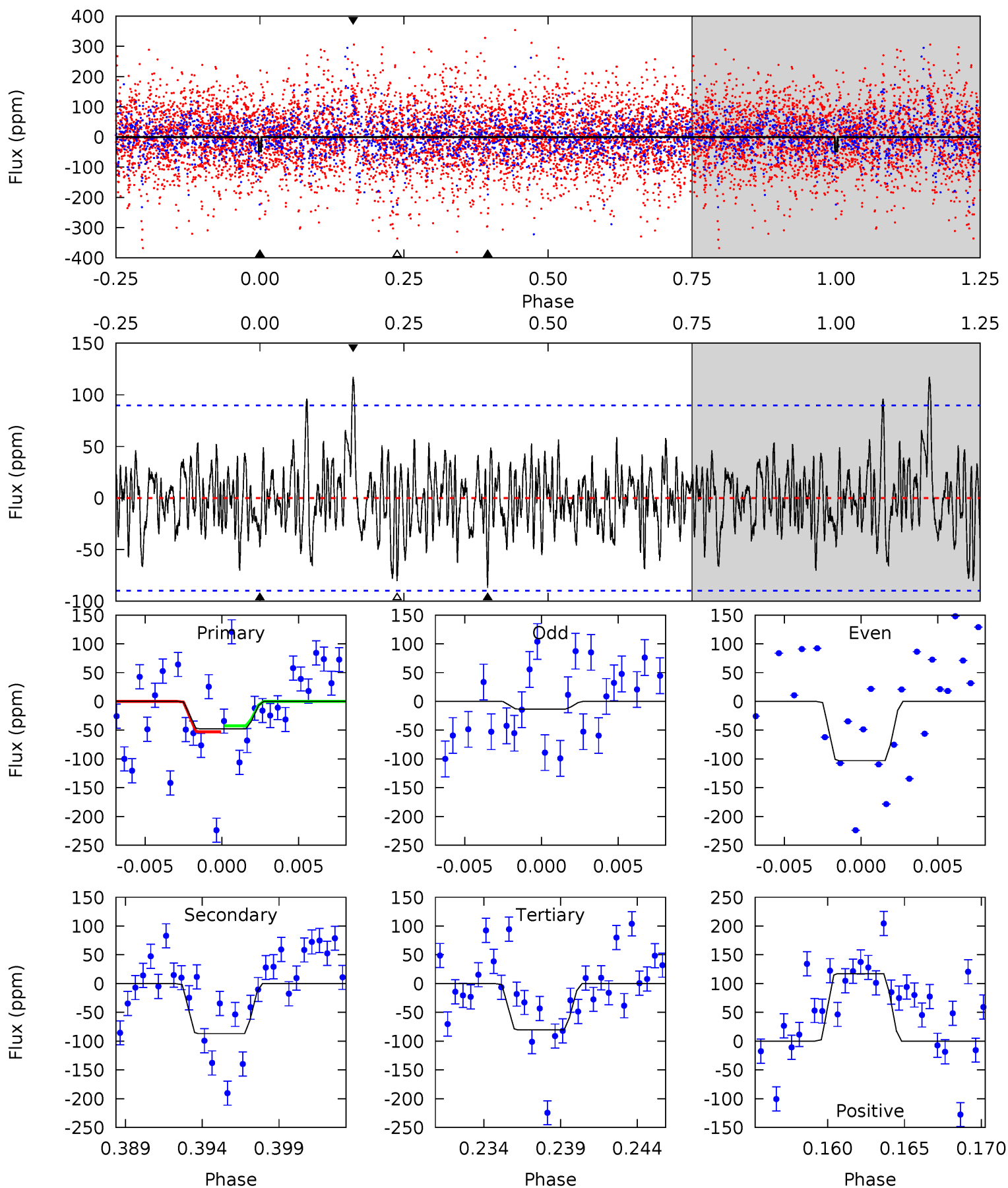
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.23	5.89	5.80	5.81	5.13	2.76	1.91	-0.57	-0.58	0.09	0.08	0.19	0.92	0.50	0.48



Alt Model-Shift Uniqueness Test

010263800-04, P = 25.136793 Days, E = 112.660016 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.74	5.00	4.62	6.74	5.16	2.81	1.53	-1.88	-4.00	0.38	-1.74	2.57	0.67	0.57	0.30



Stellar Parameters For KIC 010263800

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8818^{+240}_{-412}	$3.834^{+0.357}_{-0.153}$	$0.070^{+0.250}_{-0.600}$	$3.115^{+0.937}_{-1.406}$	$2.412^{+0.326}_{-0.816}$	$0.112^{+0.345}_{-0.050}$
	+3%/-5%	+9%/-4%	+357%/-857%	+30%/-45%	+14%/-34%	+307%/-44%
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 010263800-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-67 ± 11	$3.06^{+2.11}_{-1.77}$	1978^{+158}_{-220}	7877^{+6397}_{-1900}	192^{+810}_{-125}
Alt.	-87 ± 17	$2.77^{+1.85}_{-1.59}$	1978^{+178}_{-235}	8970^{+9379}_{-2318}	306^{+1310}_{-200}

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

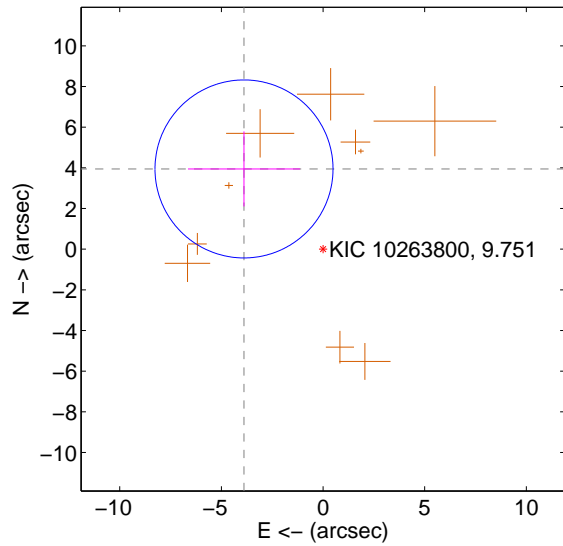
Supplemental centroid analysis for 010263800-04. **Kepler magnitude: 9.75.** Transit SNR 11.79

There are 0 quarters with good PRF difference image offsets

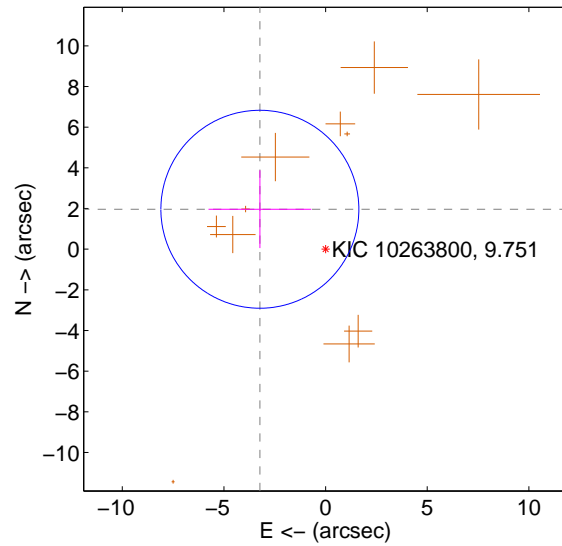
The direct PRF centroid is offset from the target star catalog position by about 1.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.540 ± 1.459	3.80	3.888 ± 2.755	3.947 ± 1.844
PRF-fit source offset from KIC position	3.783 ± 1.623	2.33	3.233 ± 2.529	1.964 ± 1.913
photometric centroid source offset	2.26 ± 0.70	3.23	-1.13 ± 0.53	1.96 ± 0.75

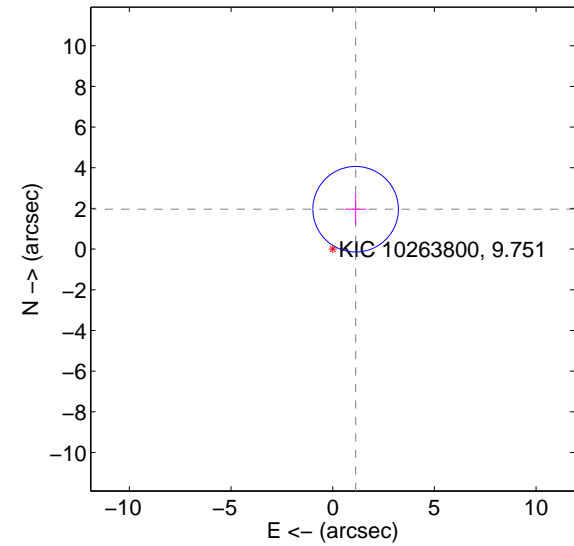
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

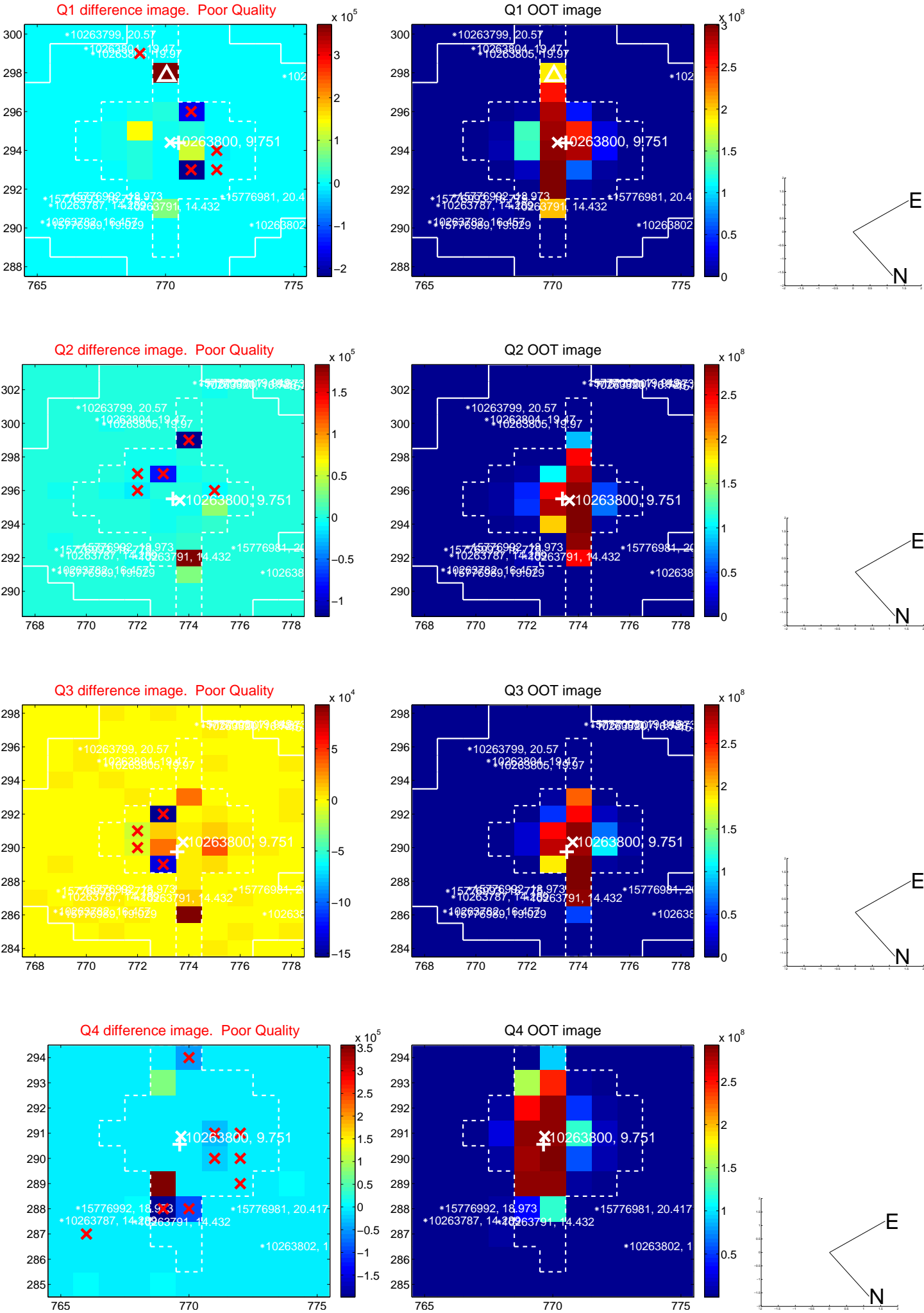


offset from photometric centroids

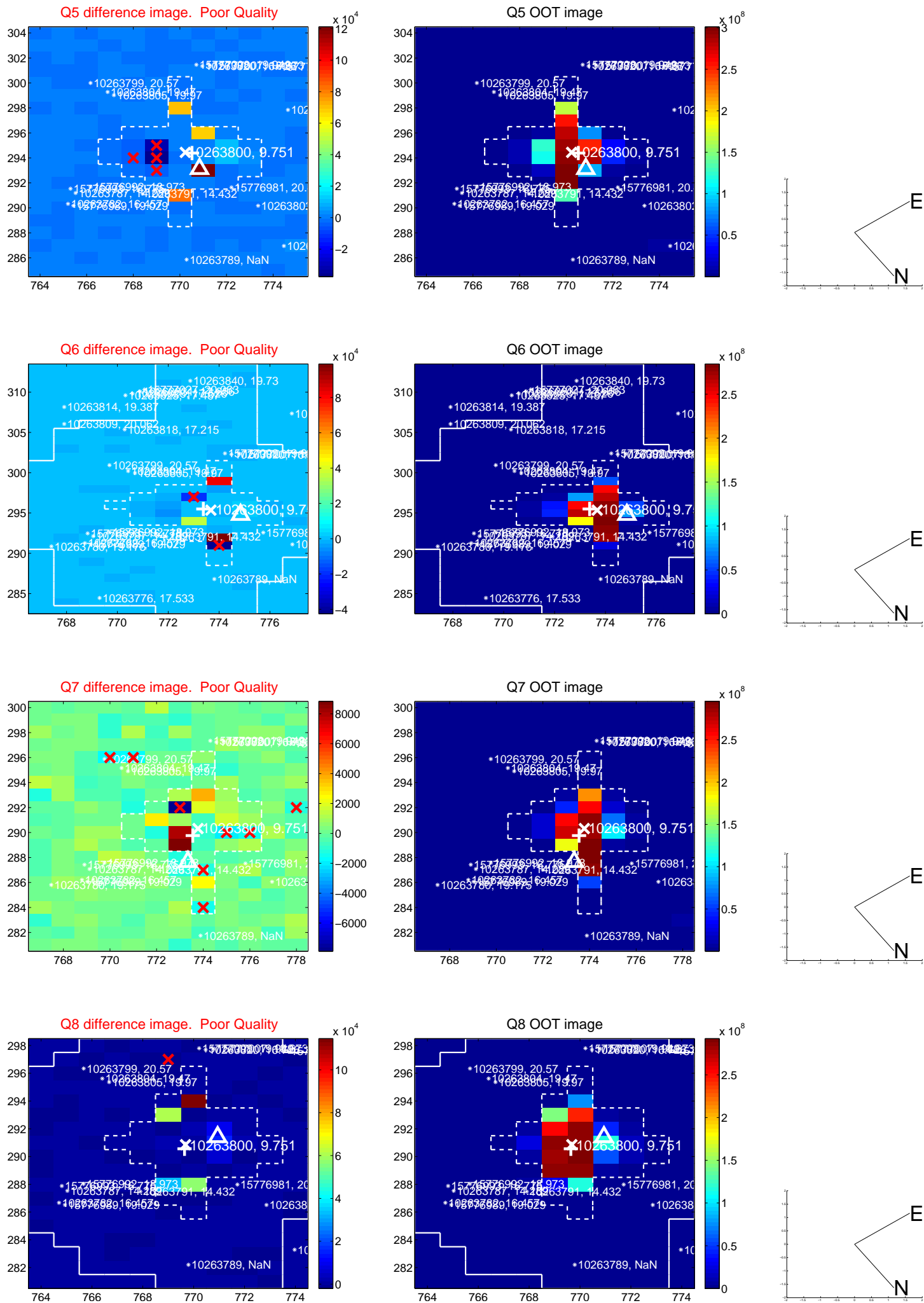


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

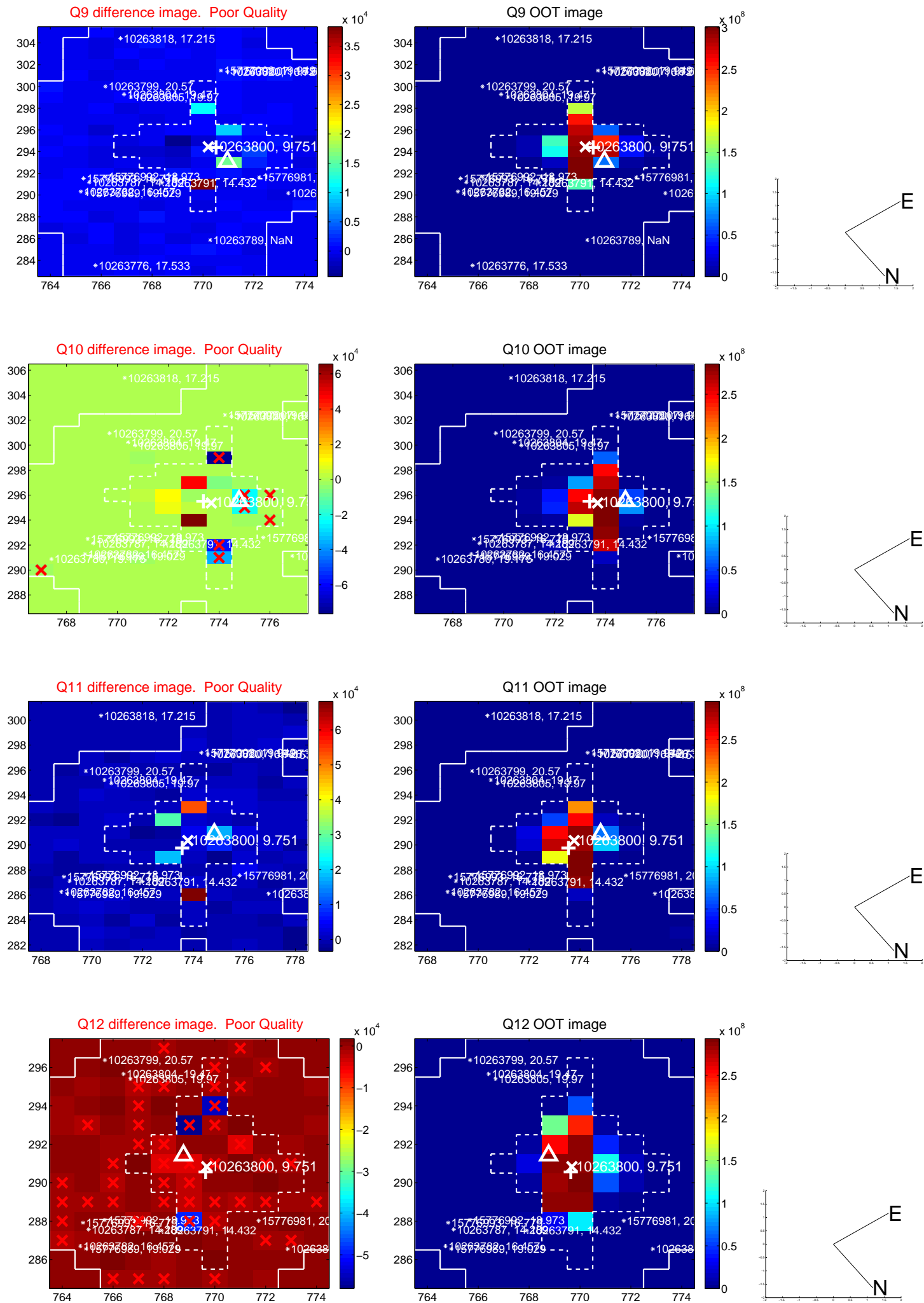
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



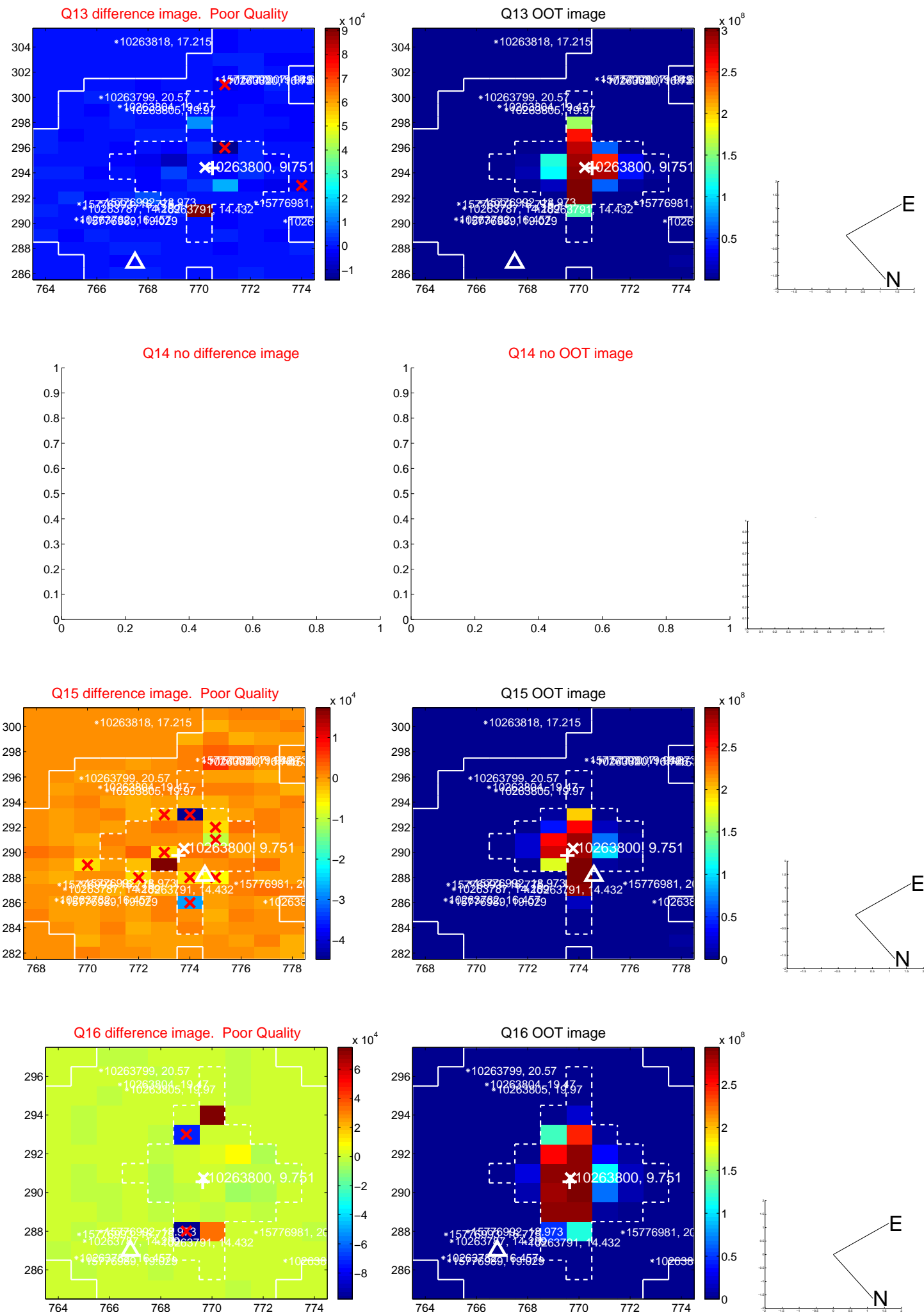
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



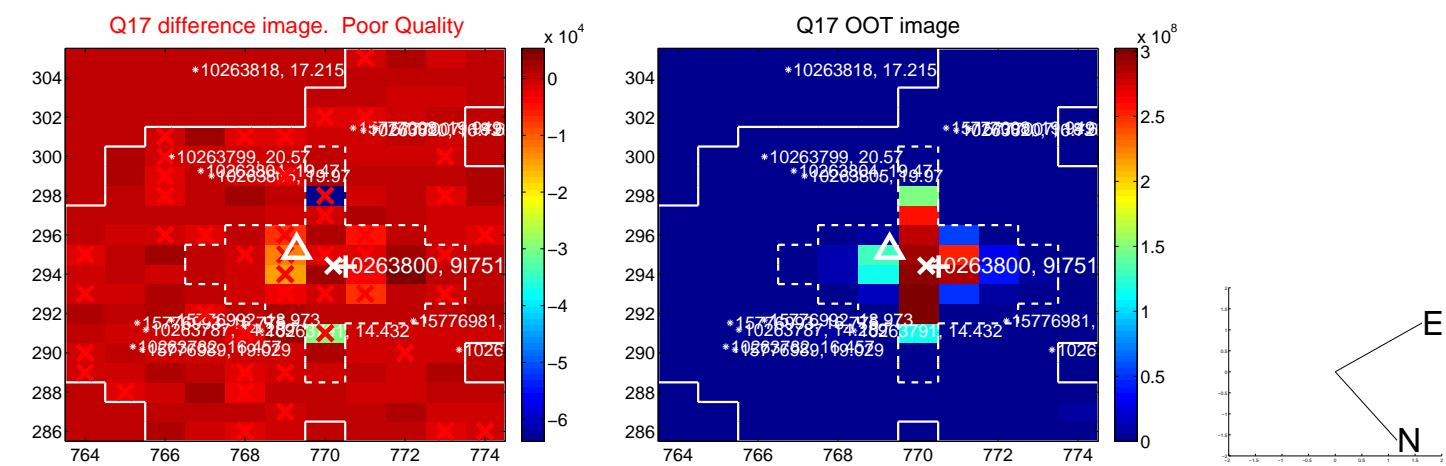
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



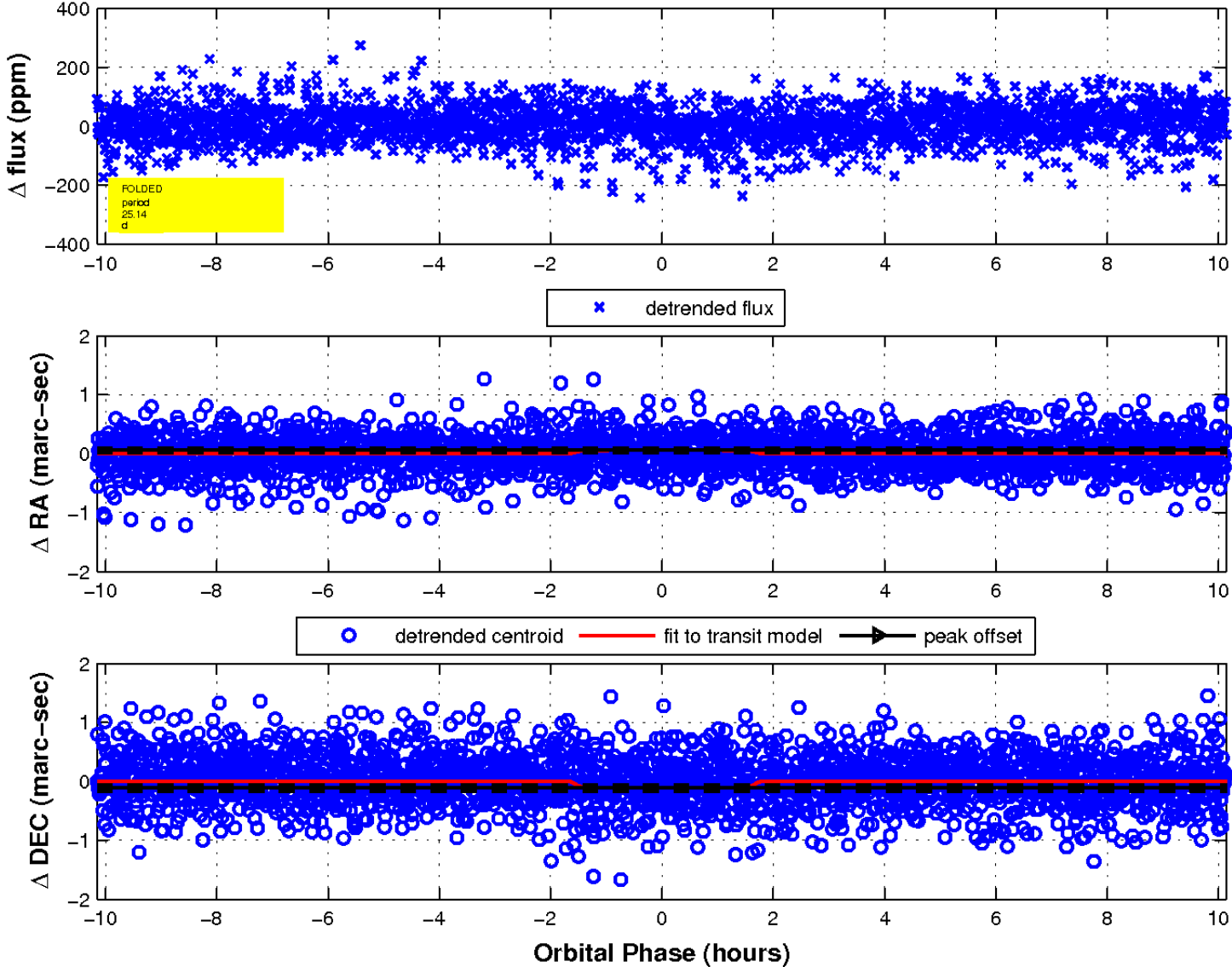
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

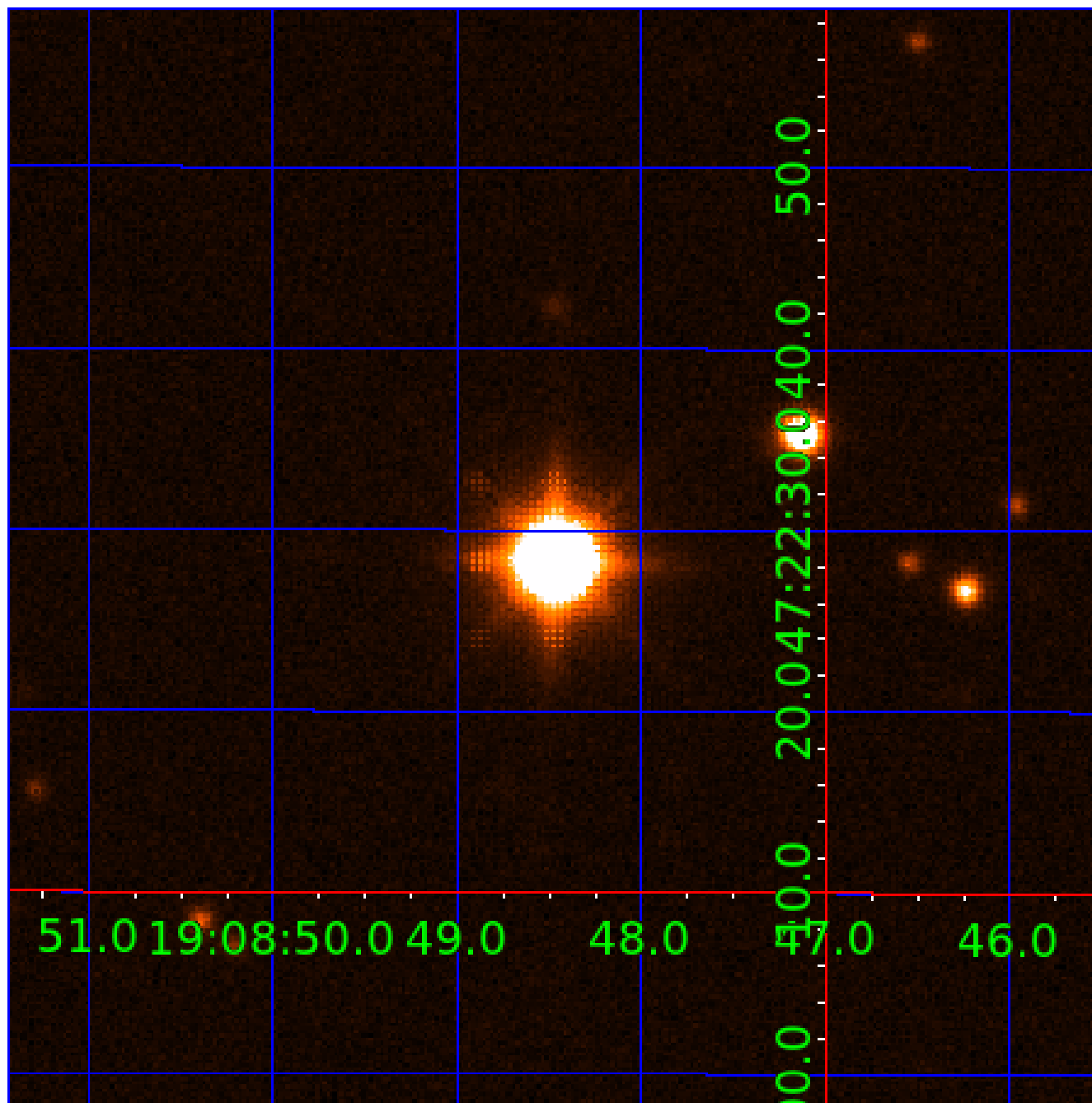


fluxWeightedCentroids, Planet 4 of 5



UKIRT Image

Declination



KIC 010263800

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})
010263800-01	OBS	No	2.312846	132.096826	7.0	16.479	9.2	12.1	3.12	8818	0.94	24916.35
010263800-03	OBS	No	20.382162	144.932537	55.4	4.015	12.5	8.8	3.12	8818	2.58	1368.82
010263800-04	OBS	No	25.137888	137.753944	77.1	3.383	12.1	11.8	3.12	8818	3.11	1034.92
010263800-05	OBS	No	6.268994	133.056503	12.5	20.620	11.4	7.3	3.12	8818	1.24	6593.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010263800-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
010263800-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010263800-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED
010263800-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED

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

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

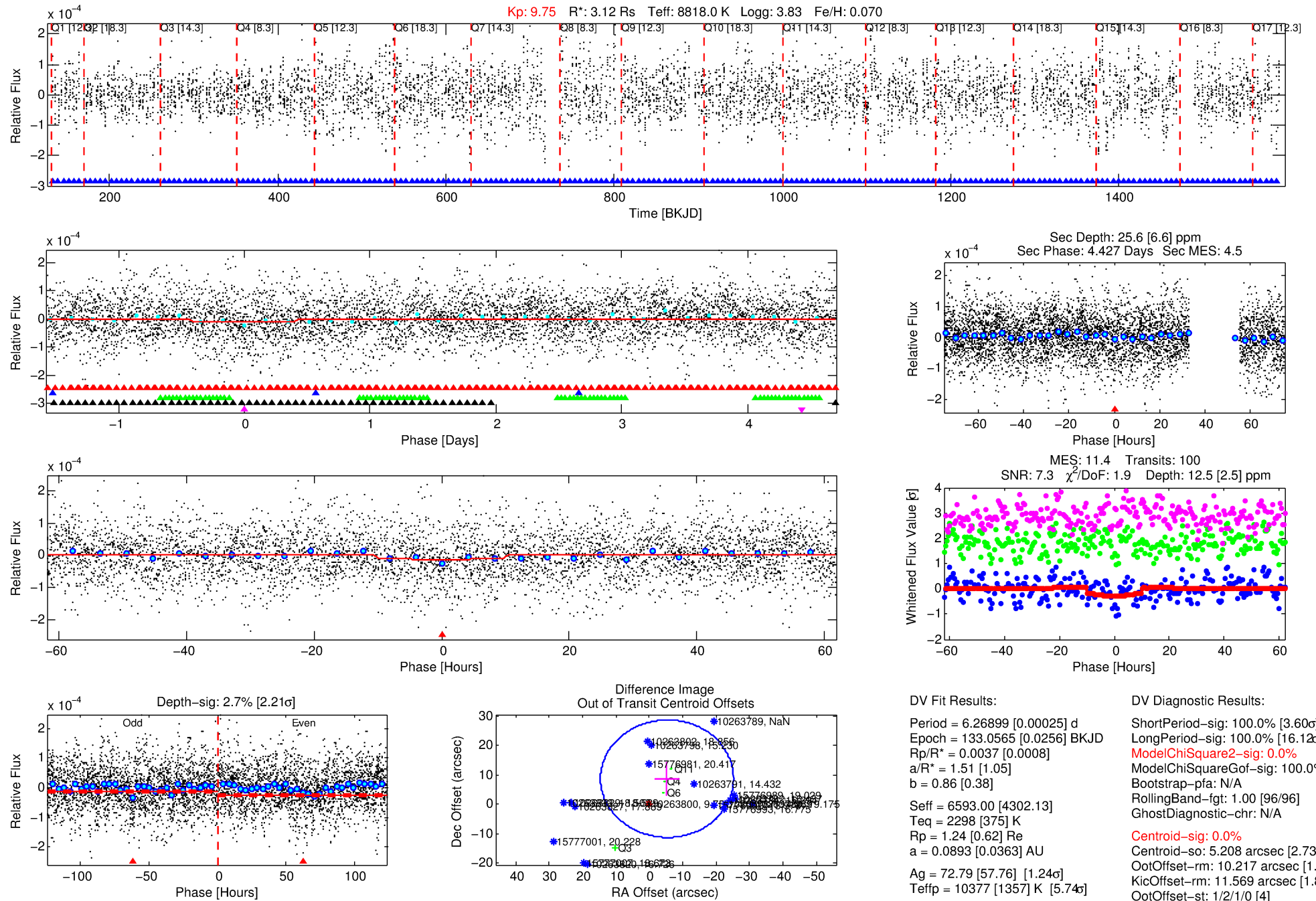
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010263800-05

No Significant Match Found

DV One-Page Summary

KIC: 10263800 Candidate: 5 of 5 Period: 6.269 d



DV Fit Results:

Period = 6.26899 [0.00025] d
Epoch = 133.0565 [0.0256] BKJD
Rp/R* = 0.0037 [0.0008]
a/R* = 1.51 [1.05]
b = 0.86 [0.38]
Seff = 6593.00 [4302.13]
Teq = 2298 [375] K
Rp = 1.24 [0.62] Re
a = 0.0893 [0.0363] AU
Ag = 72.79 [57.76] [1.24σ]
Teff = 10377 [1357] K [5.74σ]

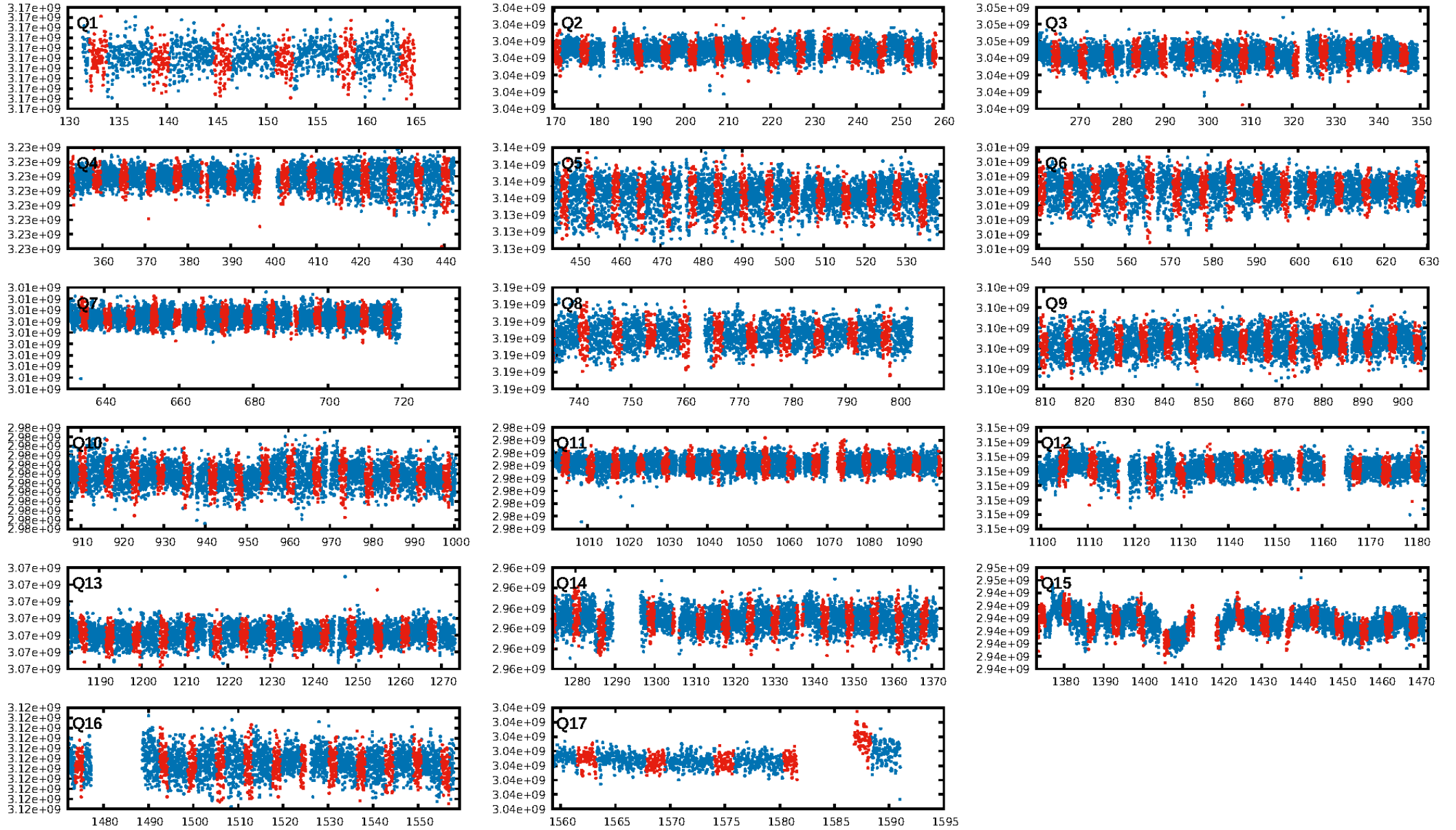
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [3.60σ]
LongPeriod-sig: 100.0% [16.12σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [96/96]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.0%
Centroid-so: 5.208 arcsec [2.73σ]
OotOffset-rm: 10.217 arcsec [1.54σ]
KicOffset-rm: 11.569 arcsec [1.81σ]
OotOffset-st: 1/2/1/0 [4]
KicOffset-st: 1/2/1/0 [4]
DiffImageQuality-fgm: 0.25 [1/4]
DiffImageOverlap-fno: 0.00 [0/17]

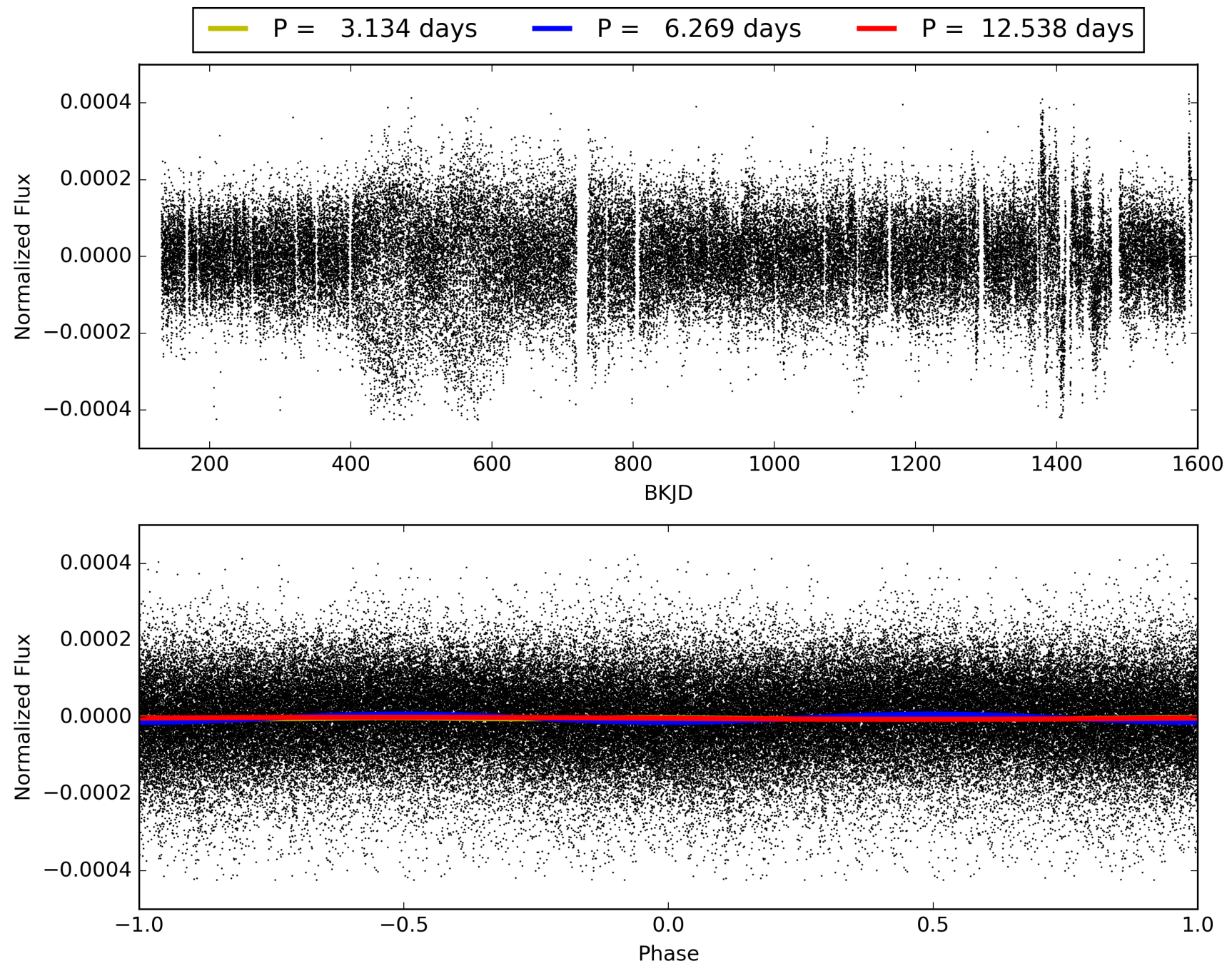
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 12:46:23 Z

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

TCE 010263800-05, PDC Light Curves

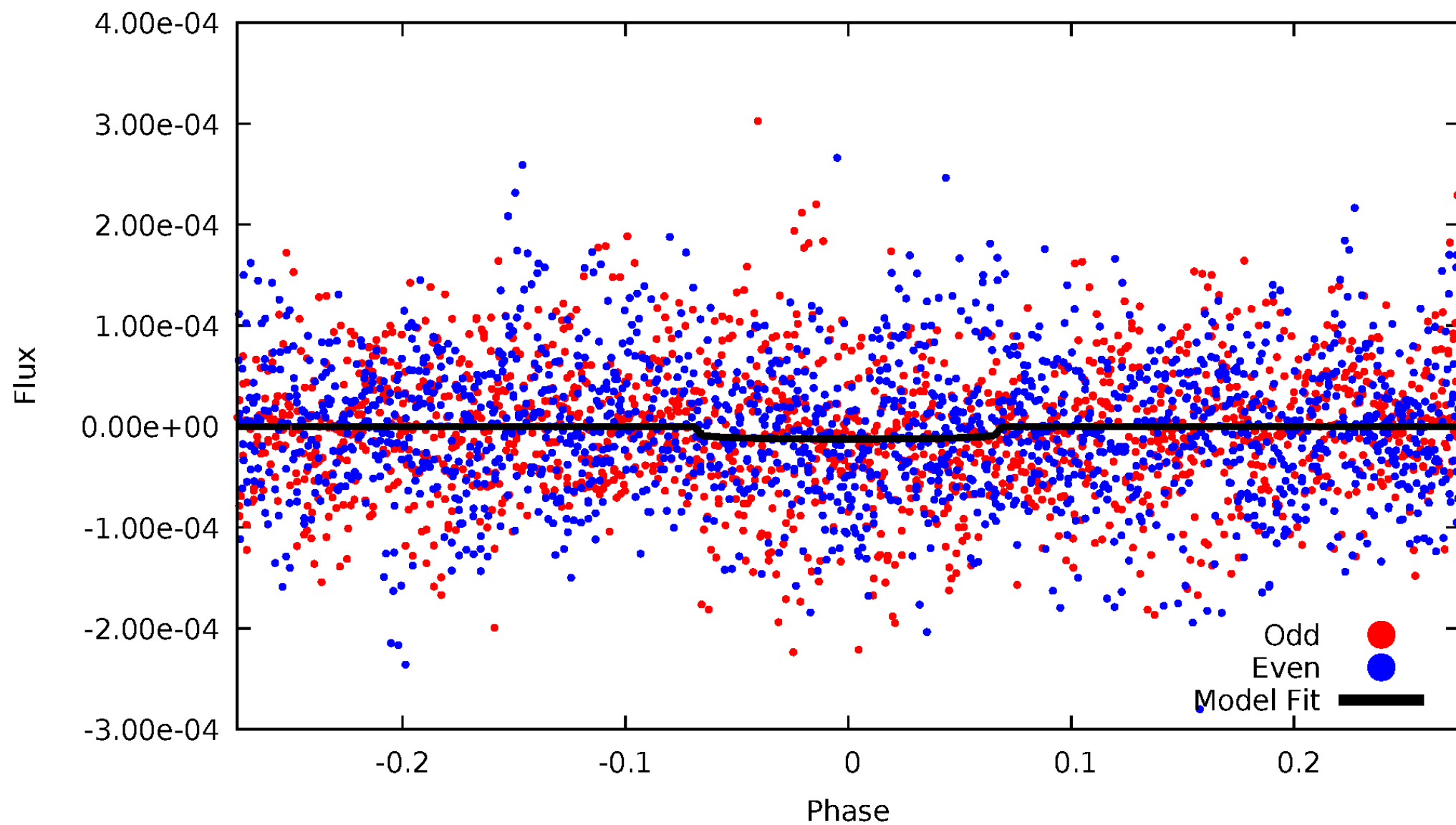


TCE 010263800-05



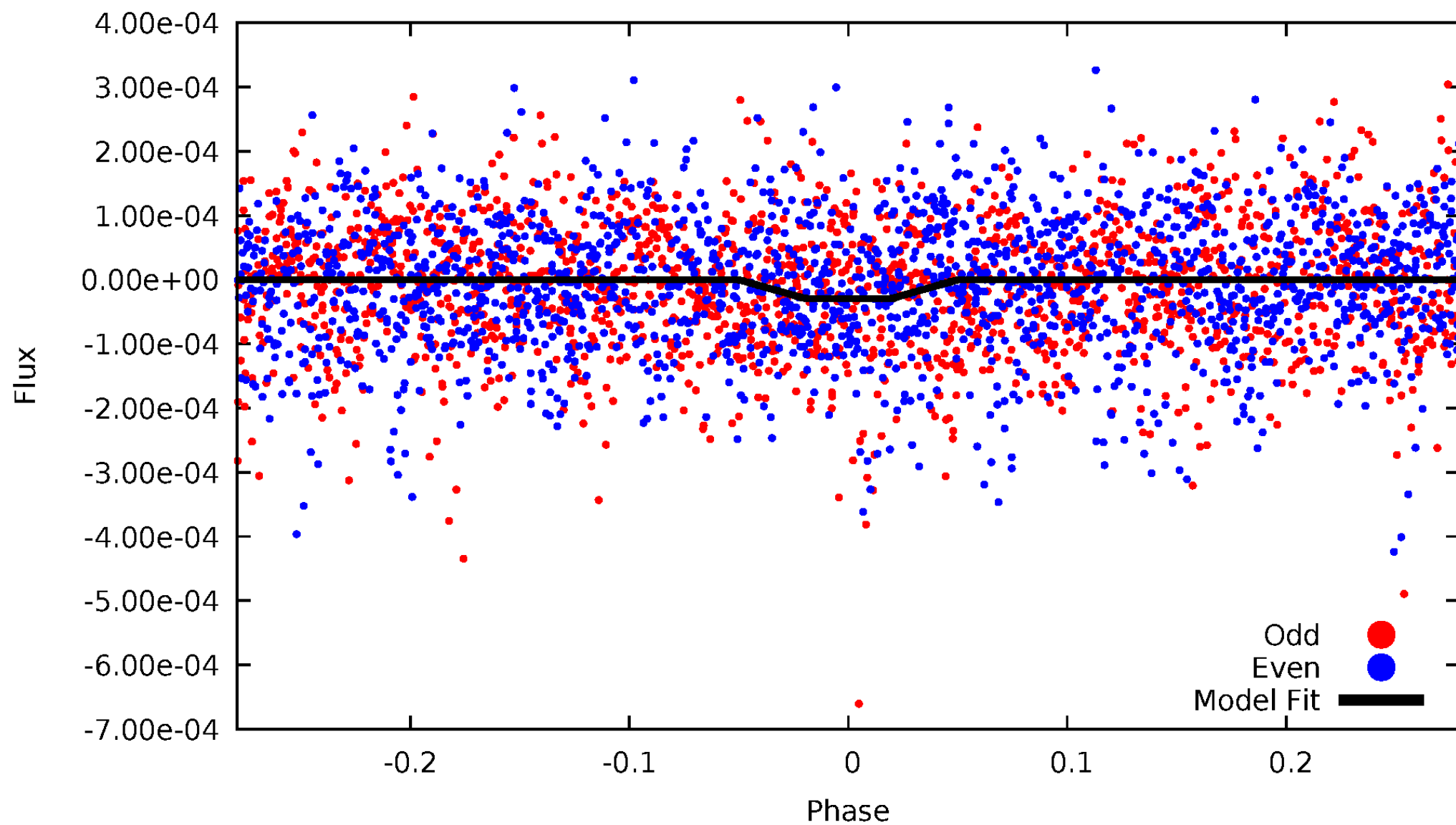
DV Odd/Even

TCE 010263800-05



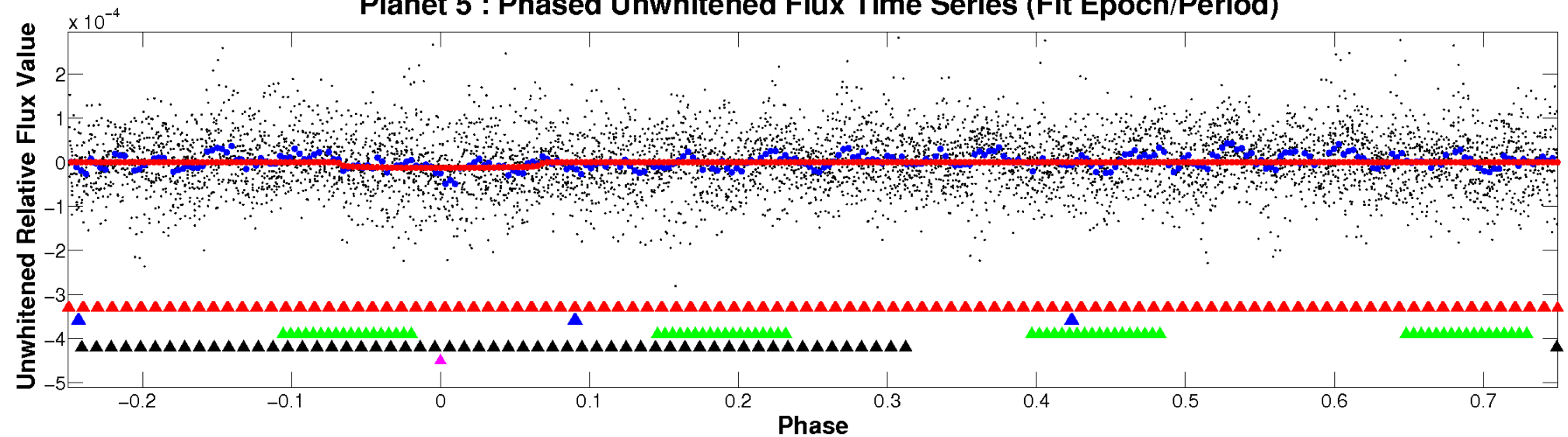
ALT Odd/Even

TCE 010263800-05

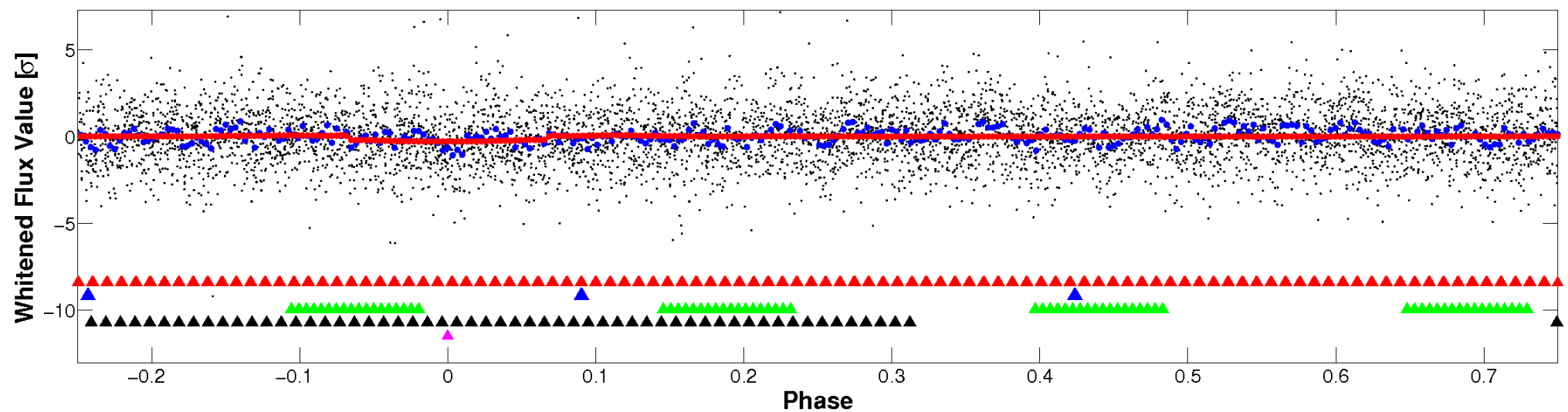


Non-Whitened Vs. Whitened Light Curve

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

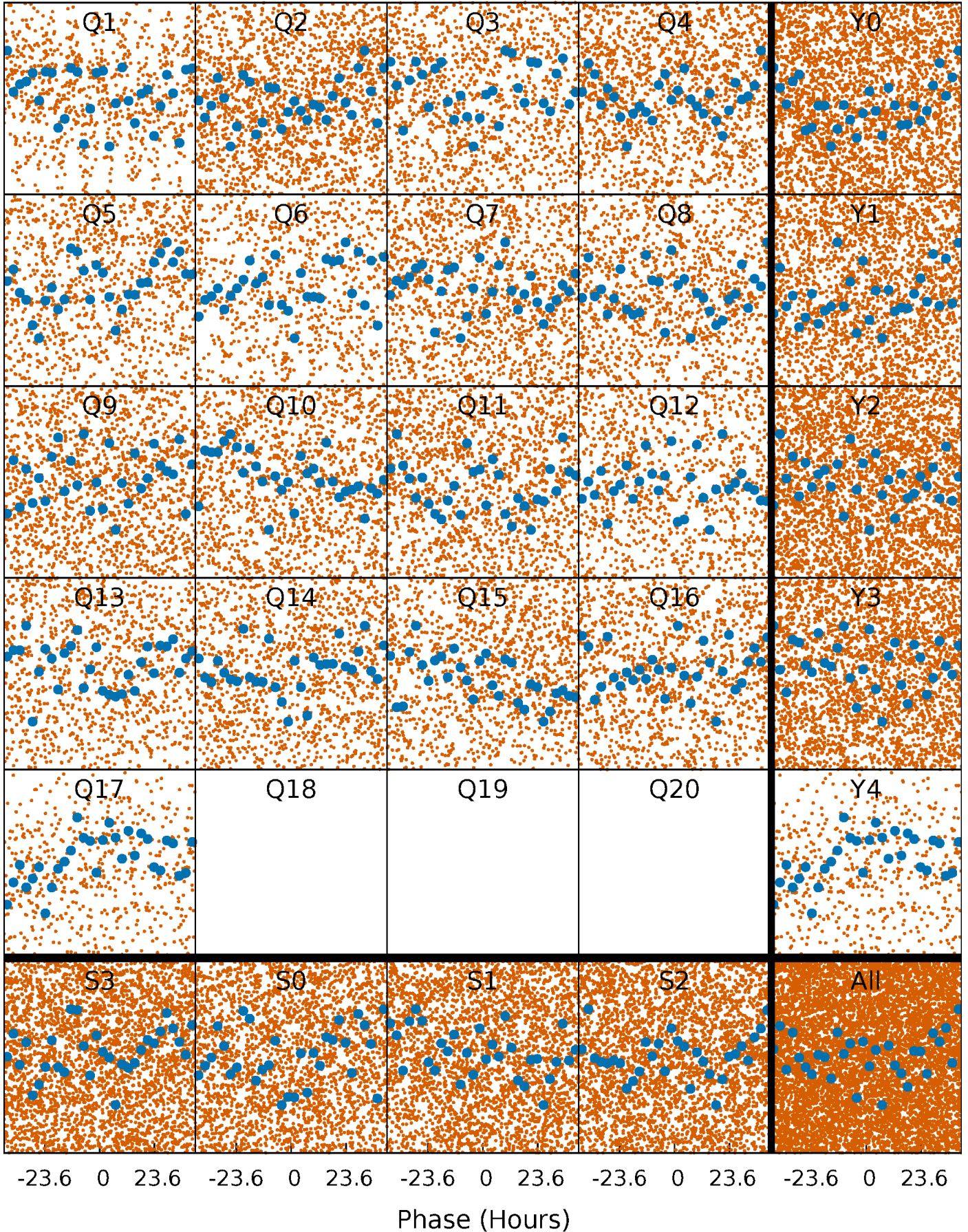


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



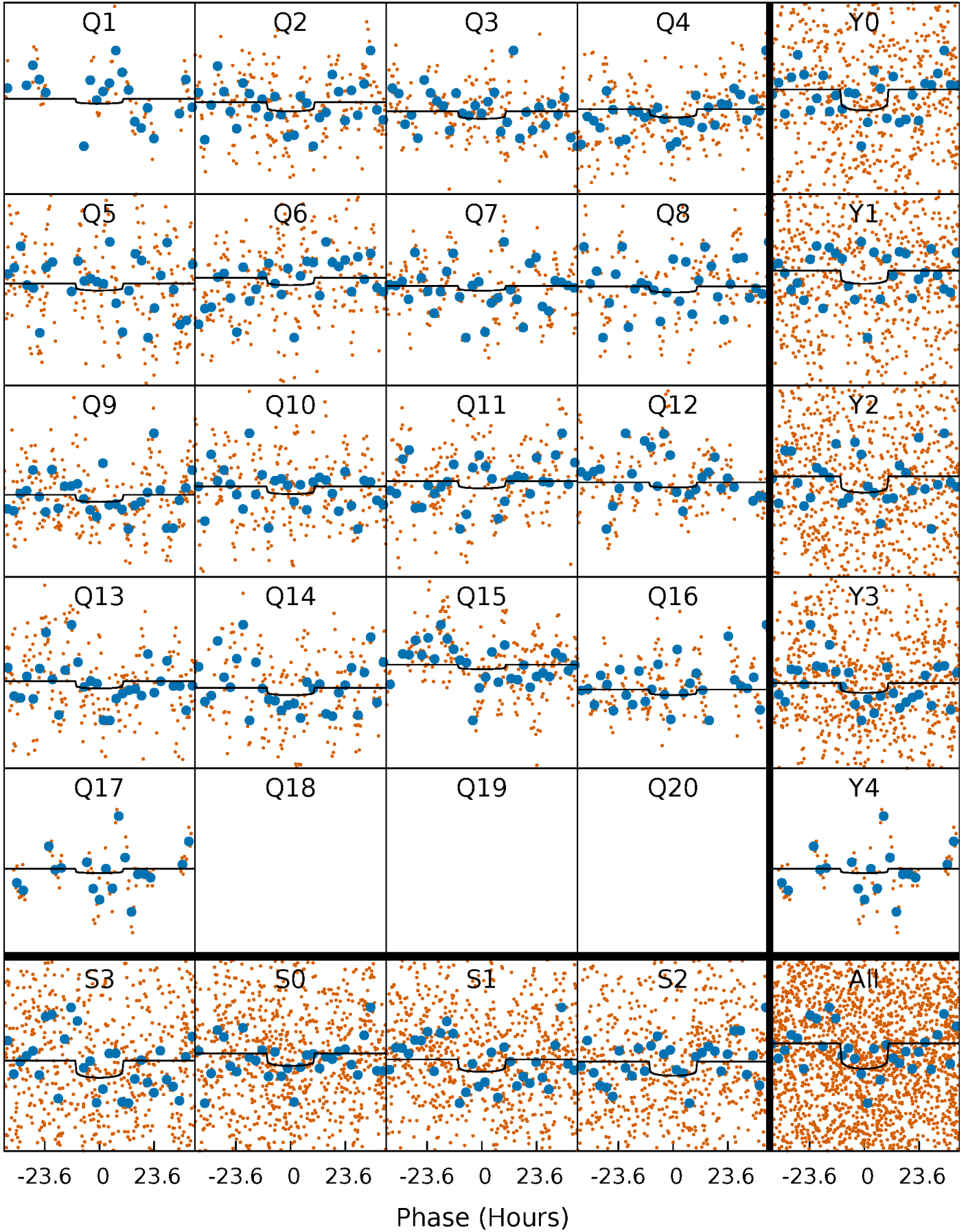
PDC Quarter-Phased Transit Curves

TCE 010263800-05 $P = 6.268994$ Days $T_0 = 133.056503$ (BKJD)



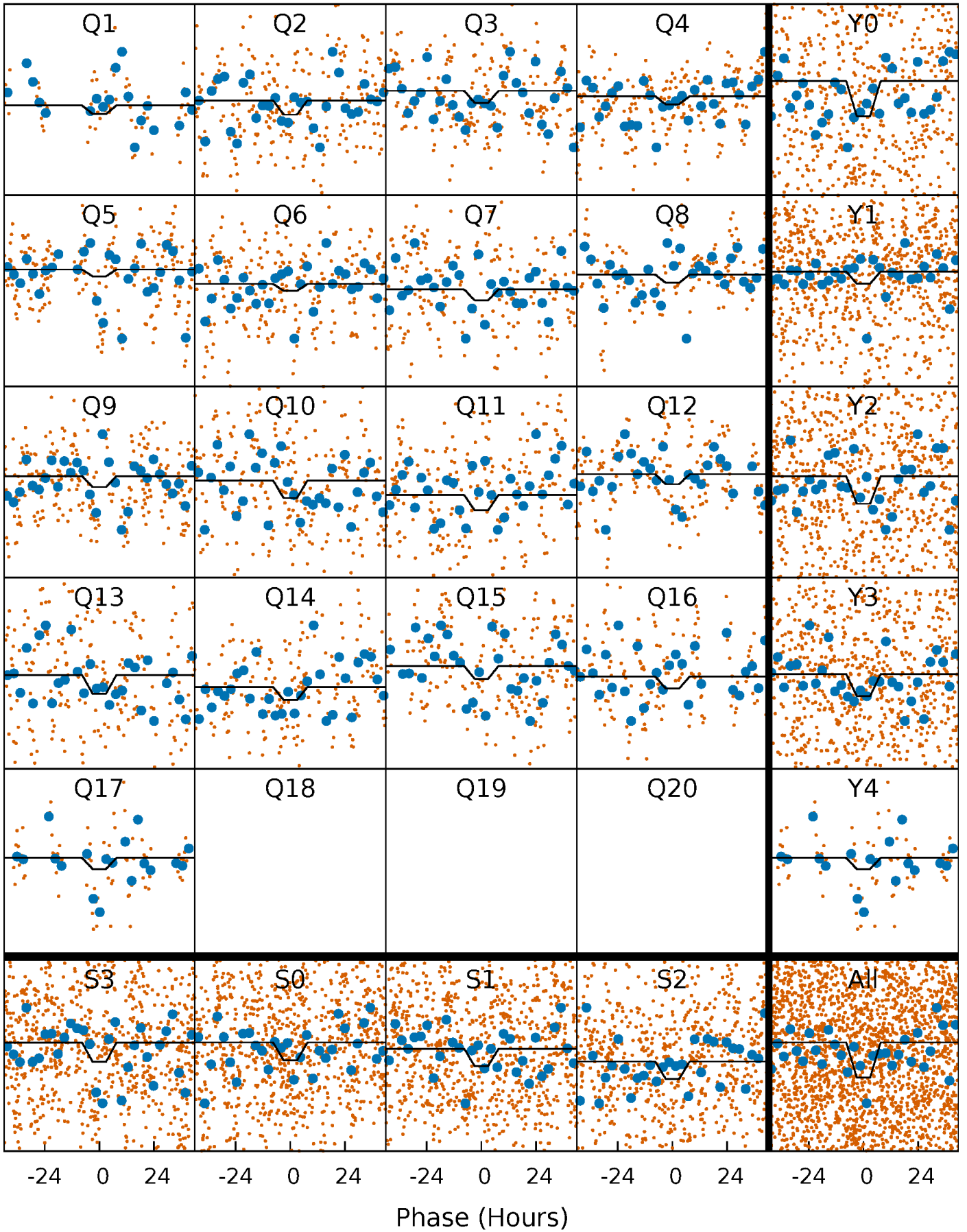
DV Quarter-Phased Transit Curves

TCE 010263800-05 $P = 6.268994$ Days $T_0 = 133.056503$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

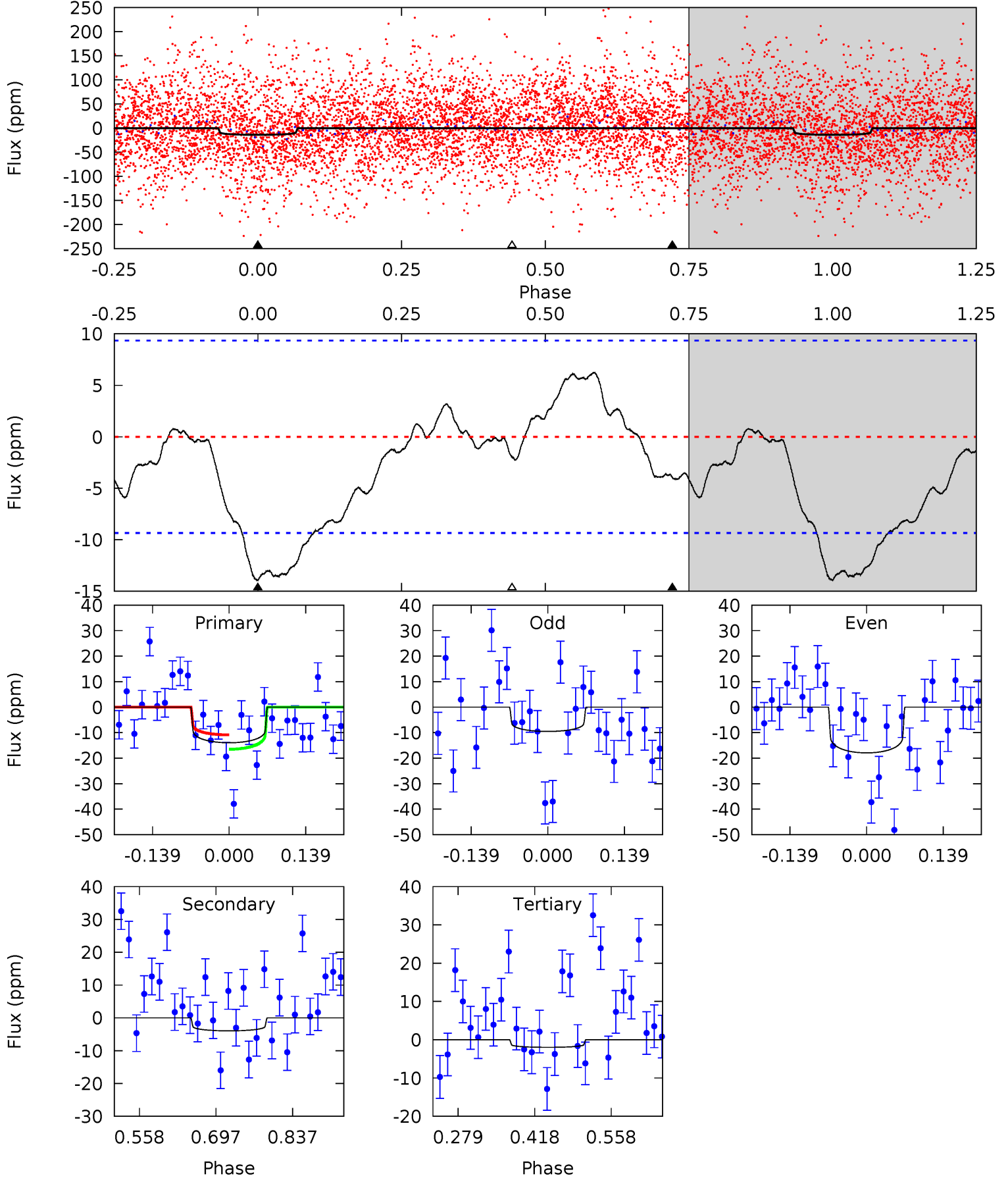
TCE 010263800-05 $P = 6.269156$ Days $T_0 = 133.043940$ (BKJD)



DV Model-Shift Uniqueness Test

010263800-05, P = 6.268994 Days, E = 133.056503 Days

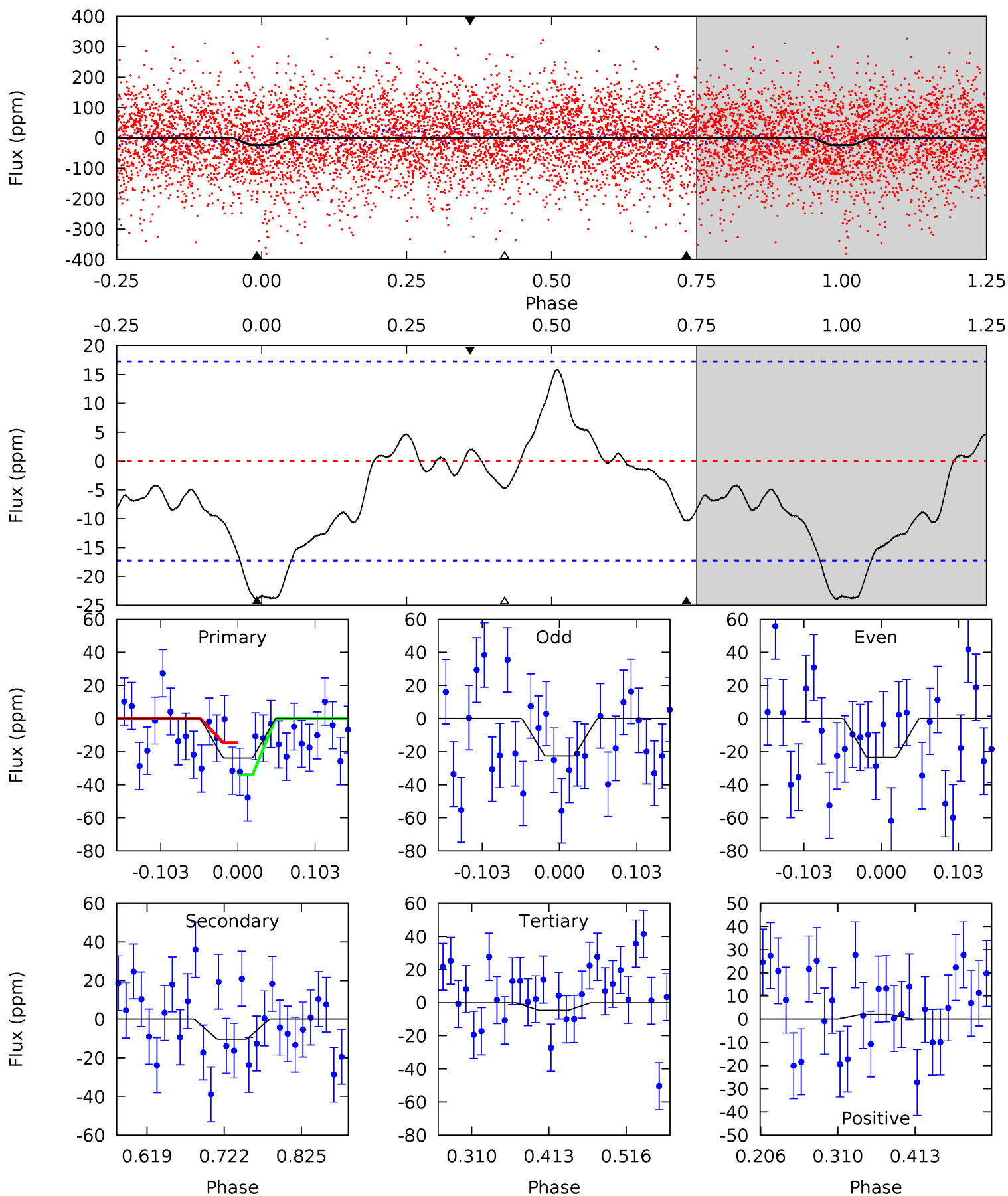
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.71	1.90	0.95	0	4.49	1.48	1.63	5.76	6.71	0.95	1.90	2.02	0.98	0.31	1.32



Alt Model-Shift Uniqueness Test

010263800-05, P = 6.269156 Days, E = 133.043940 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.32	2.74	1.25	0.53	4.56	1.63	1.66	5.08	5.79	1.49	2.20	0.12	3.25	0.40	2.57



Stellar Parameters For KIC 010263800

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8818^{+240}_{-412}	$3.834^{+0.357}_{-0.153}$	$0.070^{+0.250}_{-0.600}$	$3.115^{+0.937}_{-1.406}$	$2.412^{+0.326}_{-0.816}$	$0.112^{+0.345}_{-0.050}$
	+3%/-5%	+9%/-4%	+357%/-857%	+30%/-45%	+14%/-34%	+307%/-44%
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 010263800-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-4 ± 2	$1.13^{+0.37}_{-0.31}$	3129^{+265}_{-338}	6094^{+1291}_{-1102}	13^{+15}_{-7}
Alt.	-10 ± 4	$1.76^{+0.45}_{-0.47}$	3134^{+277}_{-357}	6373^{+927}_{-791}	14^{+13}_{-6}

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

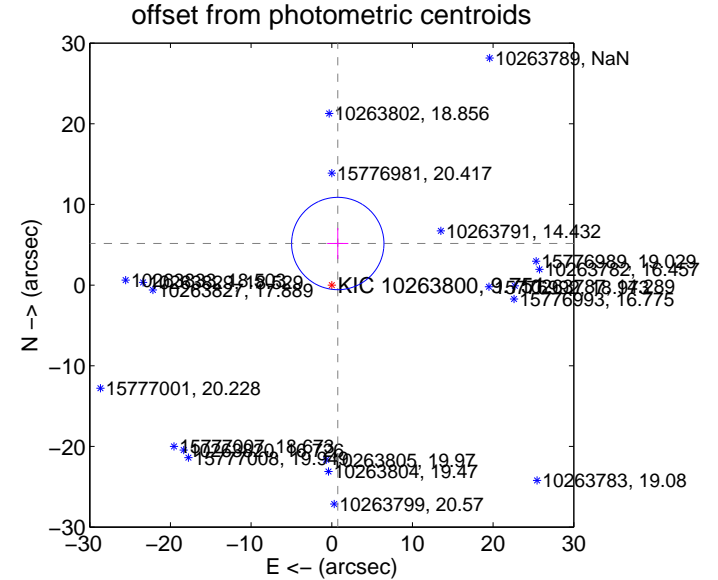
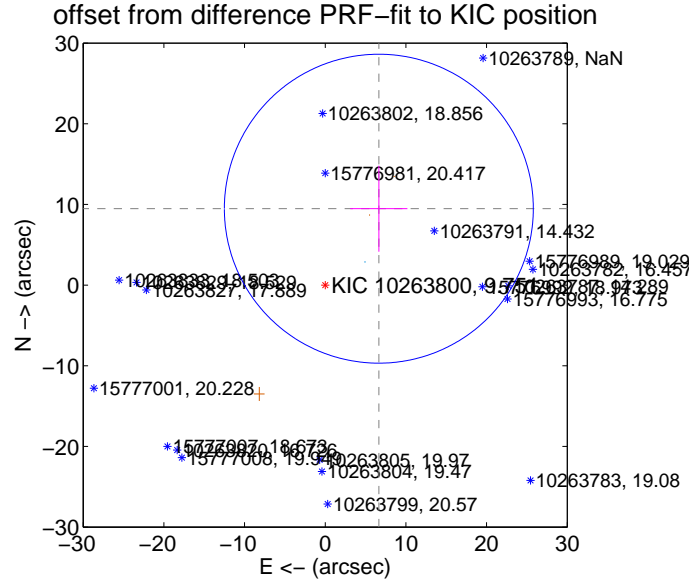
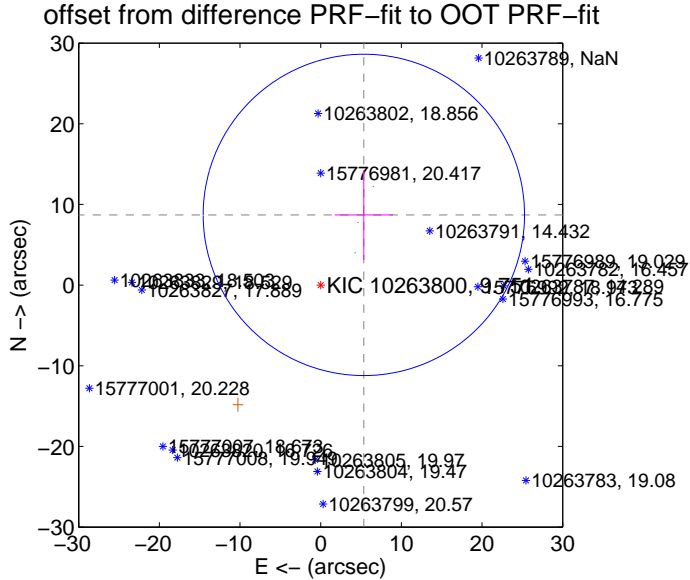
DV Centroid Data

Supplemental centroid analysis for 010263800-05. **Kepler magnitude: 9.75.** Transit SNR 7.34

There are 1 quarters with good PRF difference image offsets

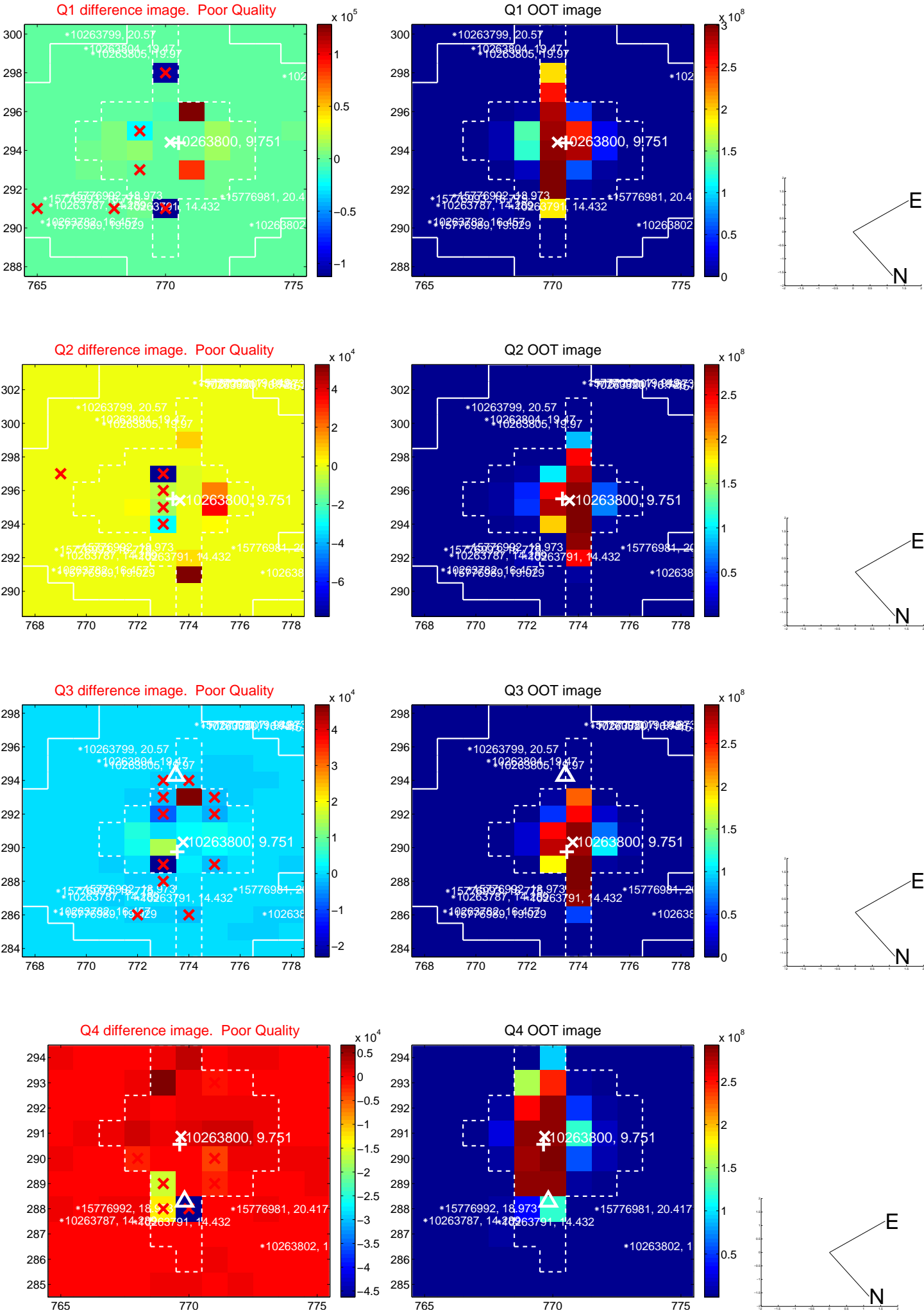
The OOT PRF centroid is offset from the target star catalog position by about 2.40 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	10.217 ± 6.639	1.54	-5.352 ± 3.608	8.703 ± 5.585
PRF-fit source offset from KIC position	11.569 ± 6.383	1.81	-6.645 ± 3.542	9.470 ± 5.333
photometric centroid source offset	5.21 ± 1.91	2.73	-0.74 ± 1.31	5.15 ± 1.92

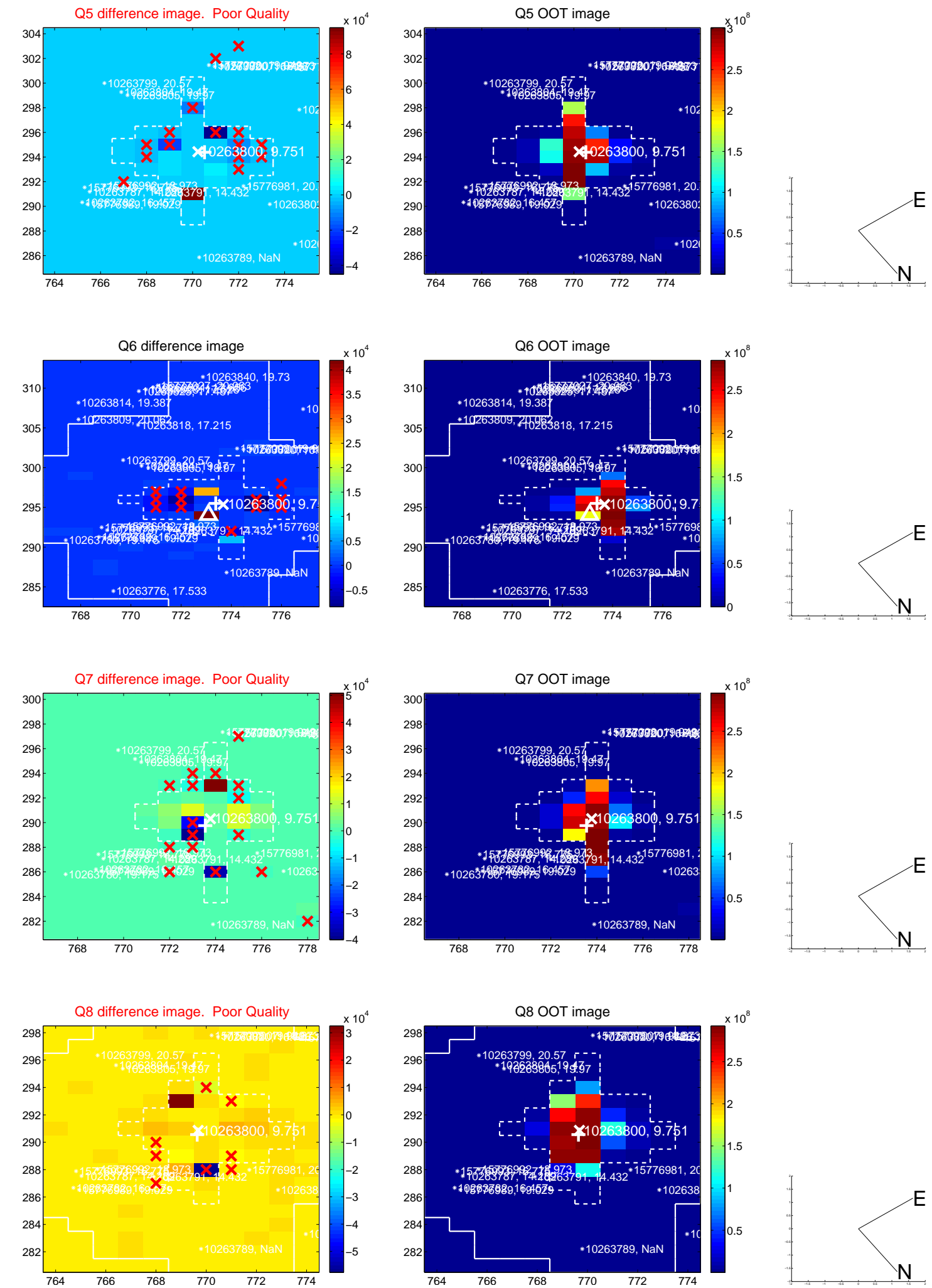


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

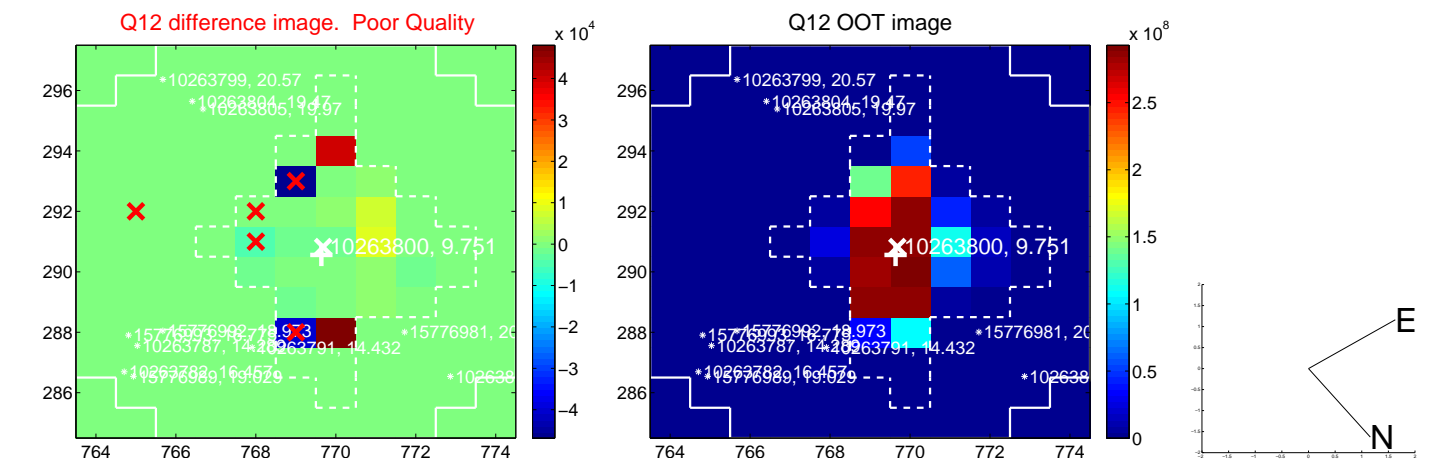
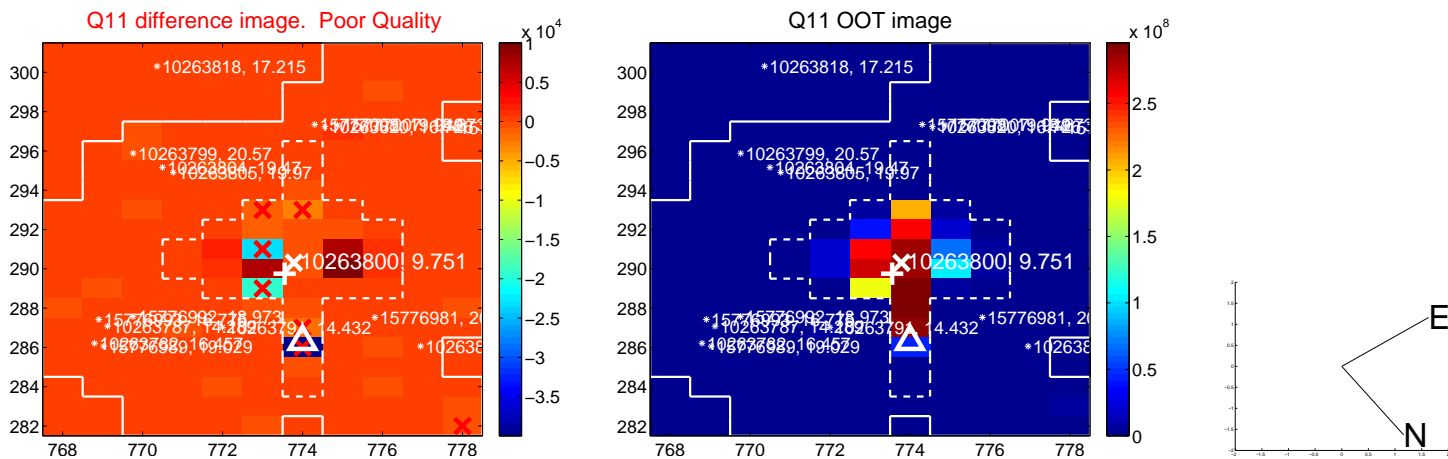
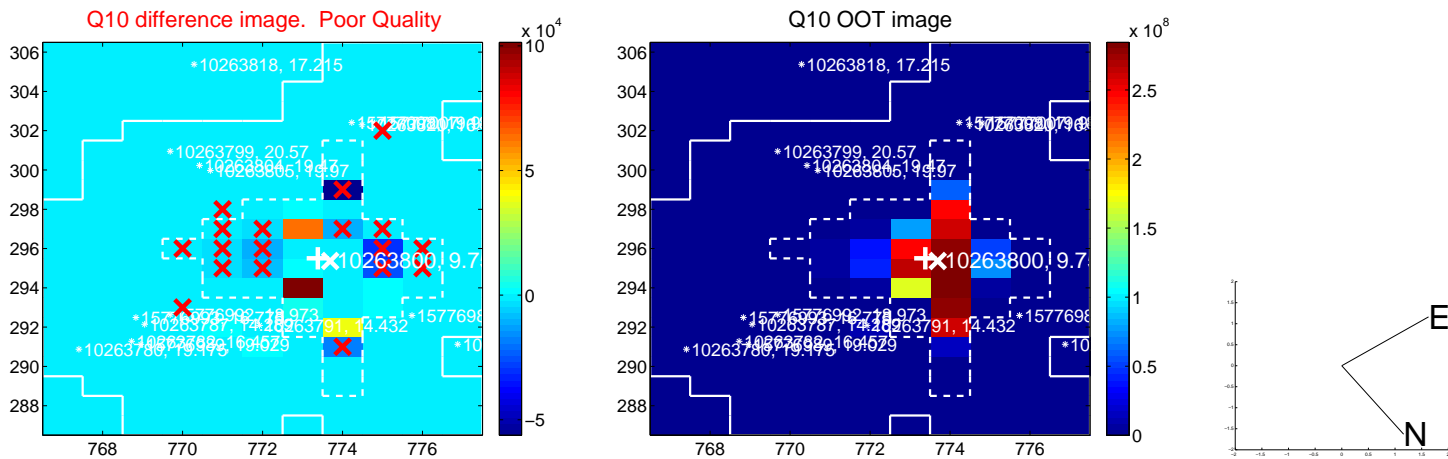
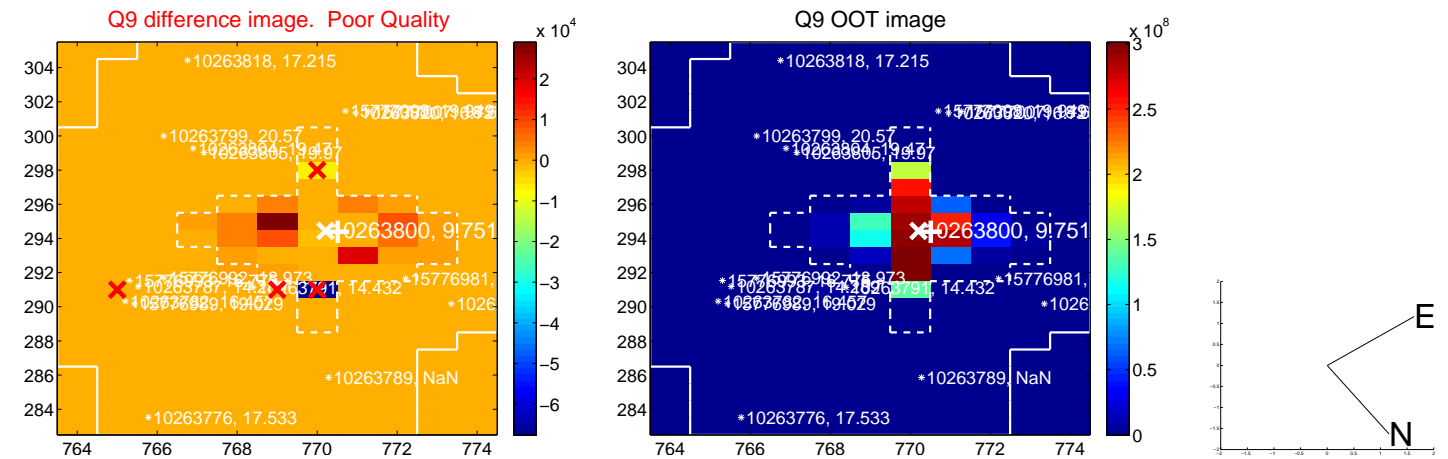
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



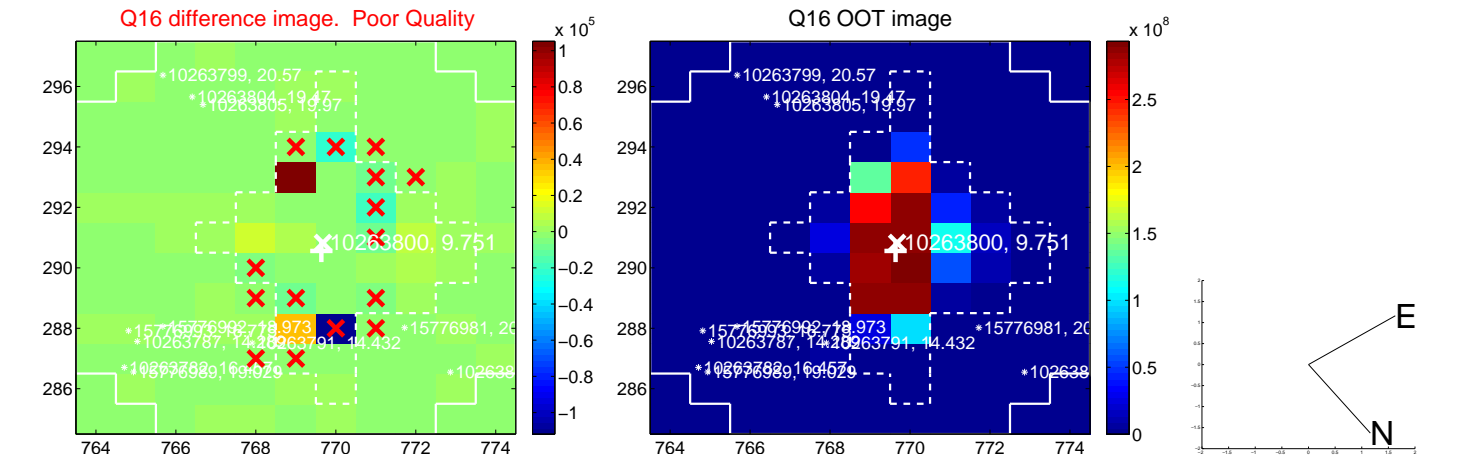
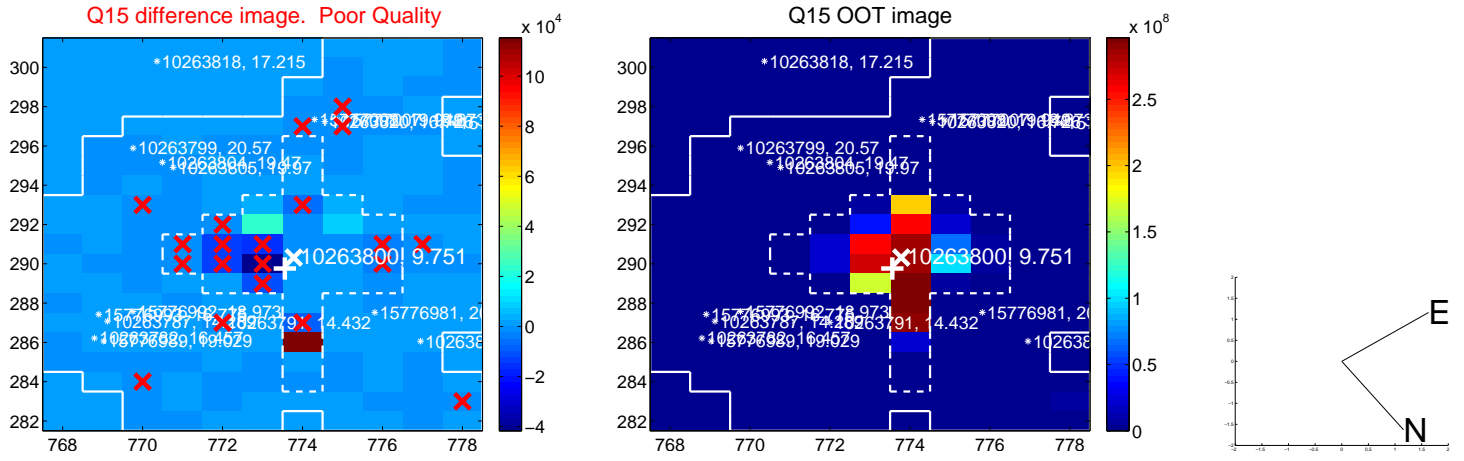
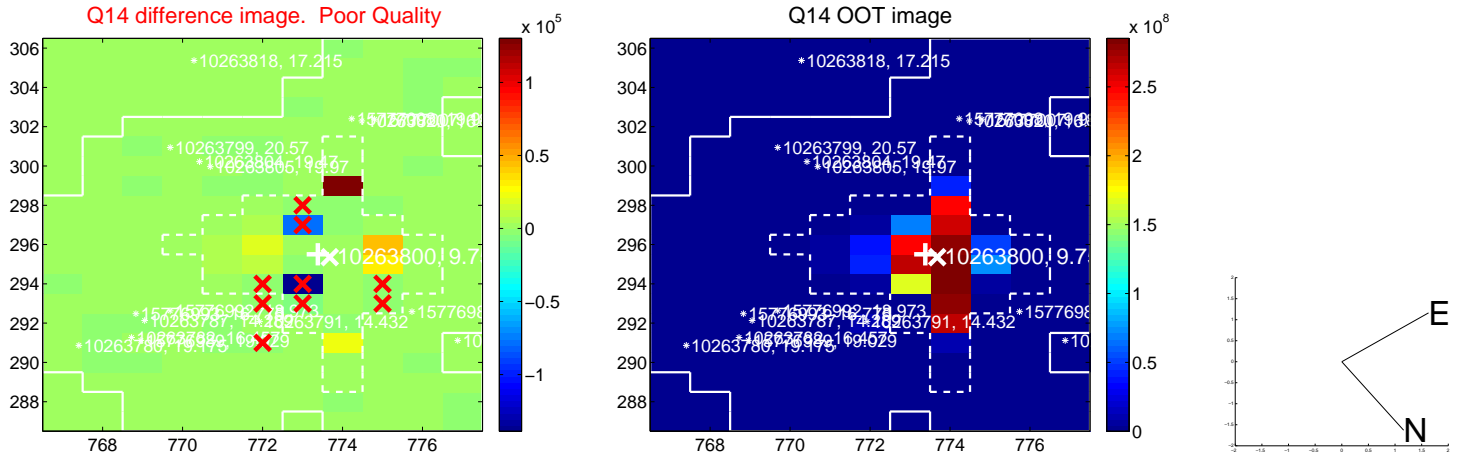
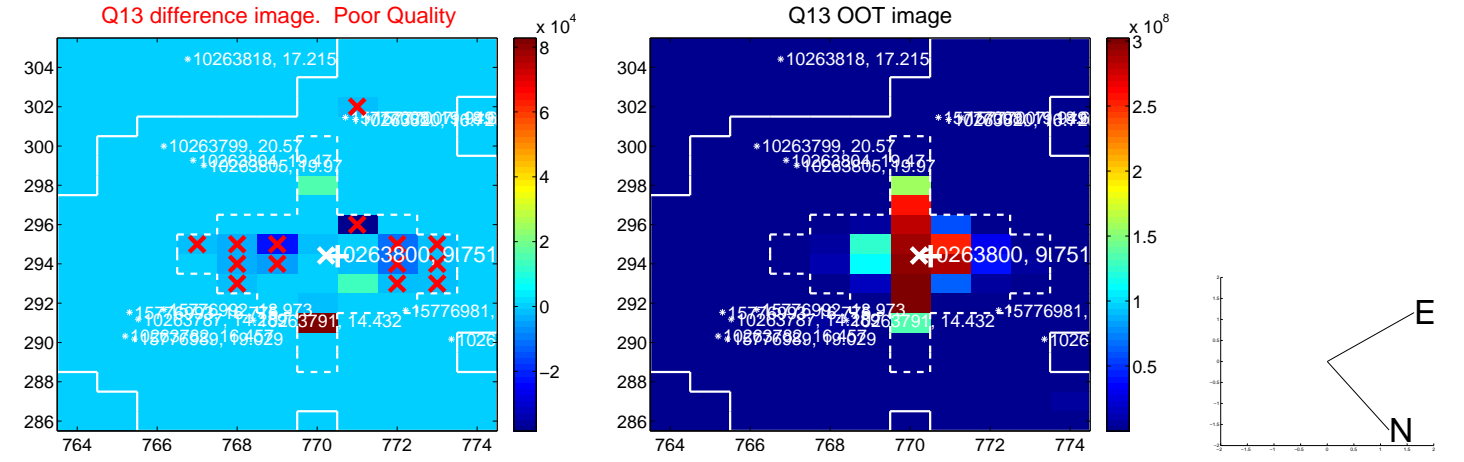
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



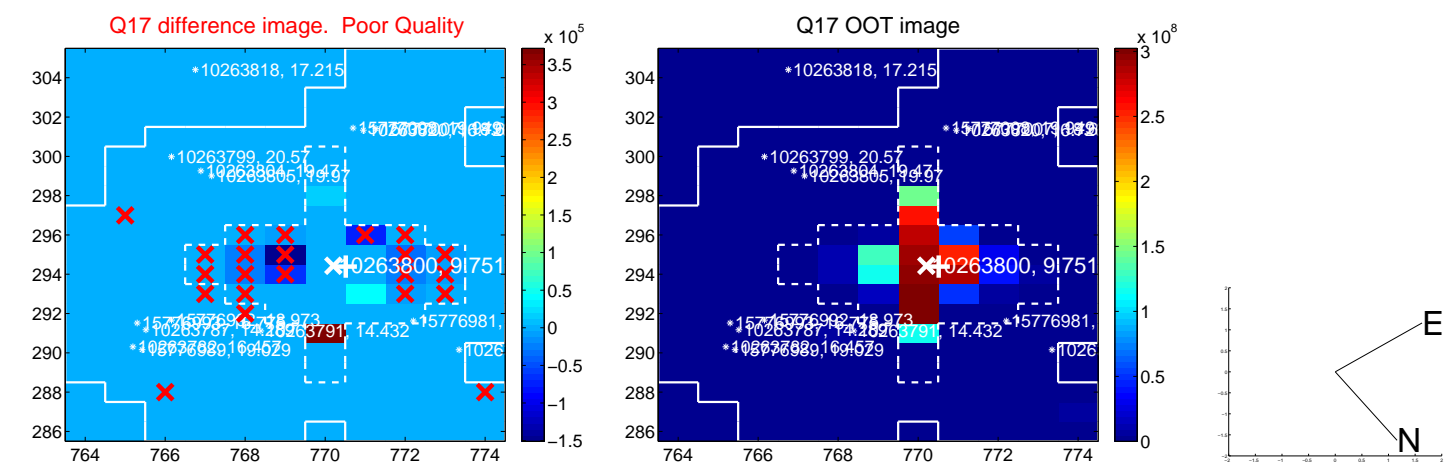
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



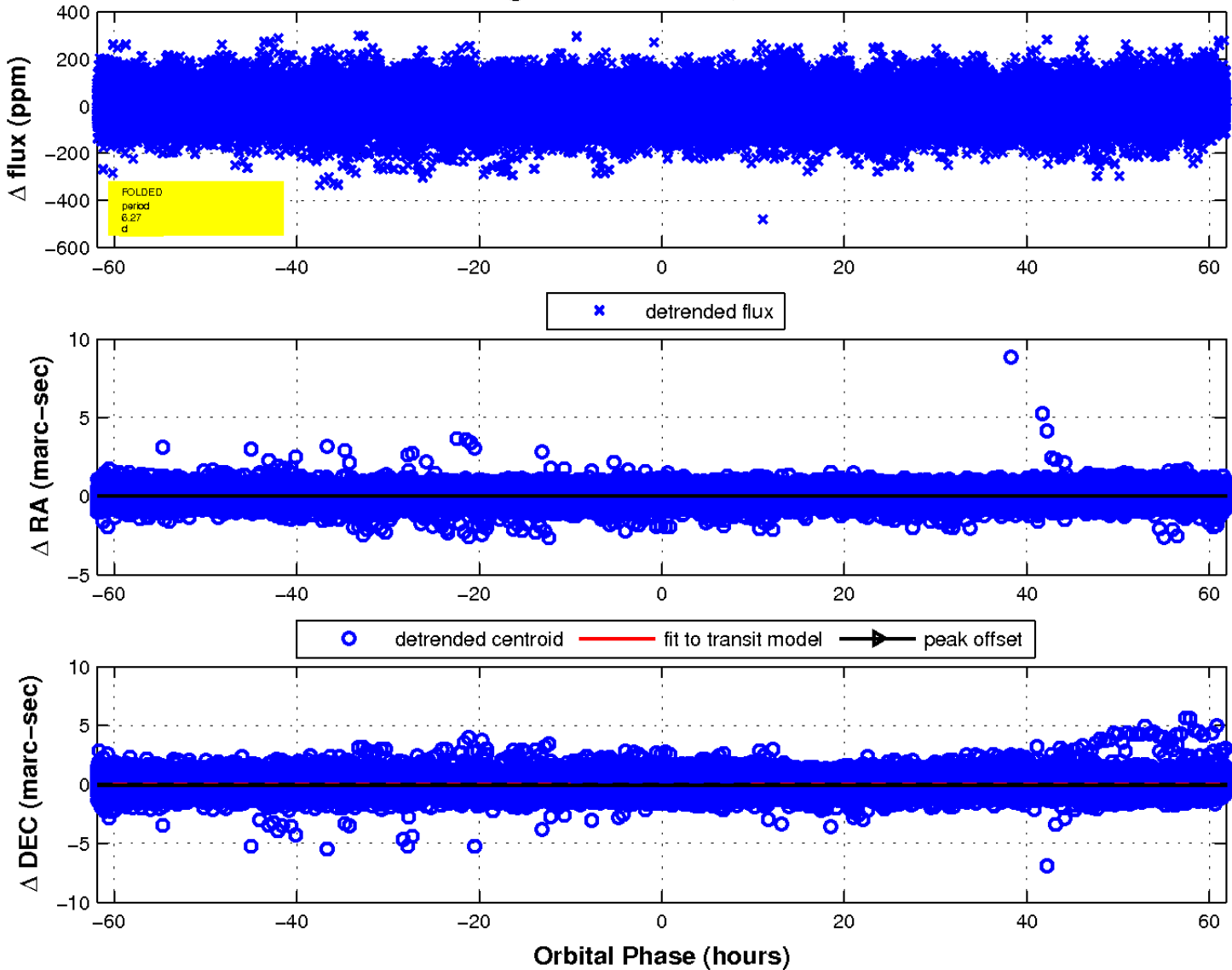
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 5 of 5



UKIRT Image

Declination

