

KIC 008874266

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})
008874266-01	OBS	No	376.939048	258.628353	749.6	19.071	9.9	9.2	0.90	5616	4.88	0.74
008874266-02	OBS	No	370.913629	276.698829	811.7	20.730	10.4	11.8	0.90	5616	2.68	0.76
008874266-03	OBS	No	370.897935	267.632055	669.2	15.254	8.8	9.3	0.90	5616	2.98	0.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008874266-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—CENT_FEW_DIFFS
008874266-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS—HALO_GHOST
008874266-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— SAME_NTL_PERIOD—CENT_FEW_DIFFS

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

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

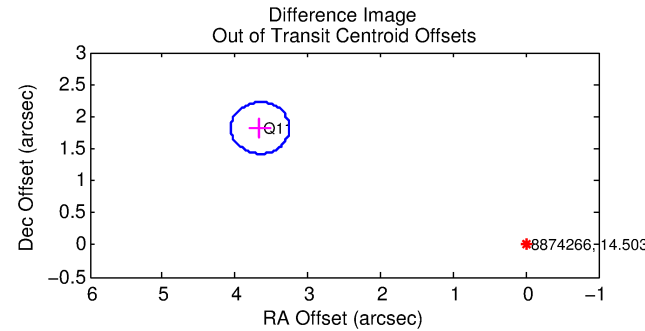
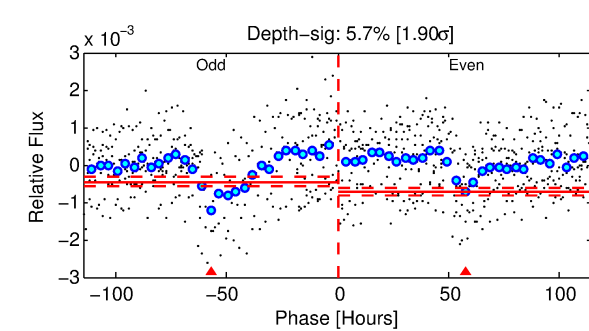
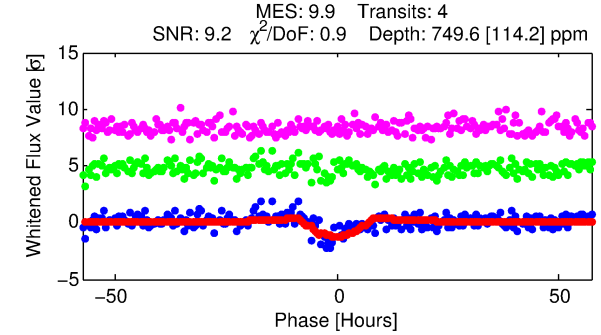
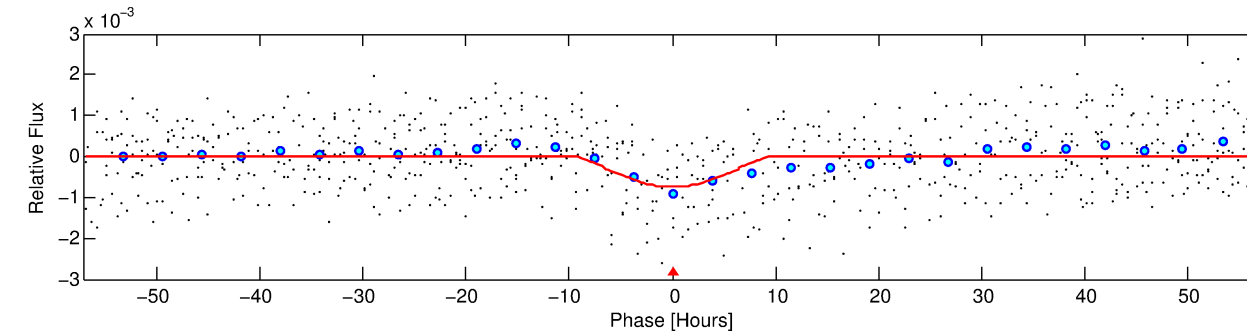
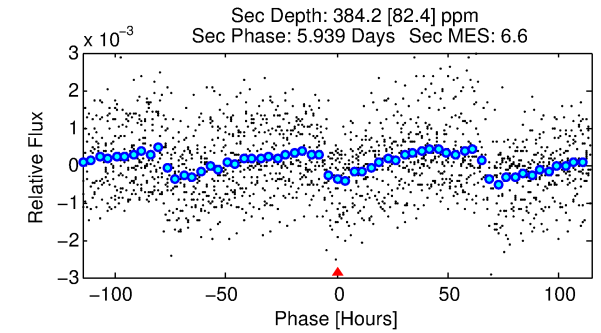
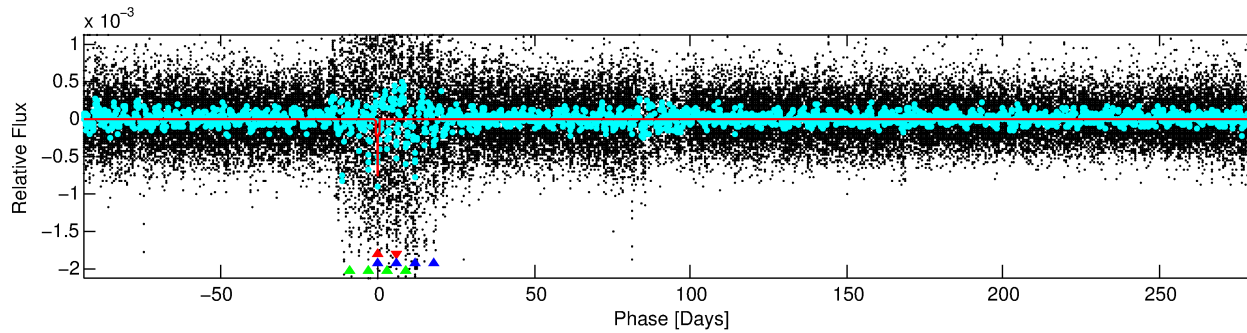
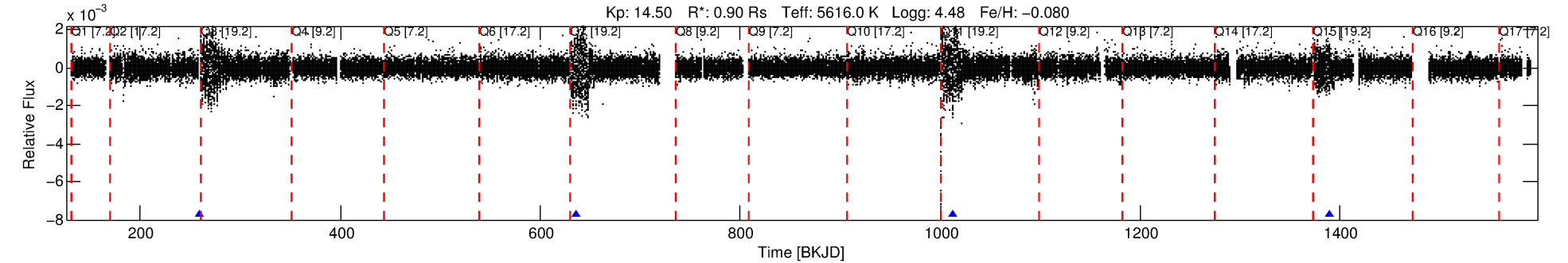
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008874266-01

No Significant Match Found

DV One-Page Summary

KIC: 8874266 Candidate: 1 of 3 Period: 376.939 d



DV Fit Results:

Period = 376.93905 [0.01935] d
Epoch = 258.6284 [0.0377] BKJD
Rp/R* = 0.0495 [0.1307]
a/R* = 48.26 [30.68]
b = 1.00 [0.18]
Seff = 0.74 [0.25]
Teq = 237 [20] K
Rp = 4.88 [12.93] Re
a = 0.9871 [0.2133] AU
Ag = 8658.43 [45817.33] [0.19σ]
Teffp = 3532 [4666] K [0.71σ]

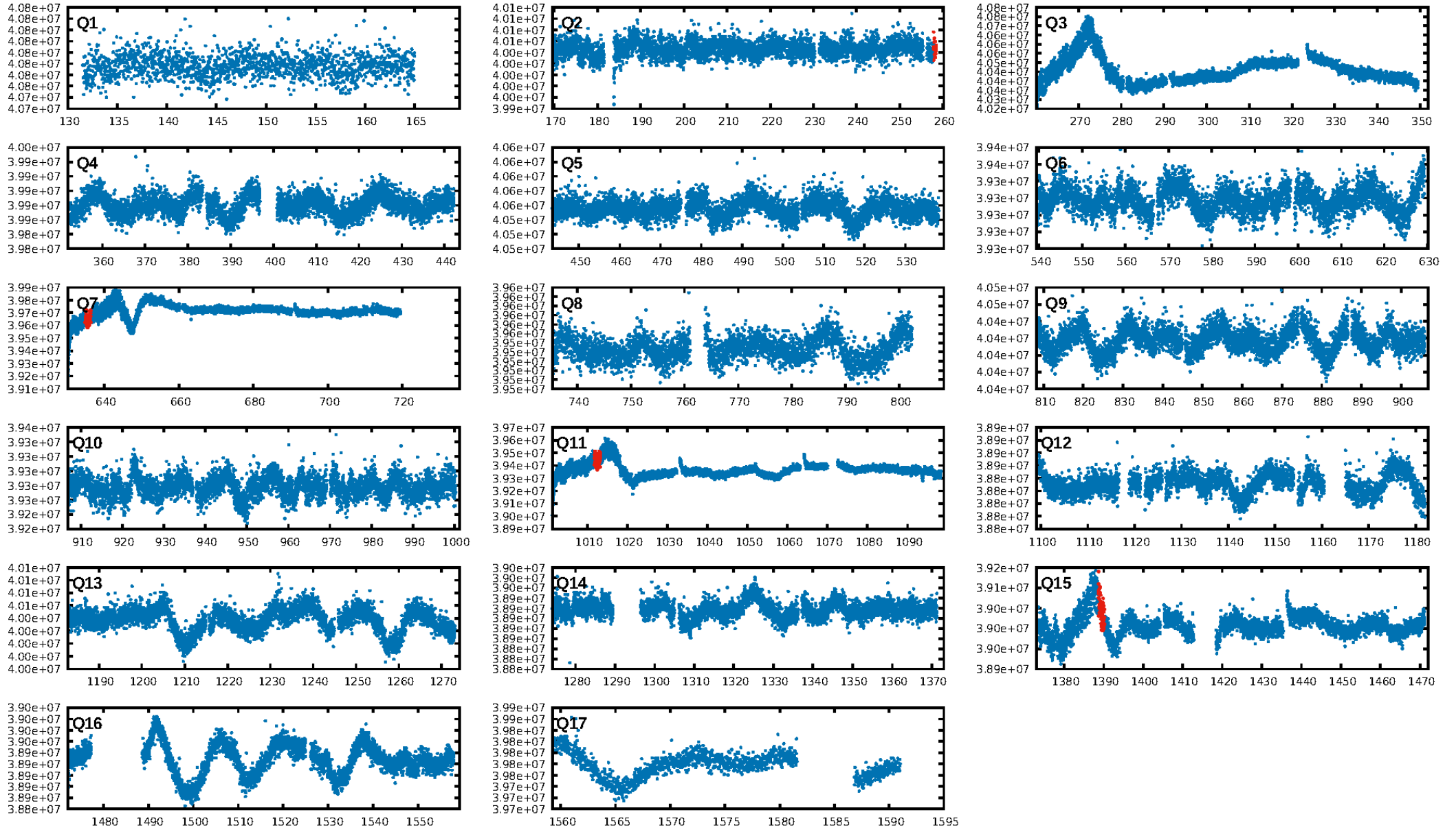
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [5.13σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 2.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.24e-10
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 2.901
Centroid-sig: 72.4%
Centroid-so: 1.383 arcsec [0.62σ]
OotOffset-rm: 4.087 arcsec [30.49σ]
KicOffset-rm: 4.062 arcsec [30.24σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 0.67 [2/3]

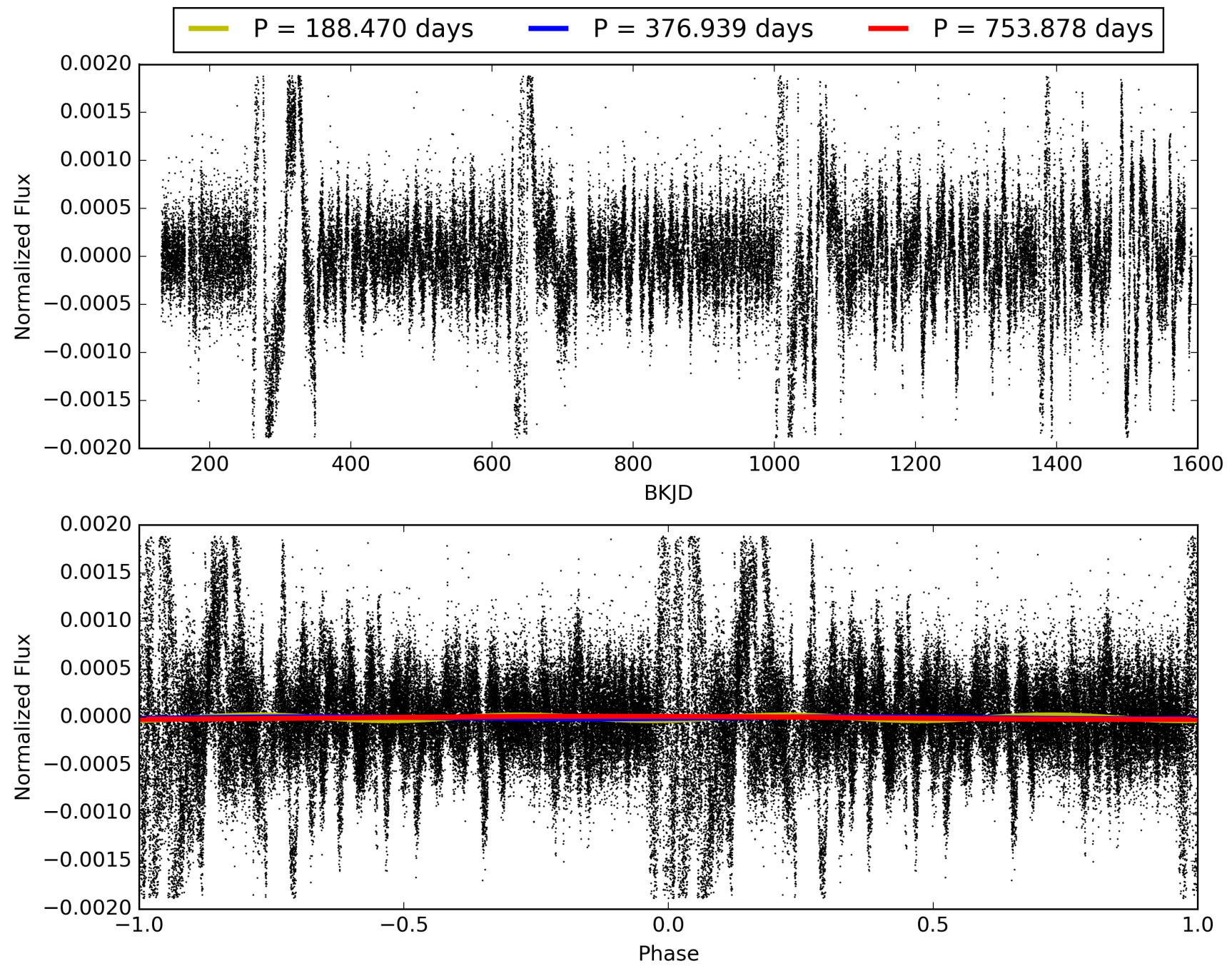
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:41:05 Z

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

TCE 008874266-01, PDC Light Curves

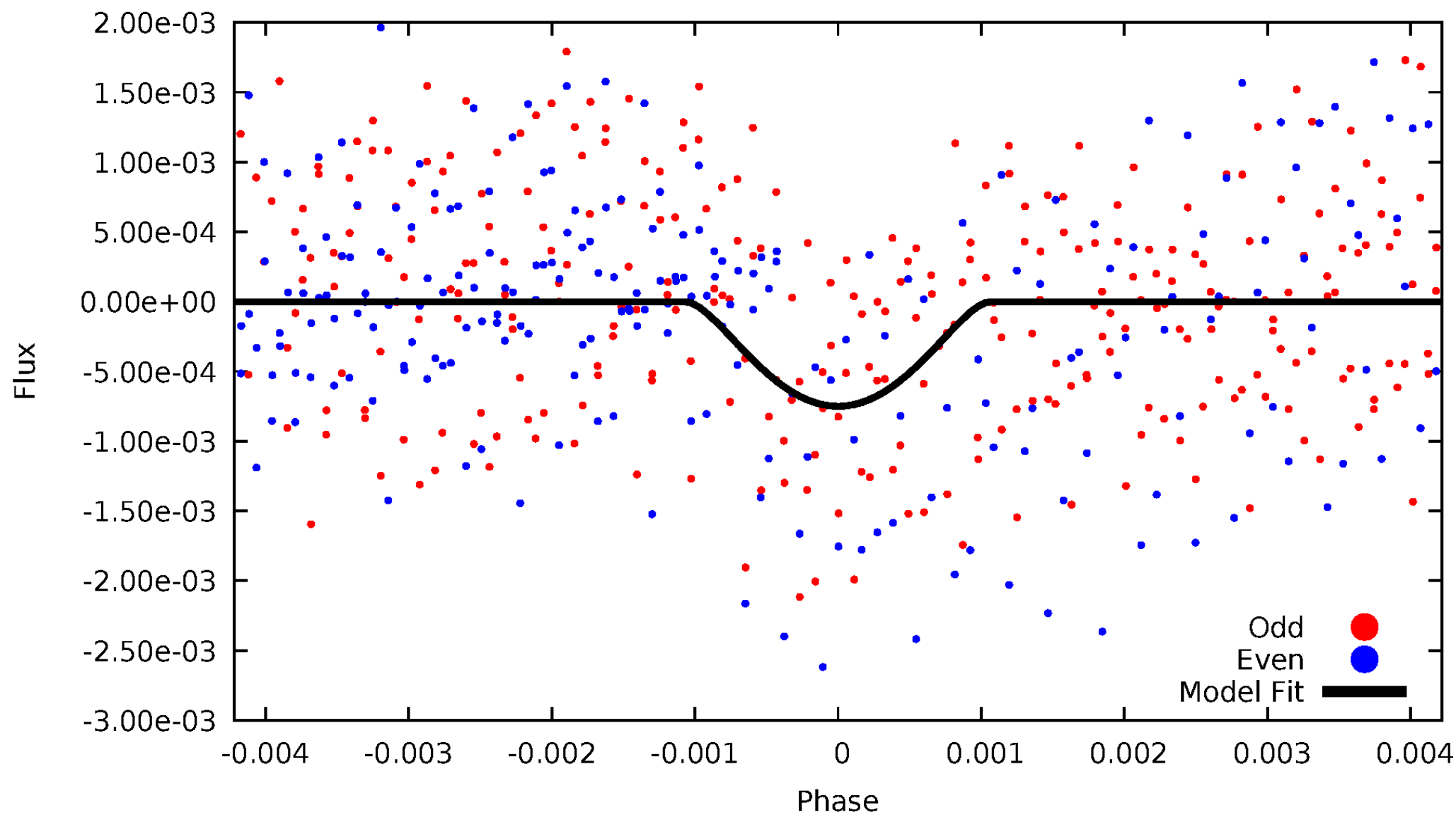


TCE 008874266-01



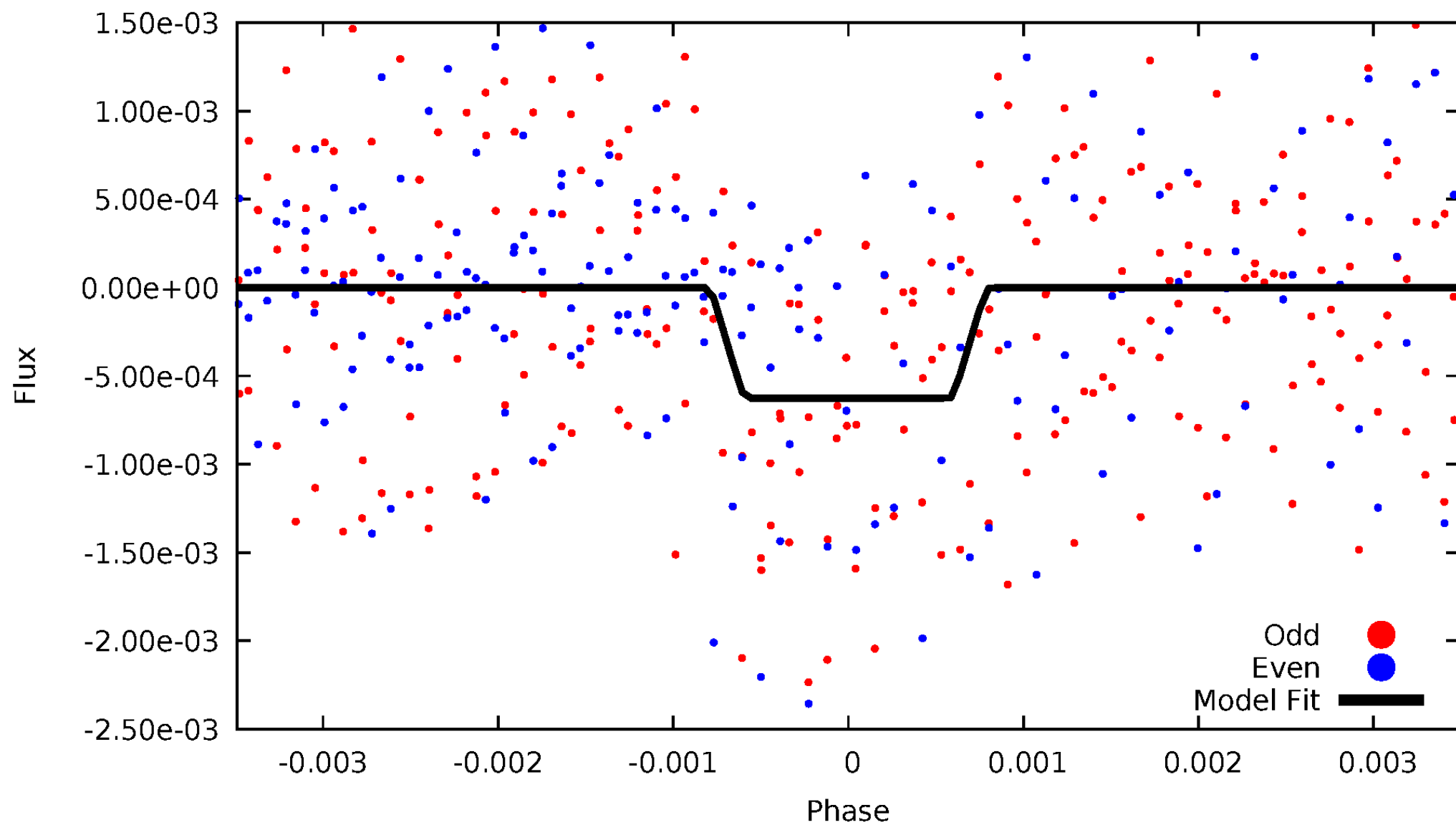
DV Odd/Even

TCE 008874266-01



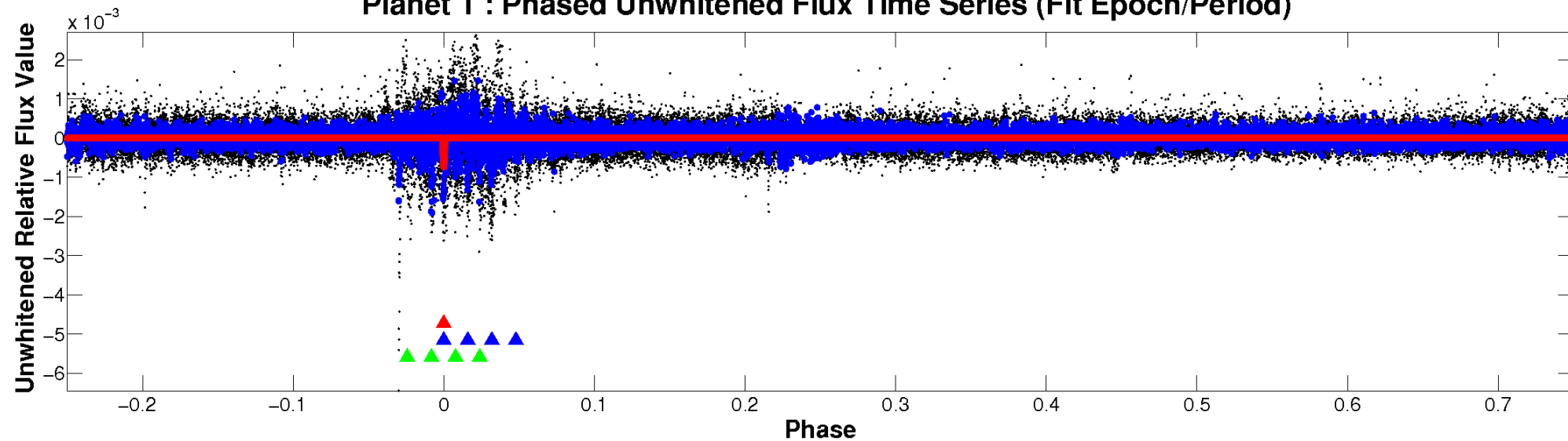
ALT Odd/Even

TCE 008874266-01

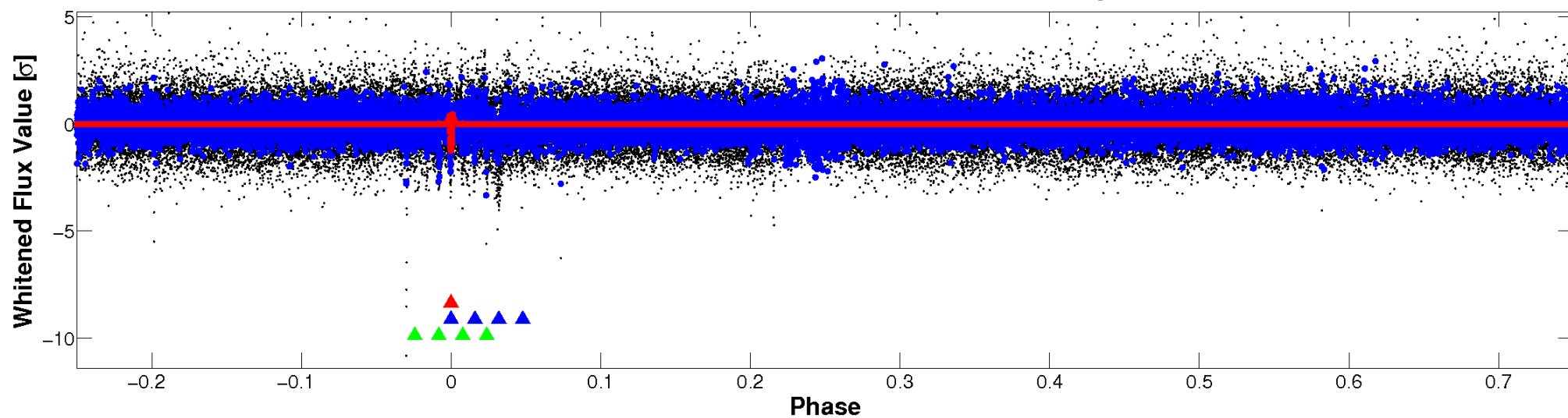


Non-Whitened Vs. Whitened Light Curve

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

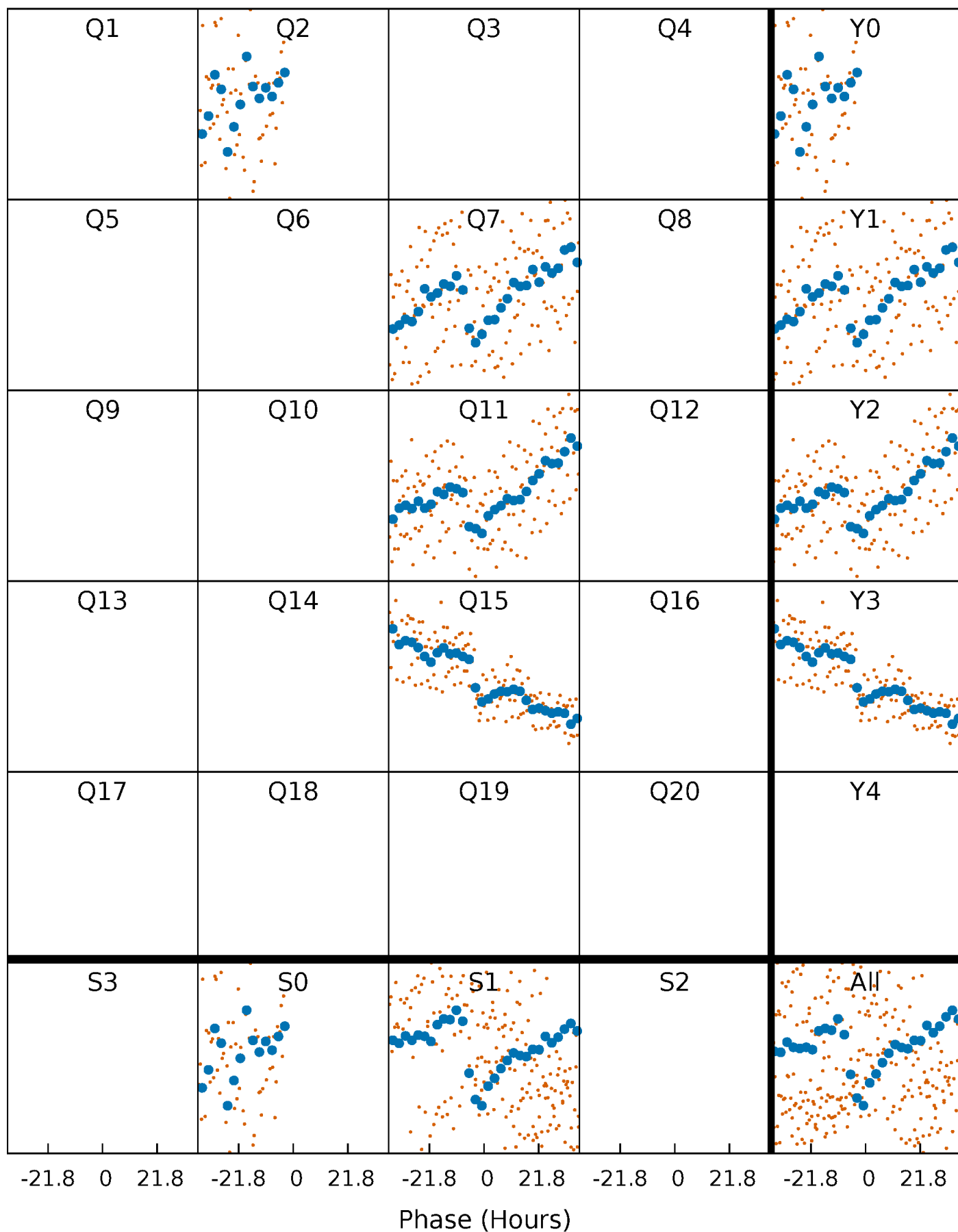


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



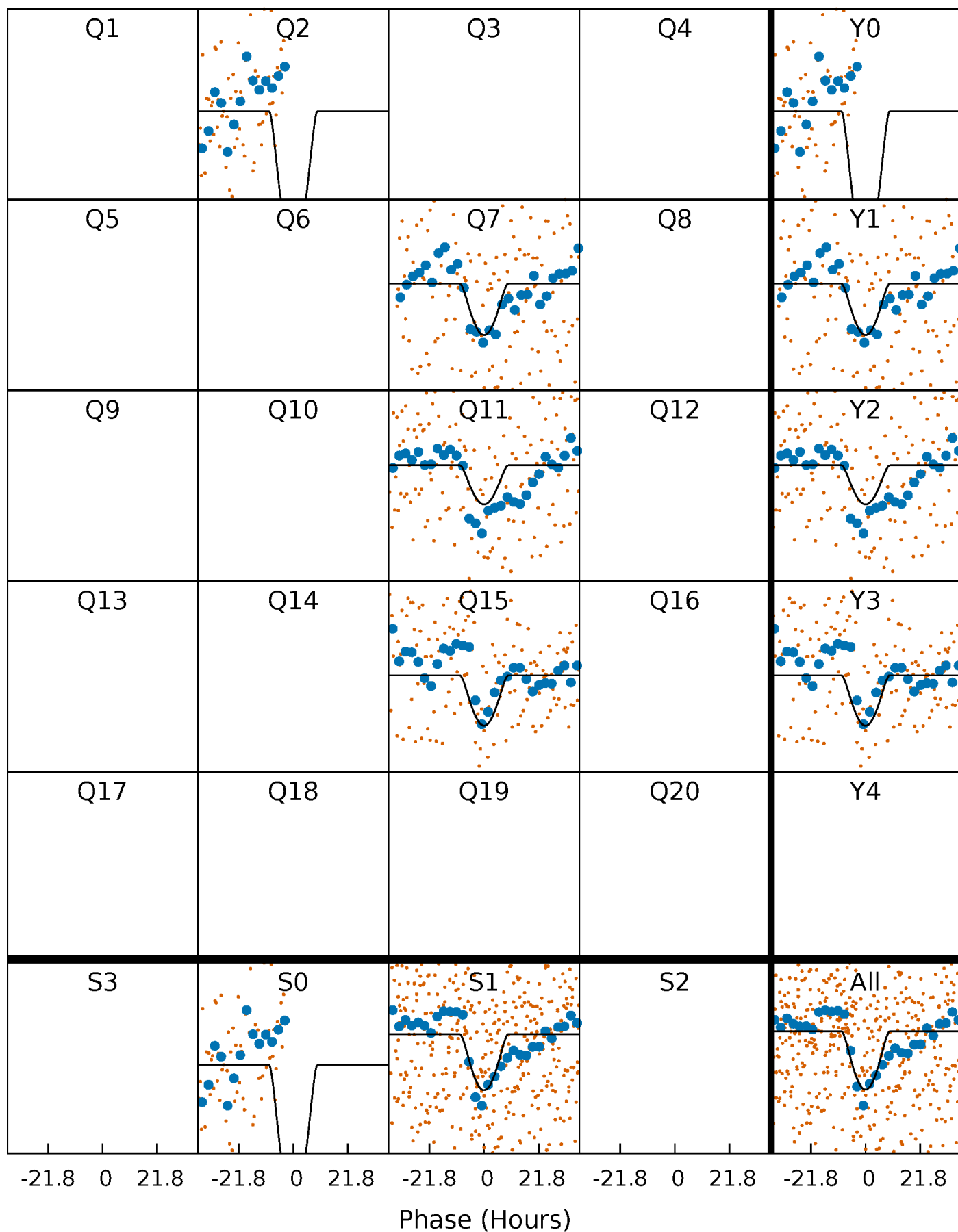
PDC Quarter-Phased Transit Curves

TCE 008874266-01 P=376.939048 Days $T_0=258.628353$ (BKJD)



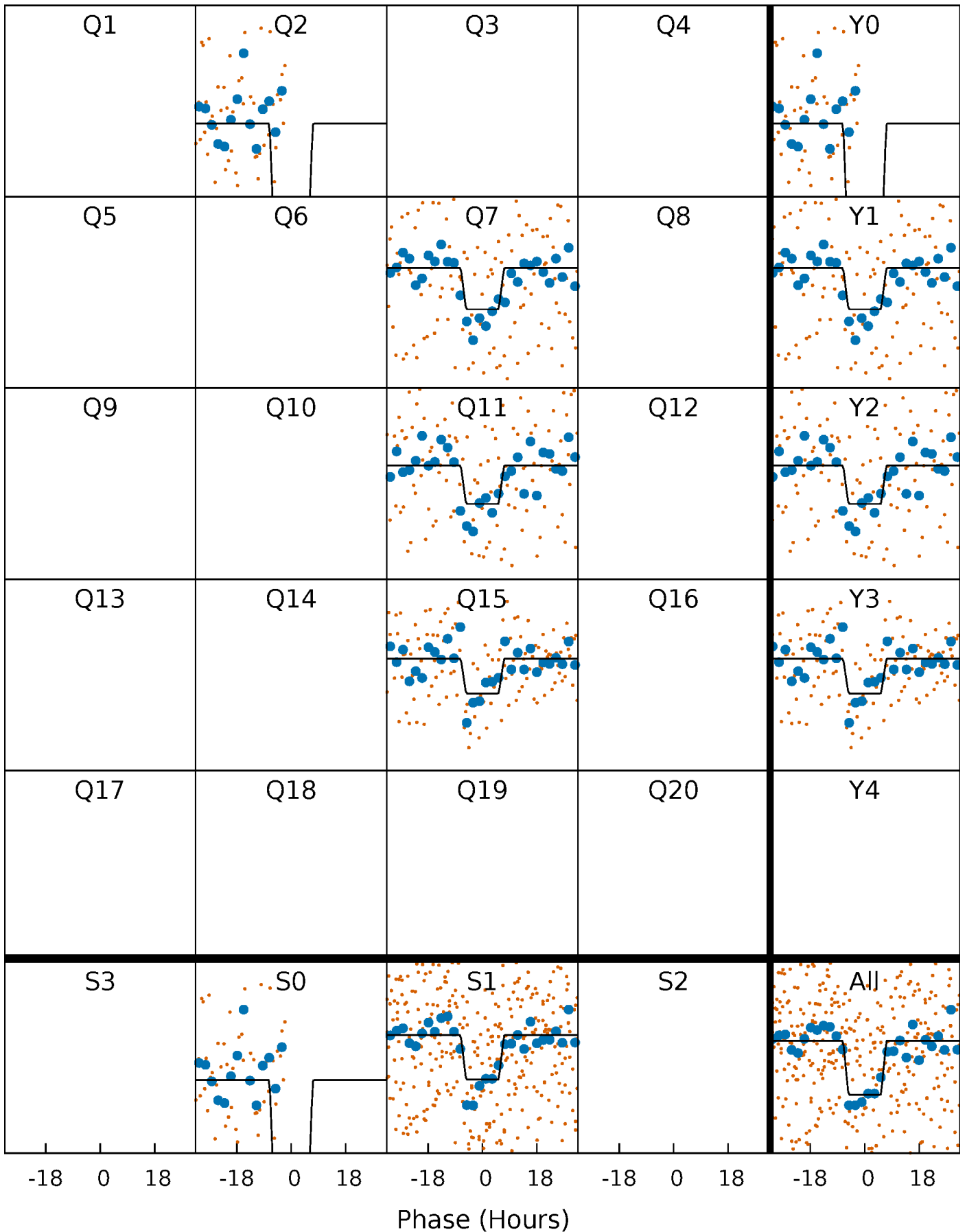
DV Quarter-Phased Transit Curves

TCE 008874266-01 P=376.939048 Days $T_0=258.628353$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

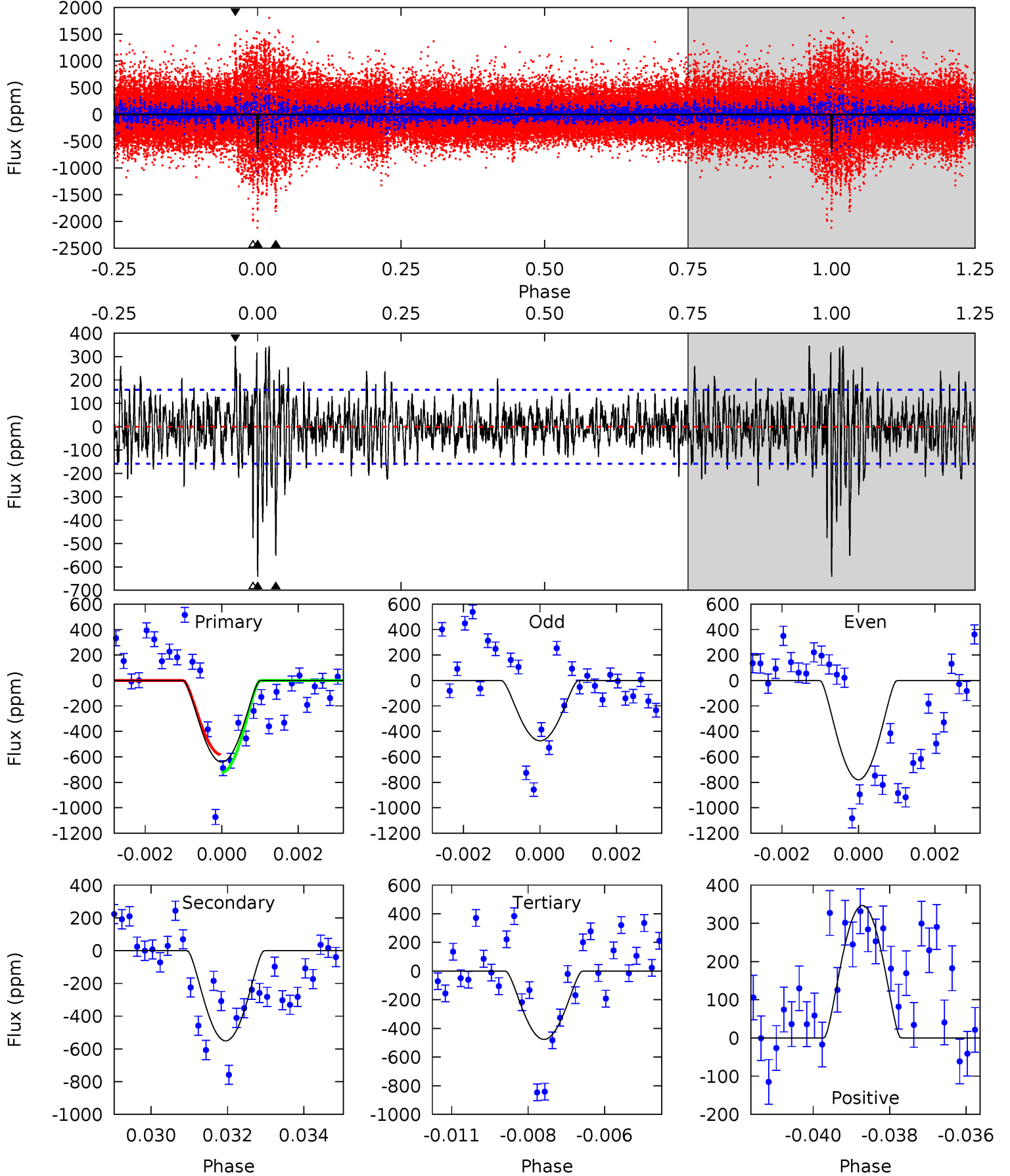
TCE 008874266-01 P=376.999182 Days $T_0=258.553930$ (BKJD)



DV Model-Shift Uniqueness Test

008874266-01, P = 376.939048 Days, E = 258.628353 Days

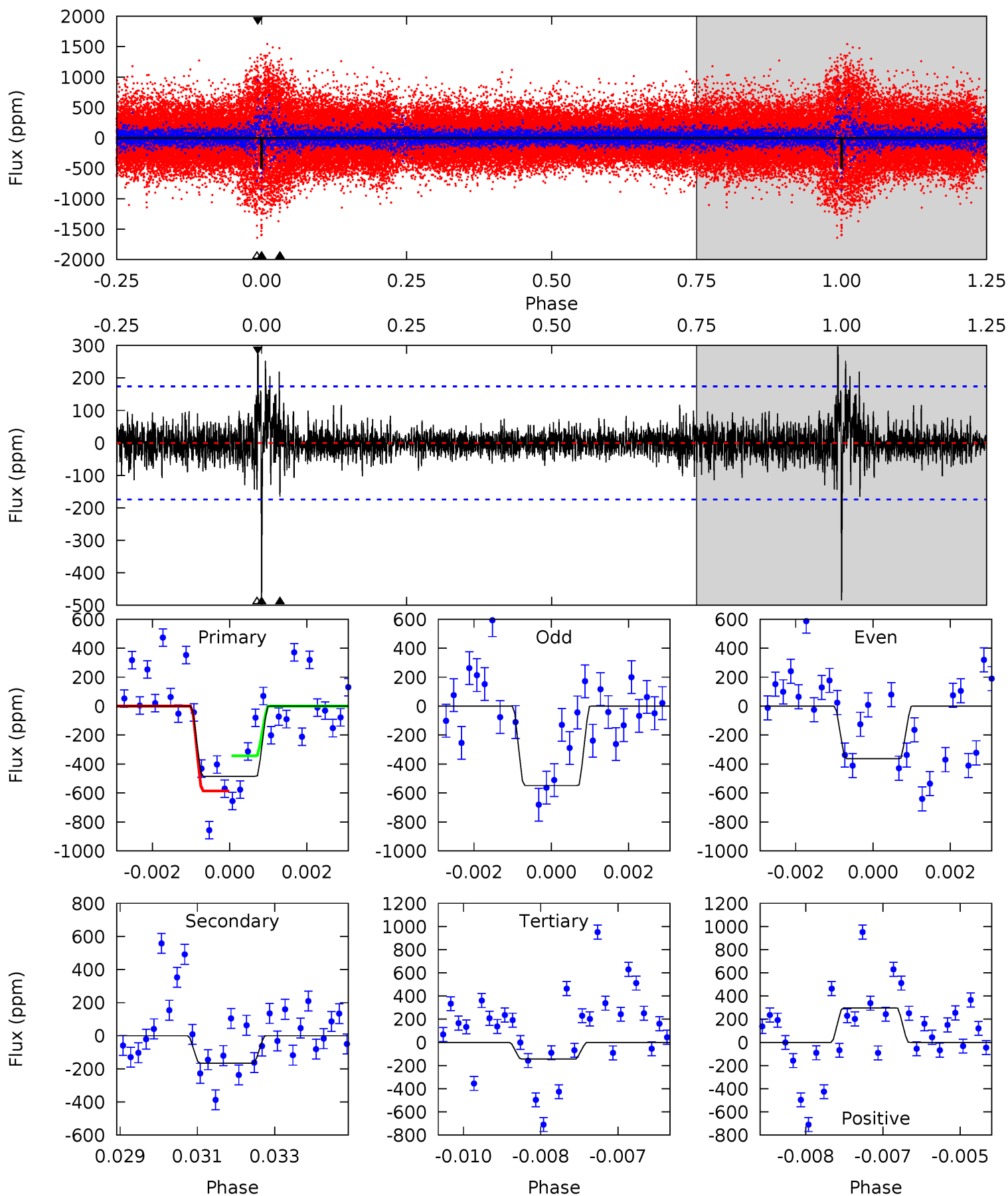
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.5	18.5	16.0	11.6	5.32	3.07	2.77	5.52	9.88	2.50	6.86	4.61	0.85	0.35	2.34



Alt Model-Shift Uniqueness Test

008874266-01, P = 376.999182 Days, E = 258.553930 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.9	5.10	4.45	9.17	5.36	3.15	1.03	10.5	5.78	0.65	-4.06	2.69	0.78	0.38	3.66



Stellar Parameters For KIC 008874266

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5616^{+152}_{-169}	$4.483^{+0.075}_{-0.175}$	$-0.080^{+0.300}_{-0.300}$	$0.902^{+0.229}_{-0.098}$	$0.901^{+0.104}_{-0.085}$	$1.732^{+0.626}_{-0.791}$
	+3%/-3%	+2%/-4%	+375%/-375%	+25%/-11%	+12%/-9%	+36%/-46%
Source	PHO1	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 008874266-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-551 ± 30	$11.05^{+10.02}_{-7.25}$	333^{+21}_{-16}	3200^{+1422}_{-548}	2410^{+19289}_{-1767}
Alt.	-166 ± 32	$9.18^{+10.96}_{-6.21}$	334^{+23}_{-16}	2819^{+1126}_{-474}	969^{+8463}_{-755}

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

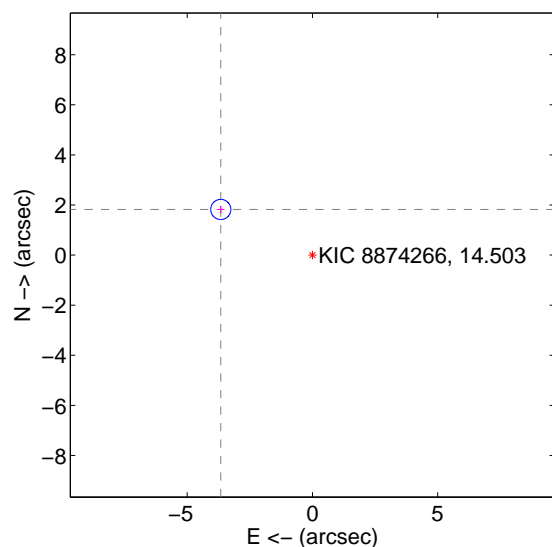
Supplemental centroid analysis for 008874266-01. Kepler magnitude: 14.50. Transit SNR 9.18

There are 0 quarters with good PRF difference image offsets

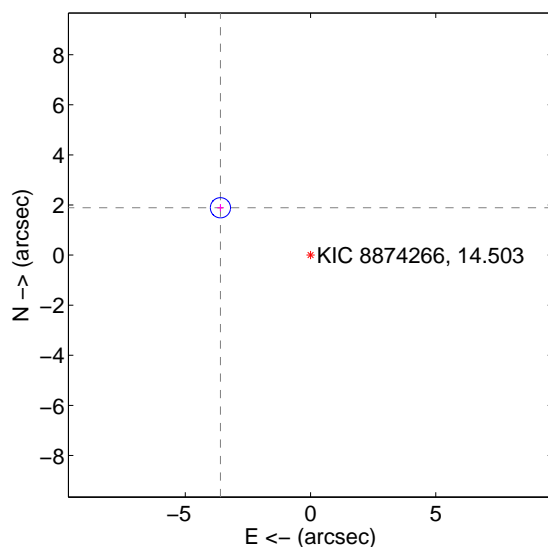
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.087 \pm 0.134	30.49	3.658 \pm 0.131	1.822 \pm 0.146
PRF-fit source offset from KIC position	4.062 \pm 0.134	30.24	3.596 \pm 0.131	1.889 \pm 0.146
photometric centroid source offset	1.38 \pm 2.22	0.62	1.37 \pm 2.22	0.15 \pm 2.55

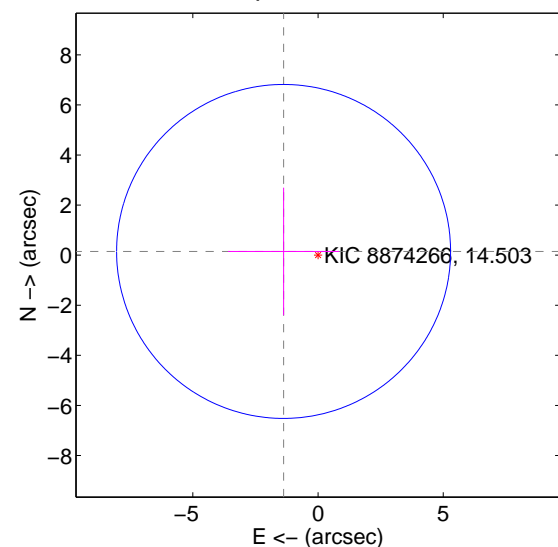
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

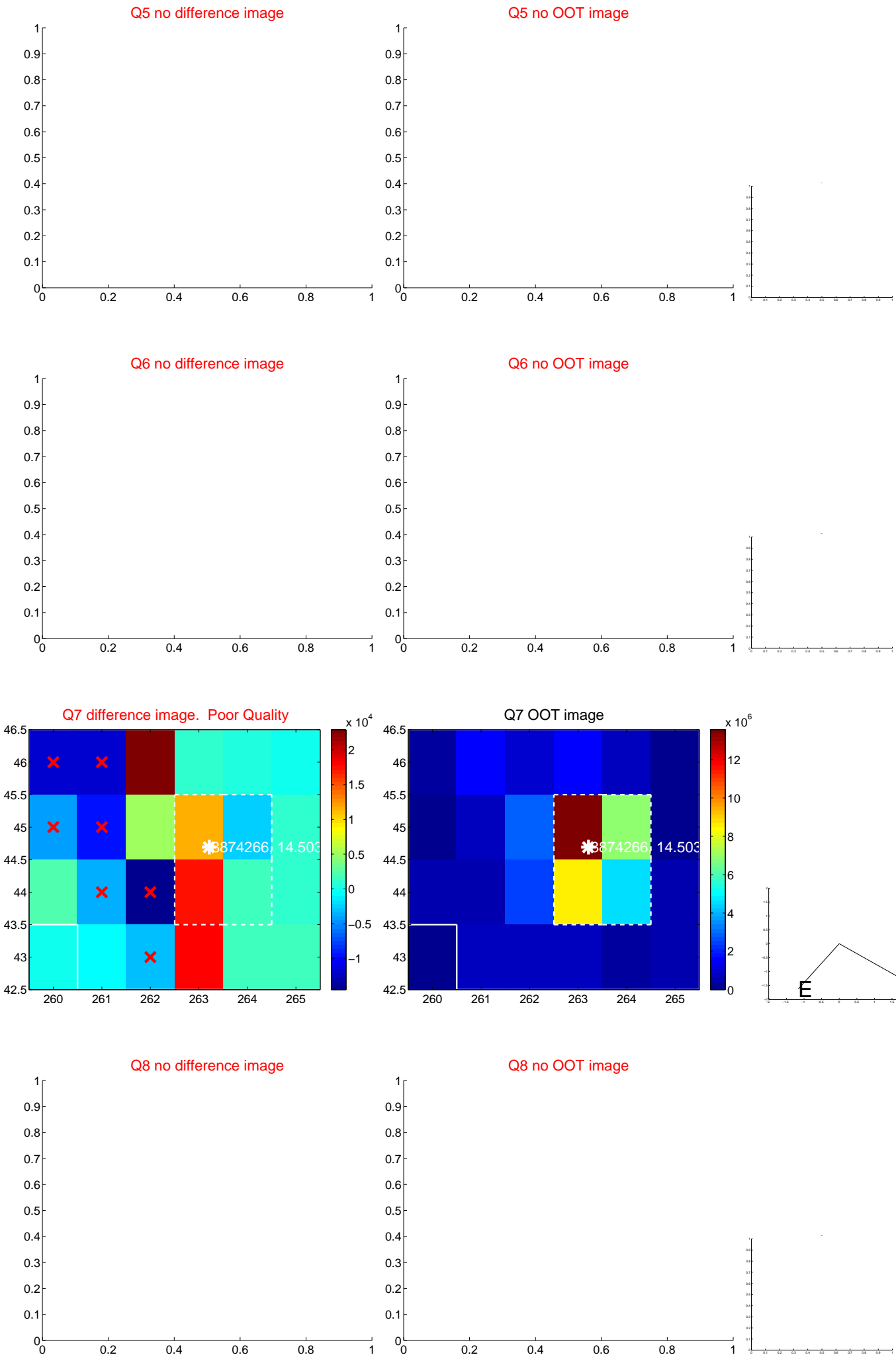


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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 ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.

Q9 no difference image



Q9 no OOT image



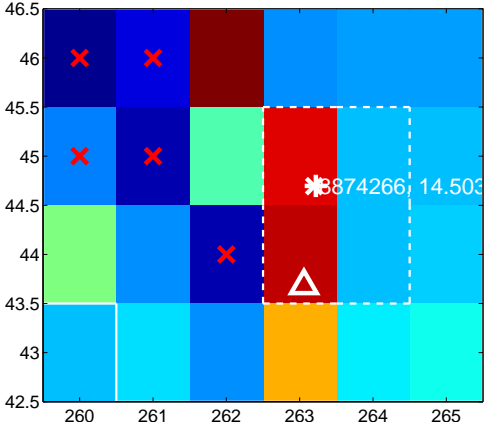
Q10 no difference image



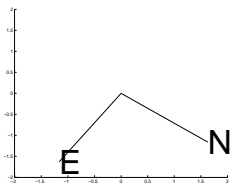
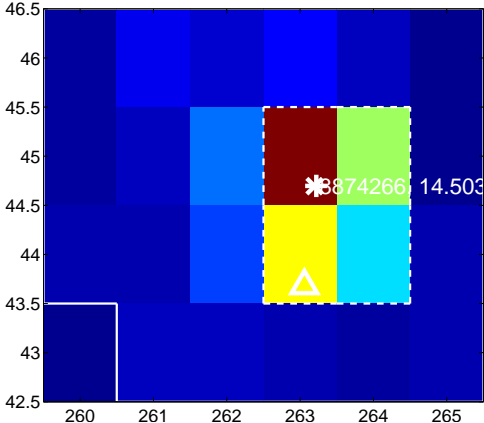
Q10 no OOT image



Q11 difference image. Poor Quality



Q11 OOT image



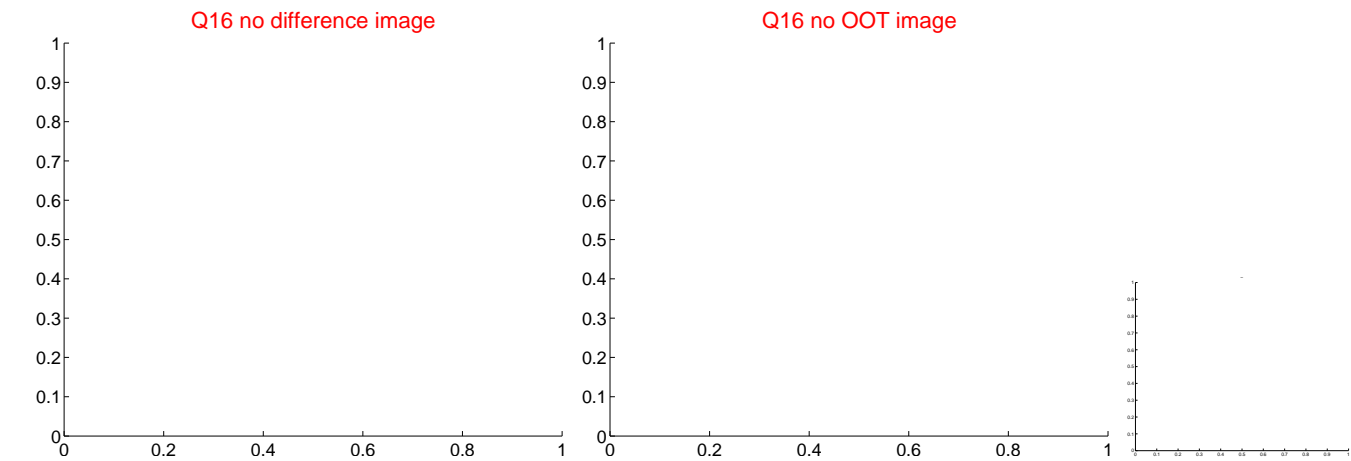
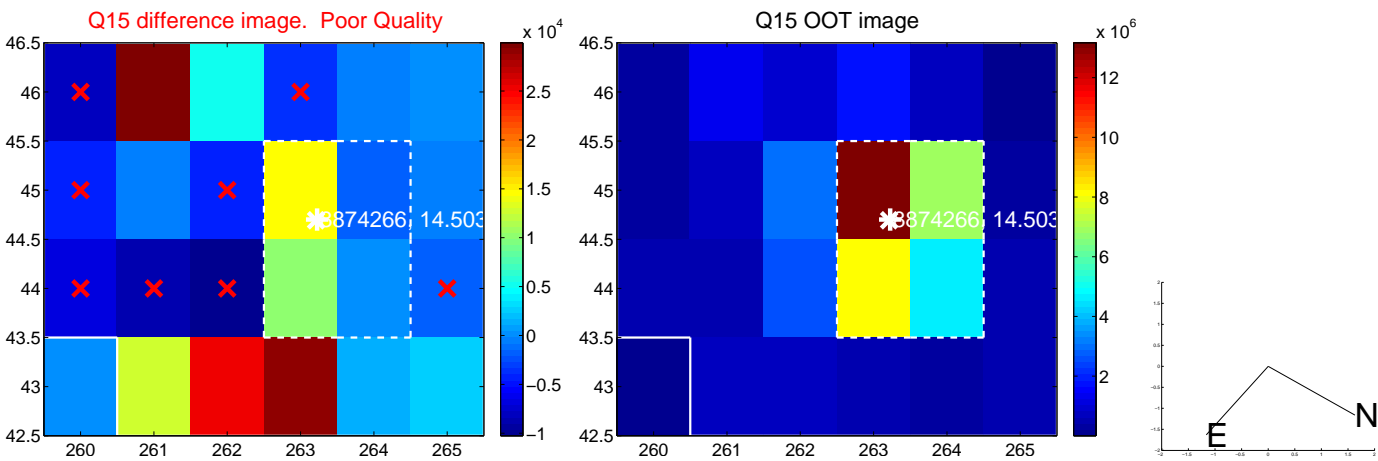
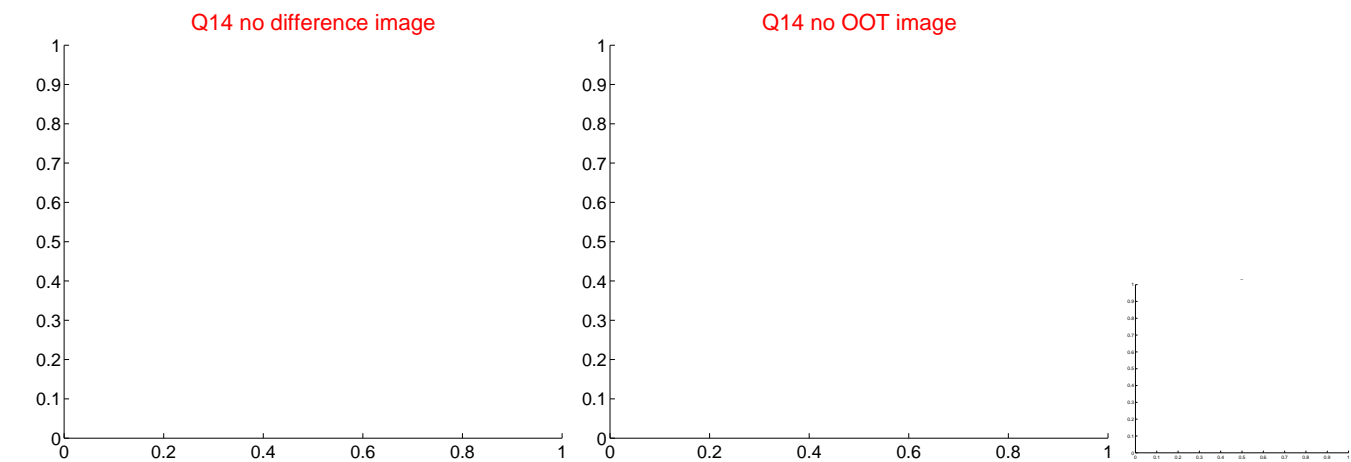
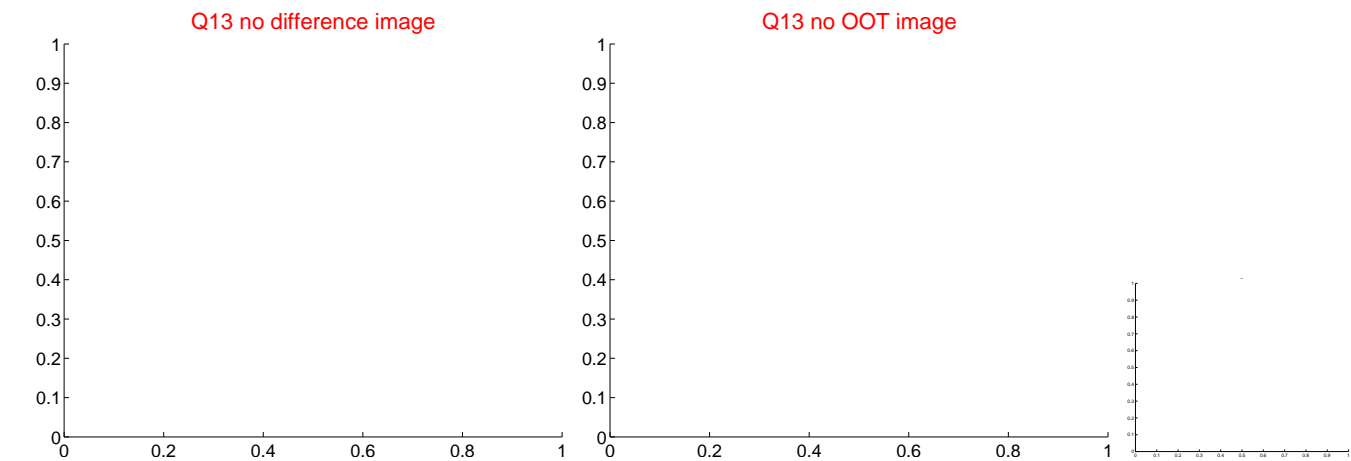
Q12 no difference image



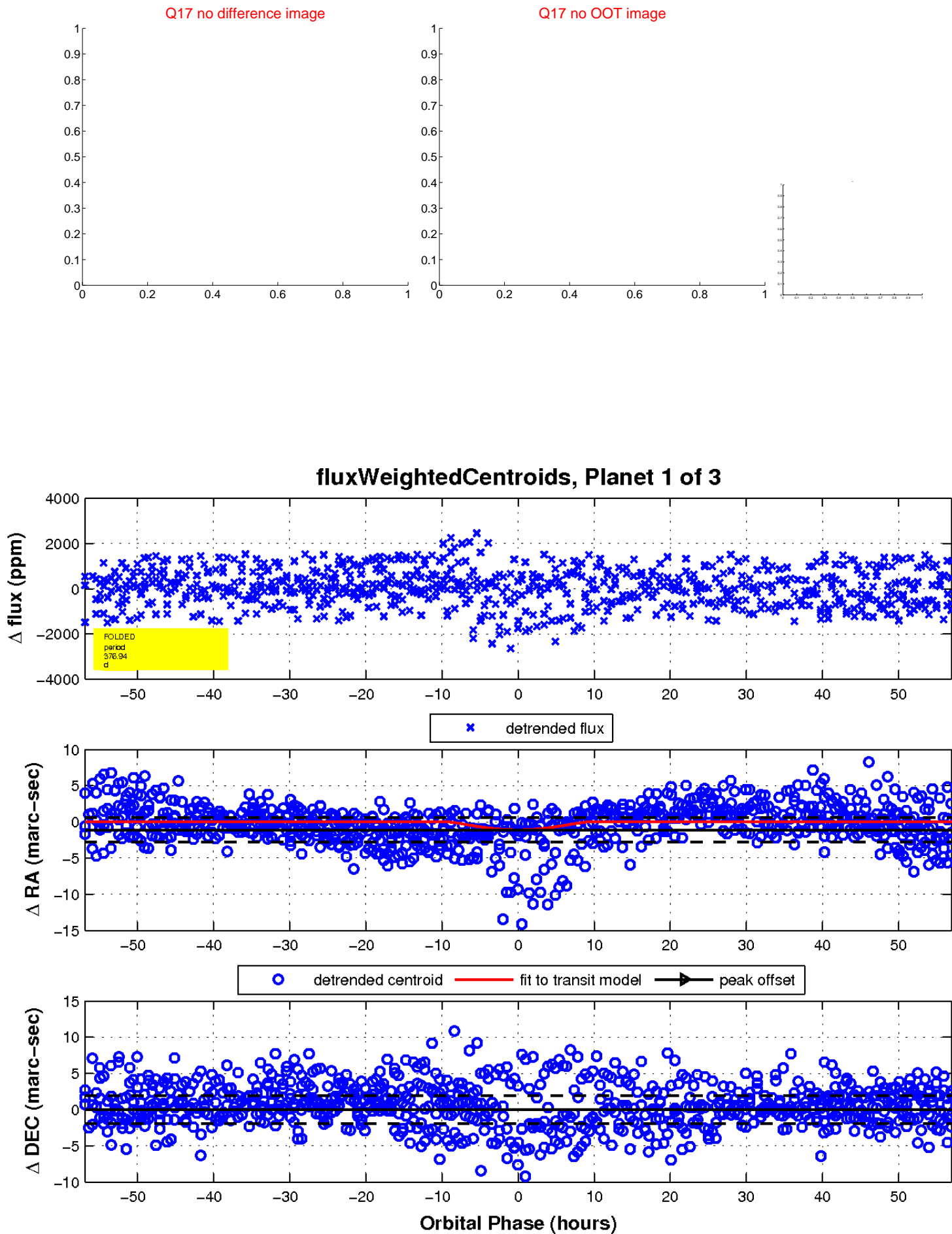
Q12 no OOT image



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

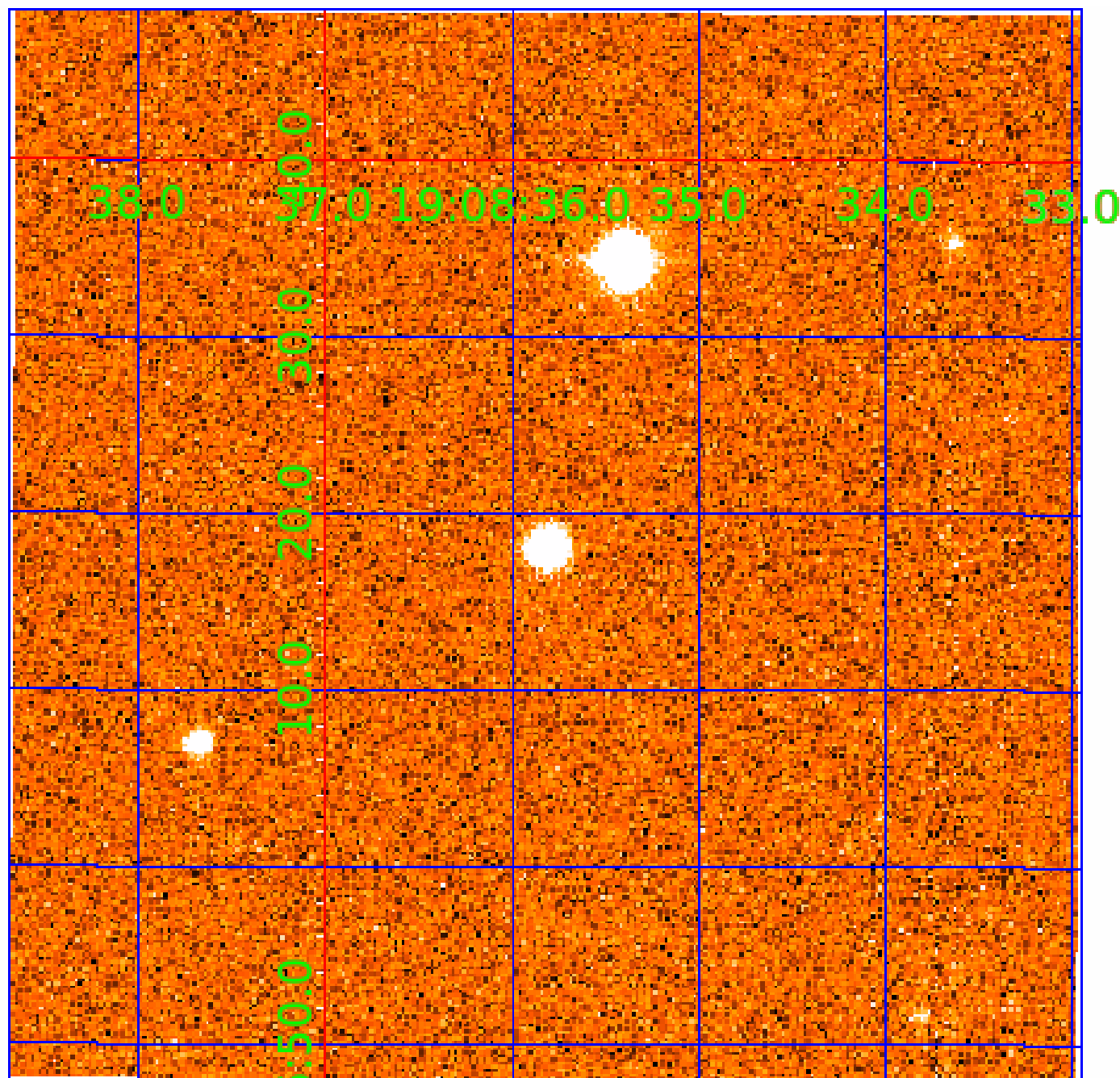


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008874266

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})
008874266-01	OBS	No	376.939048	258.628353	749.6	19.071	9.9	9.2	0.90	5616	4.88	0.74
008874266-02	OBS	No	370.913629	276.698829	811.7	20.730	10.4	11.8	0.90	5616	2.68	0.76
008874266-03	OBS	No	370.897935	267.632055	669.2	15.254	8.8	9.3	0.90	5616	2.98	0.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008874266-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—CENT_FEW_DIFFS
008874266-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS—HALO_GHOST
008874266-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— SAME_NTL_PERIOD—CENT_FEW_DIFFS

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

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

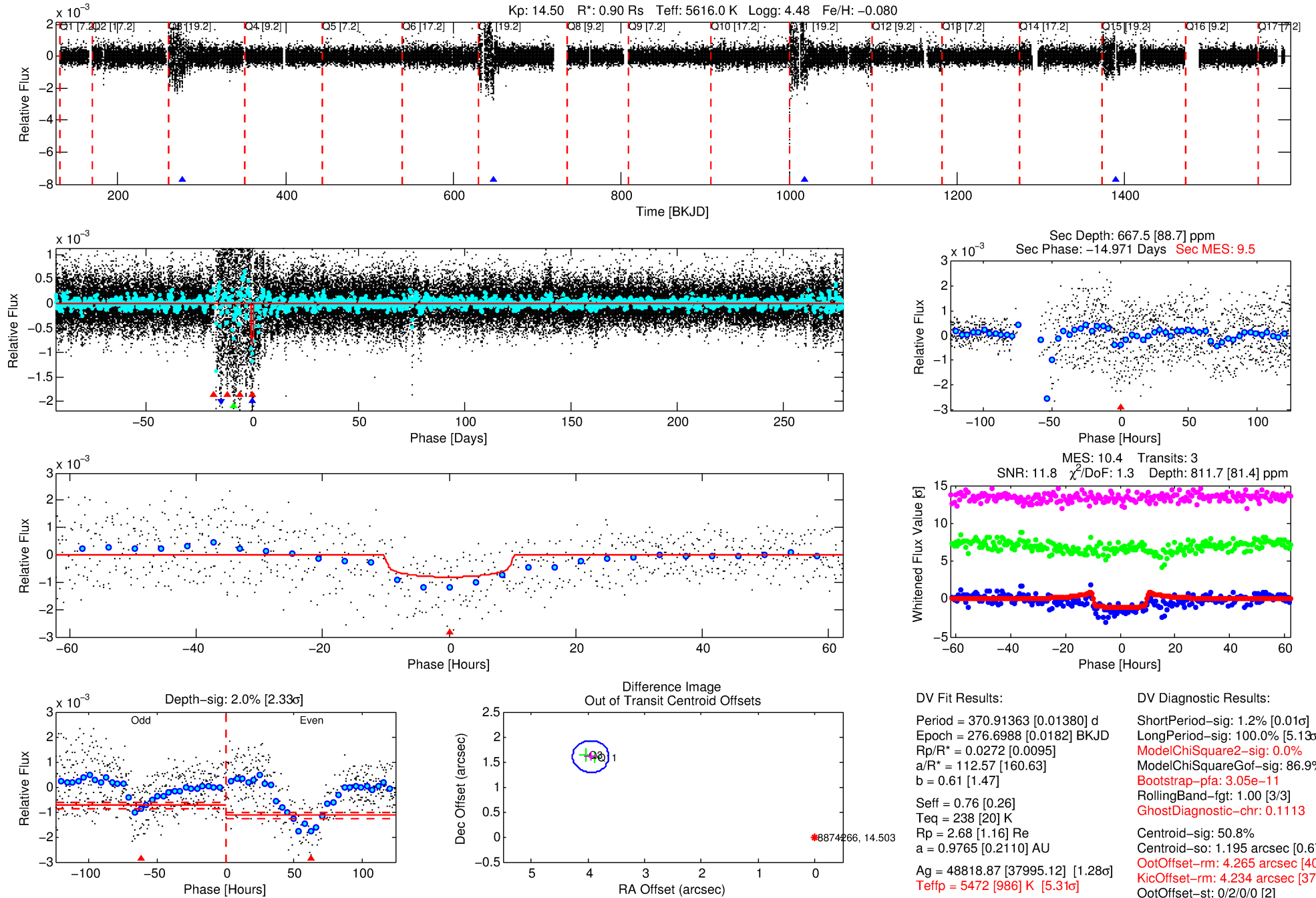
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008874266-02

No Significant Match Found

DV One-Page Summary

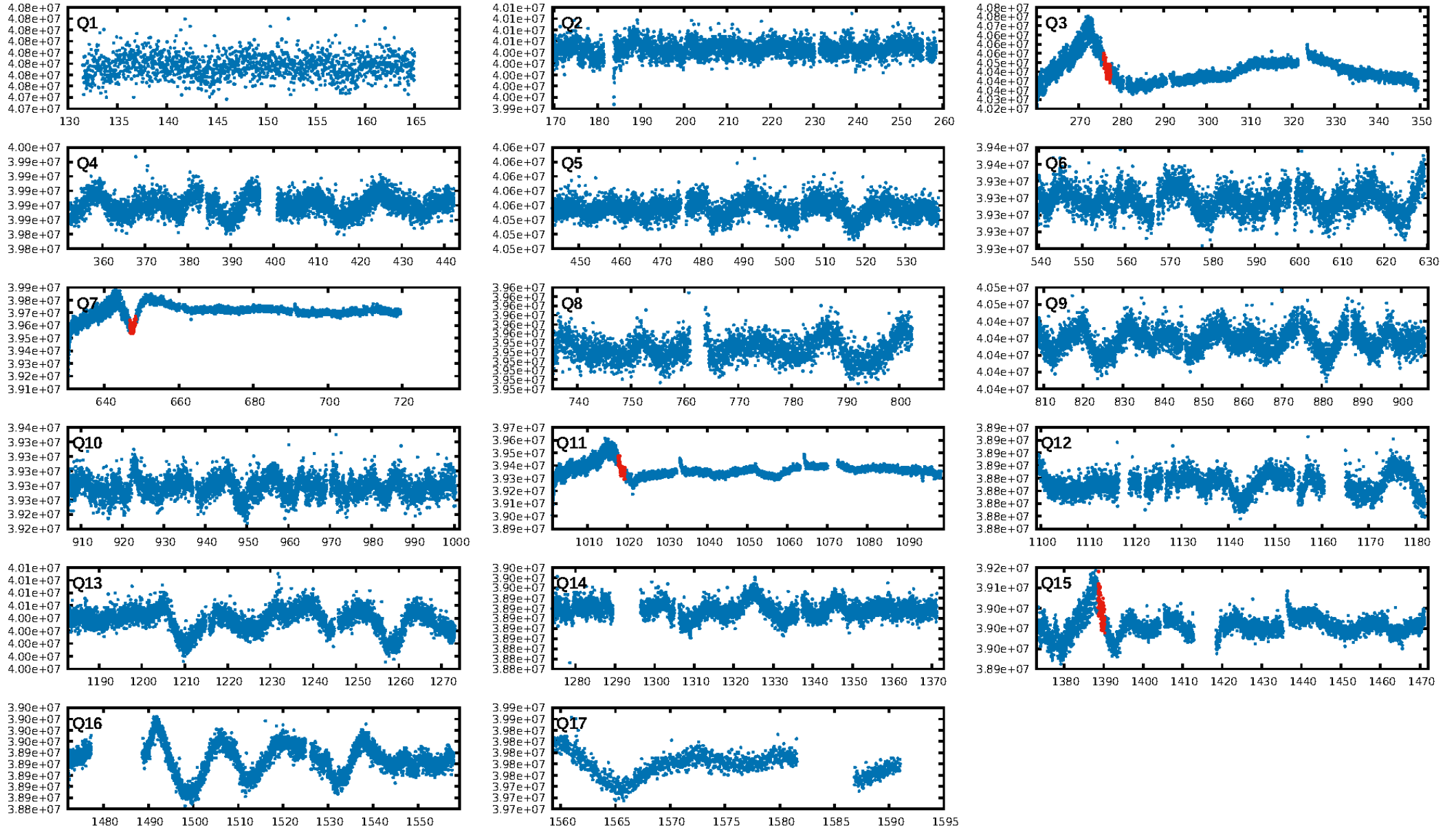
KIC: 8874266 Candidate: 2 of 3 Period: 370.914 d



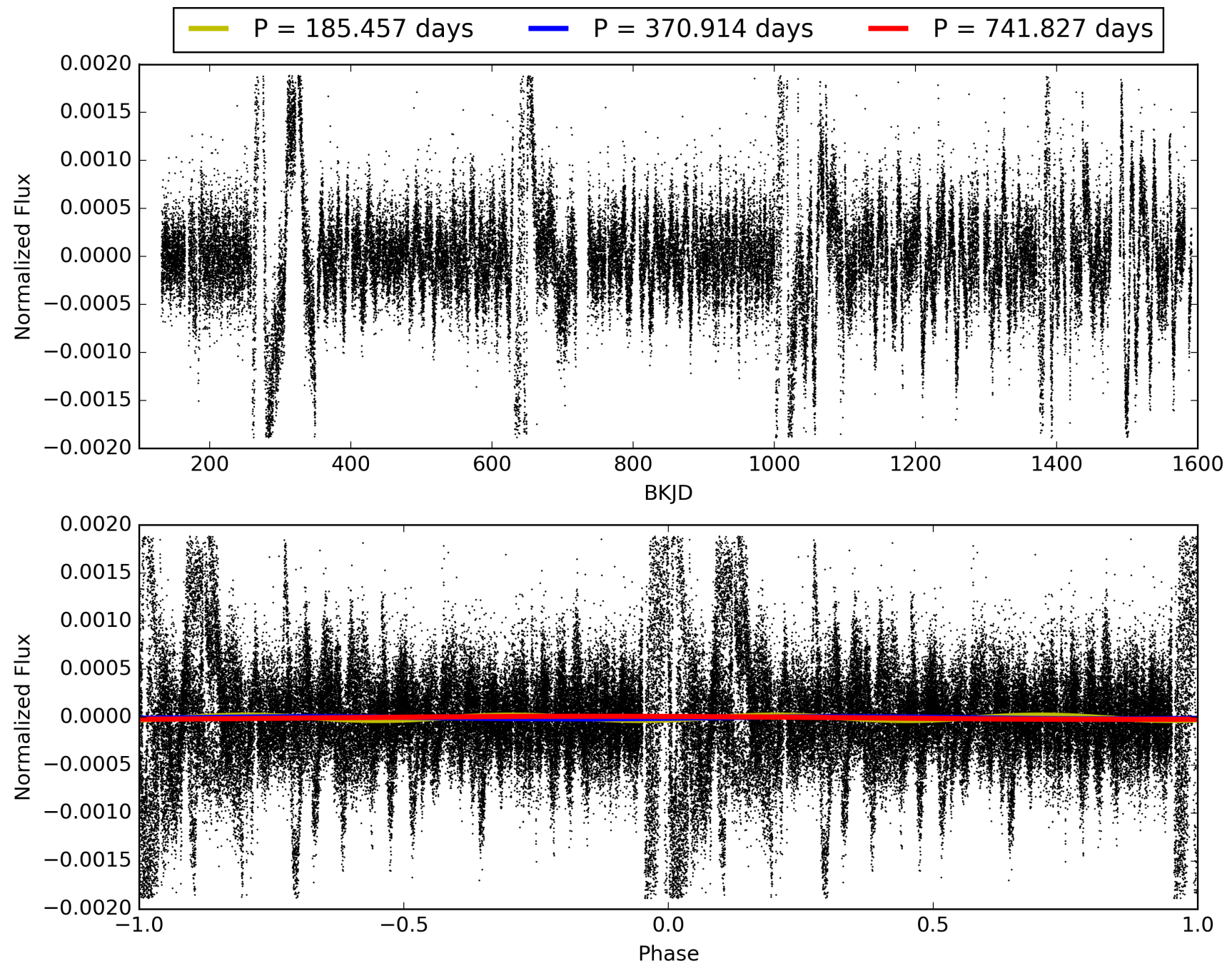
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:41:13 Z

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

TCE 008874266-02, PDC Light Curves

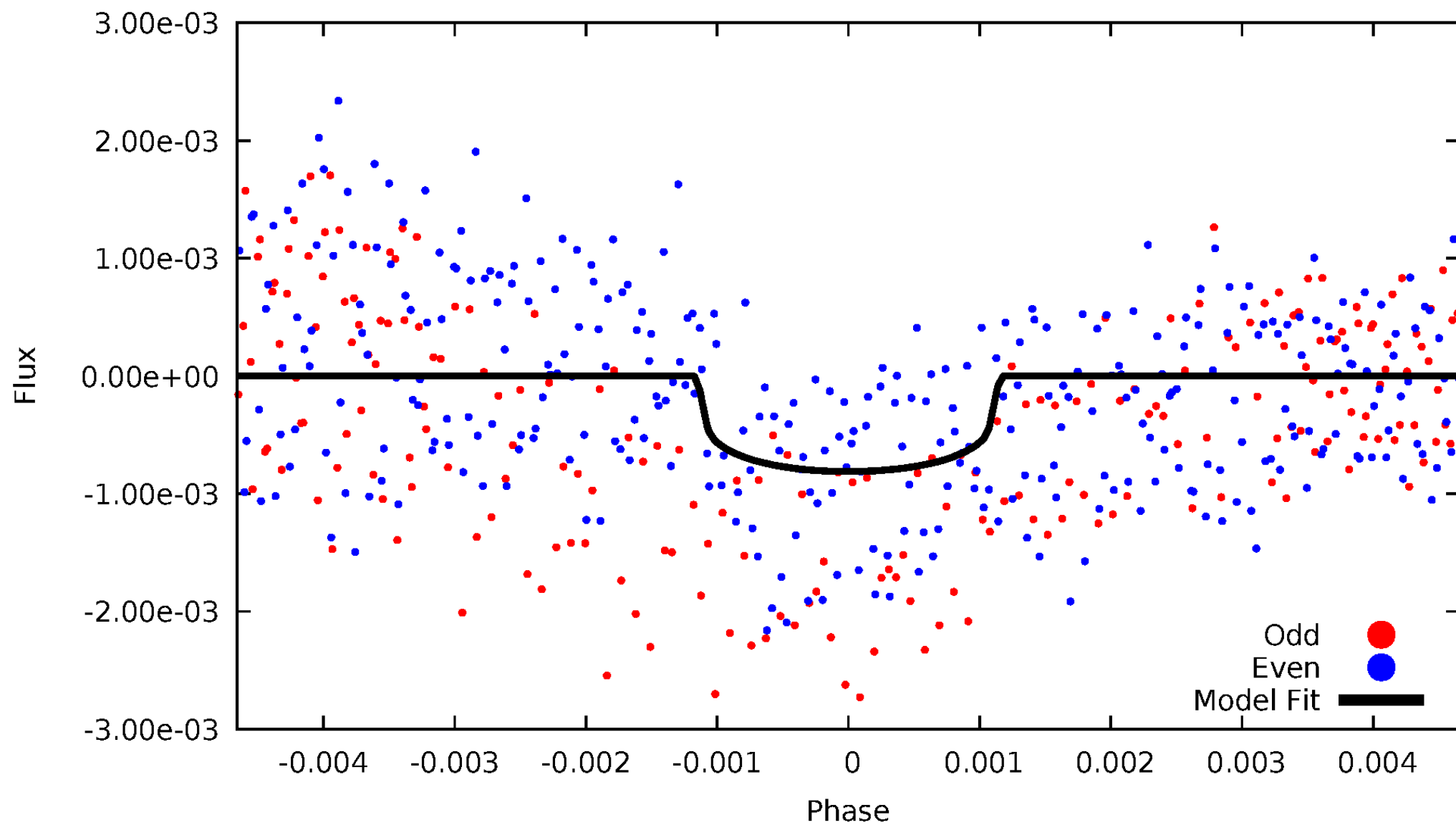


TCE 008874266-02



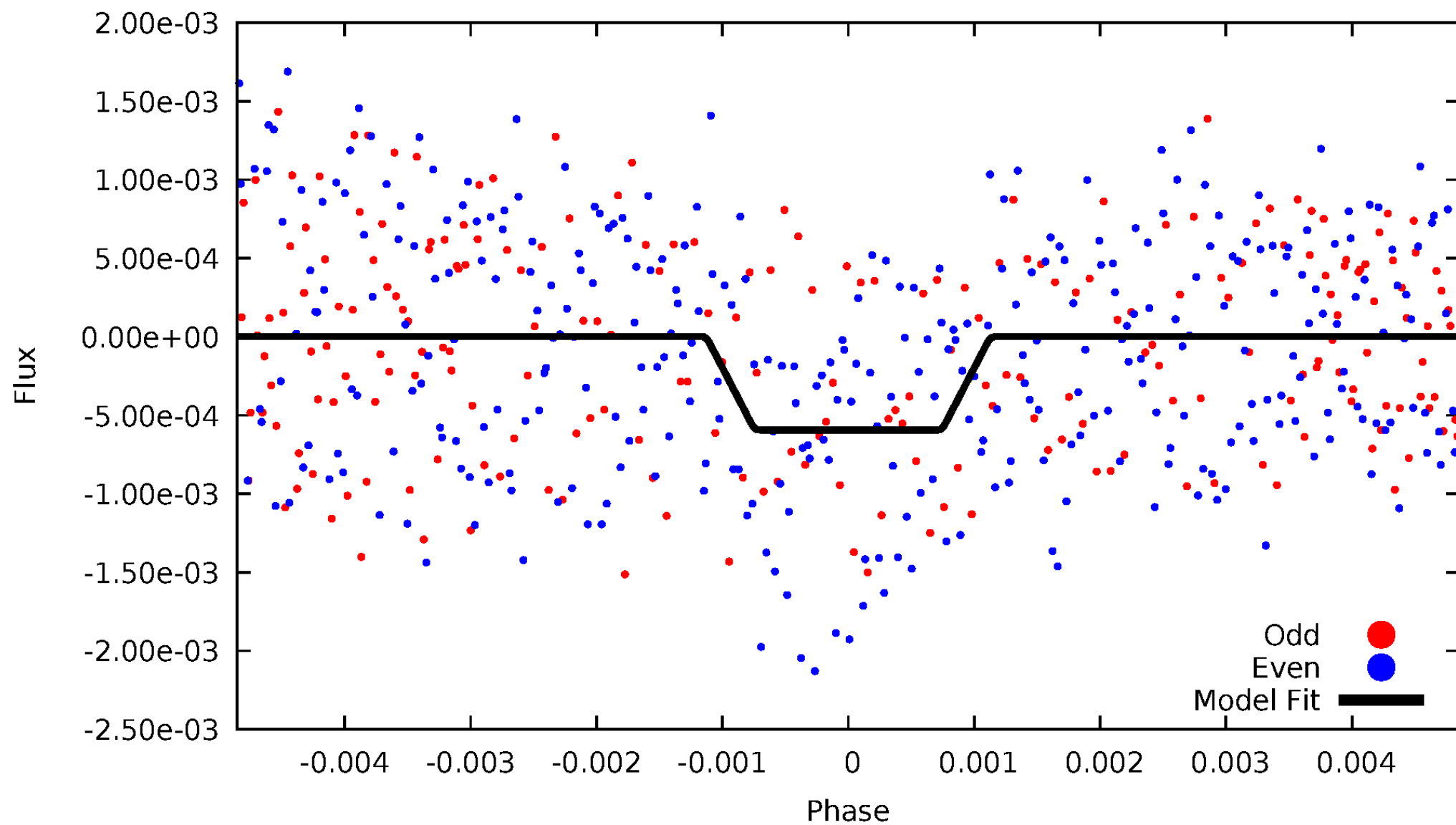
DV Odd/Even

TCE 008874266-02



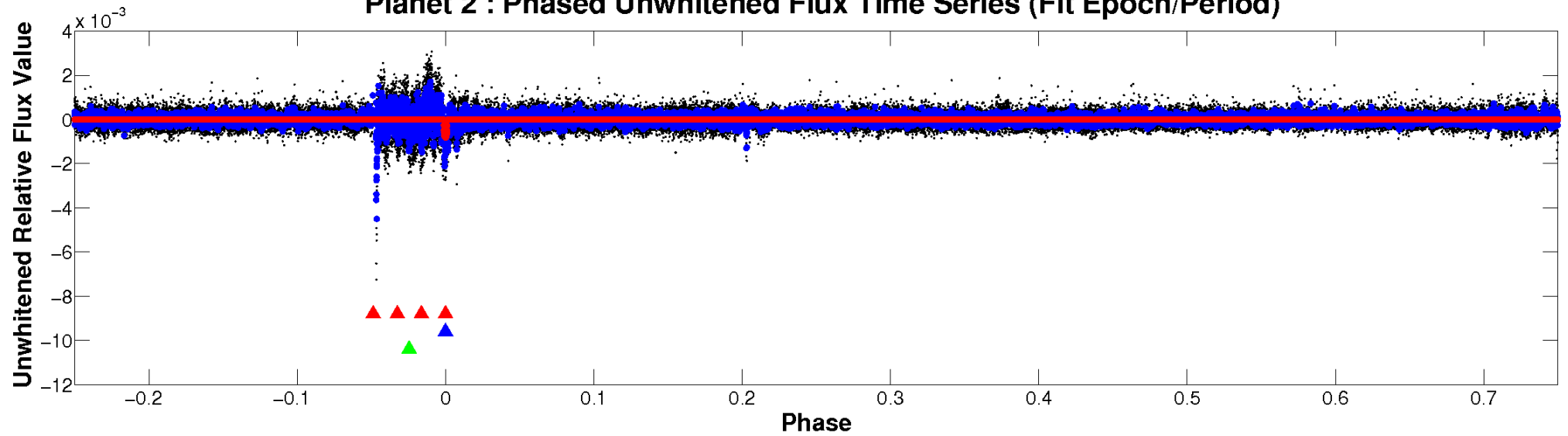
ALT Odd/Even

TCE 008874266-02

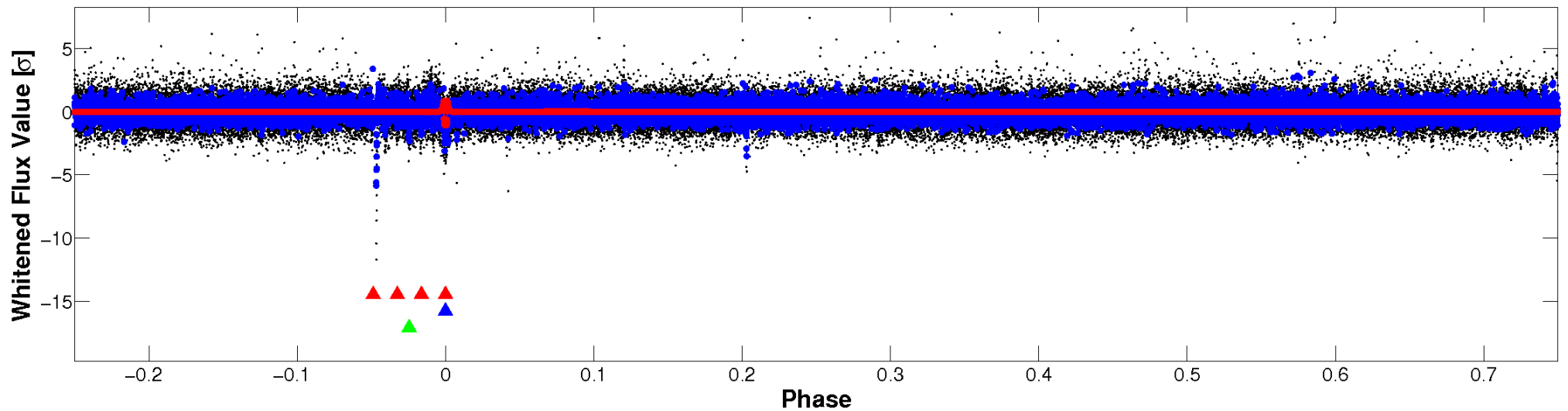


Non-Whitened Vs. Whitened Light Curve

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

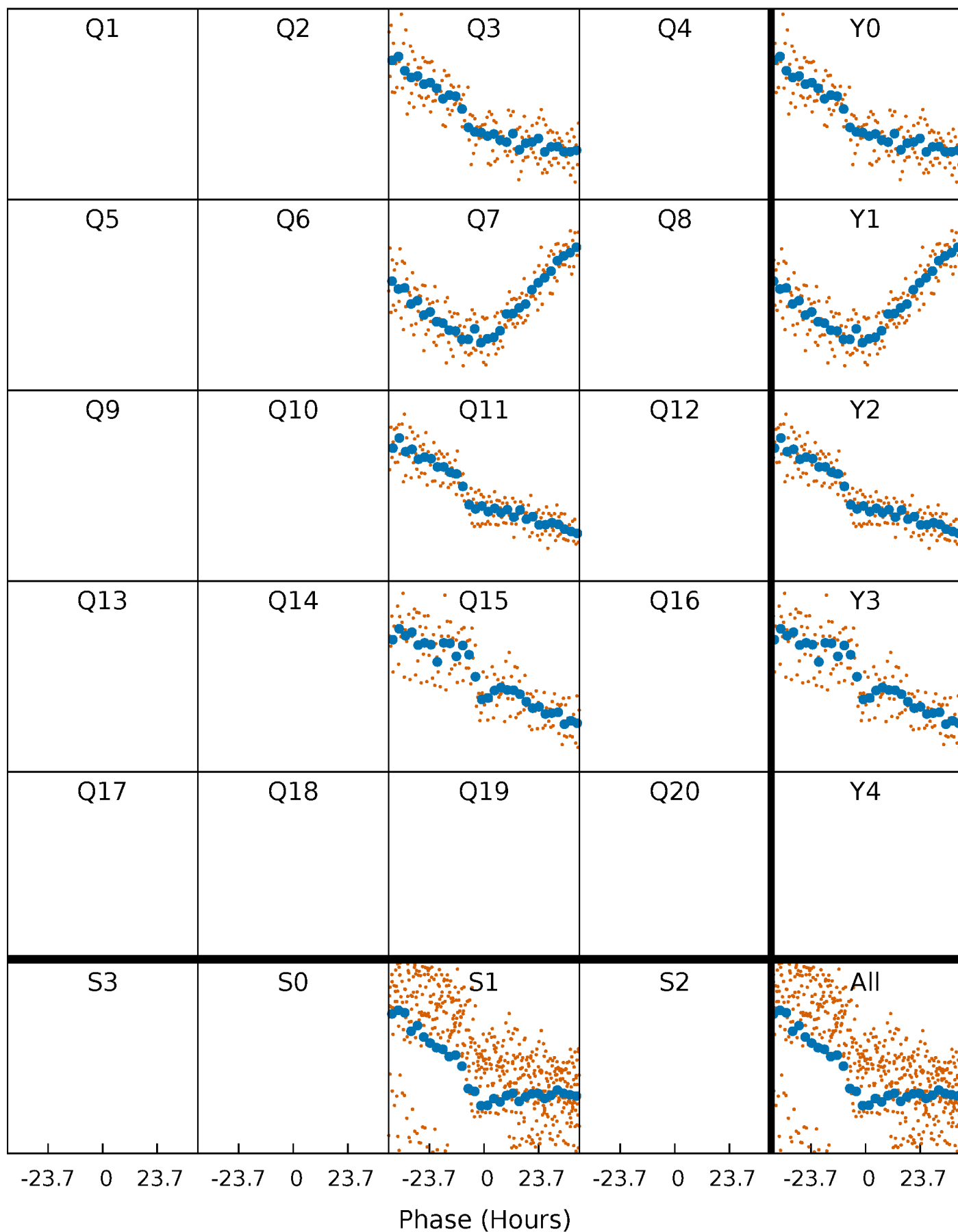


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



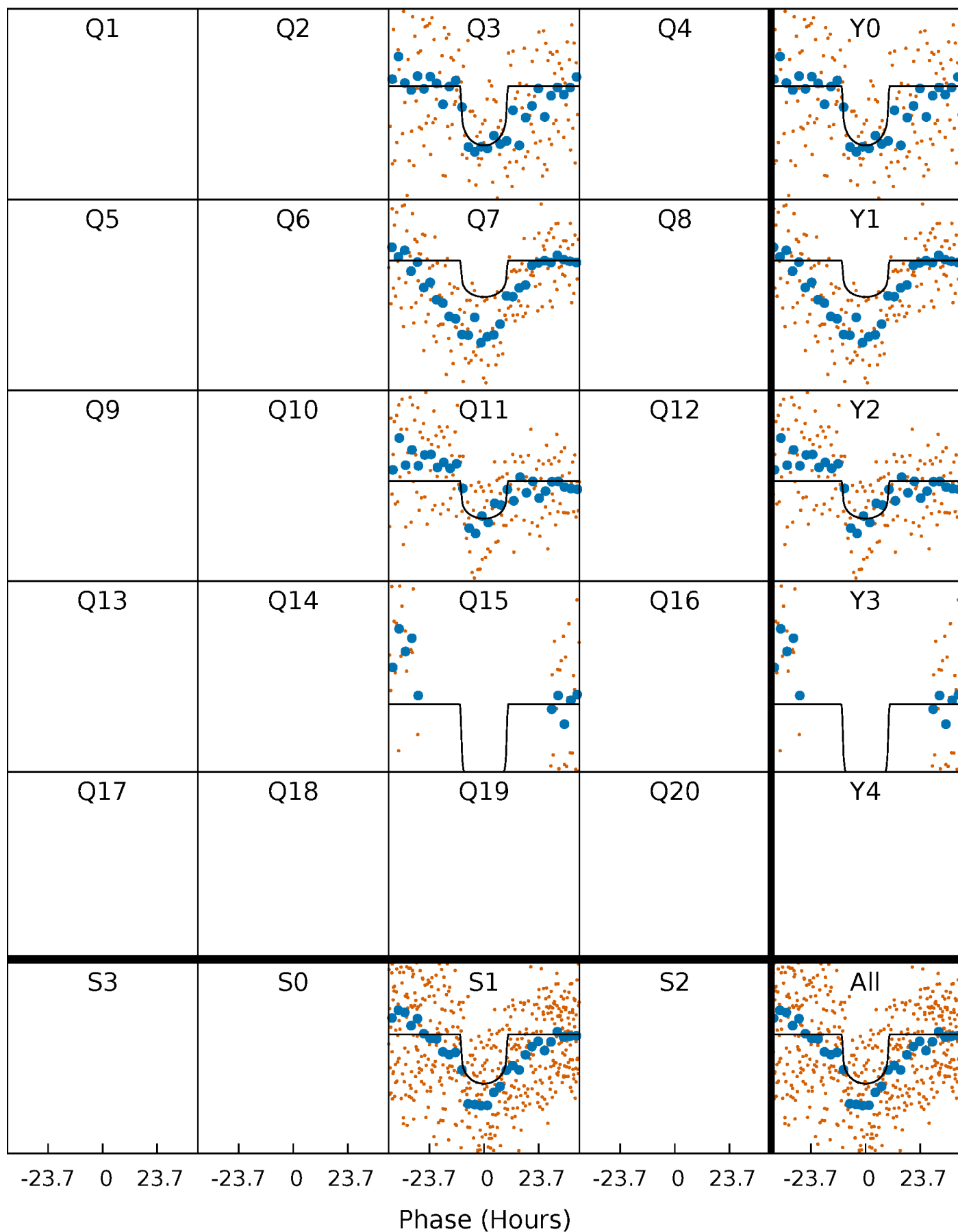
PDC Quarter-Phased Transit Curves

TCE 008874266-02 P=370.913629 Days $T_0=276.698829$ (BKJD)



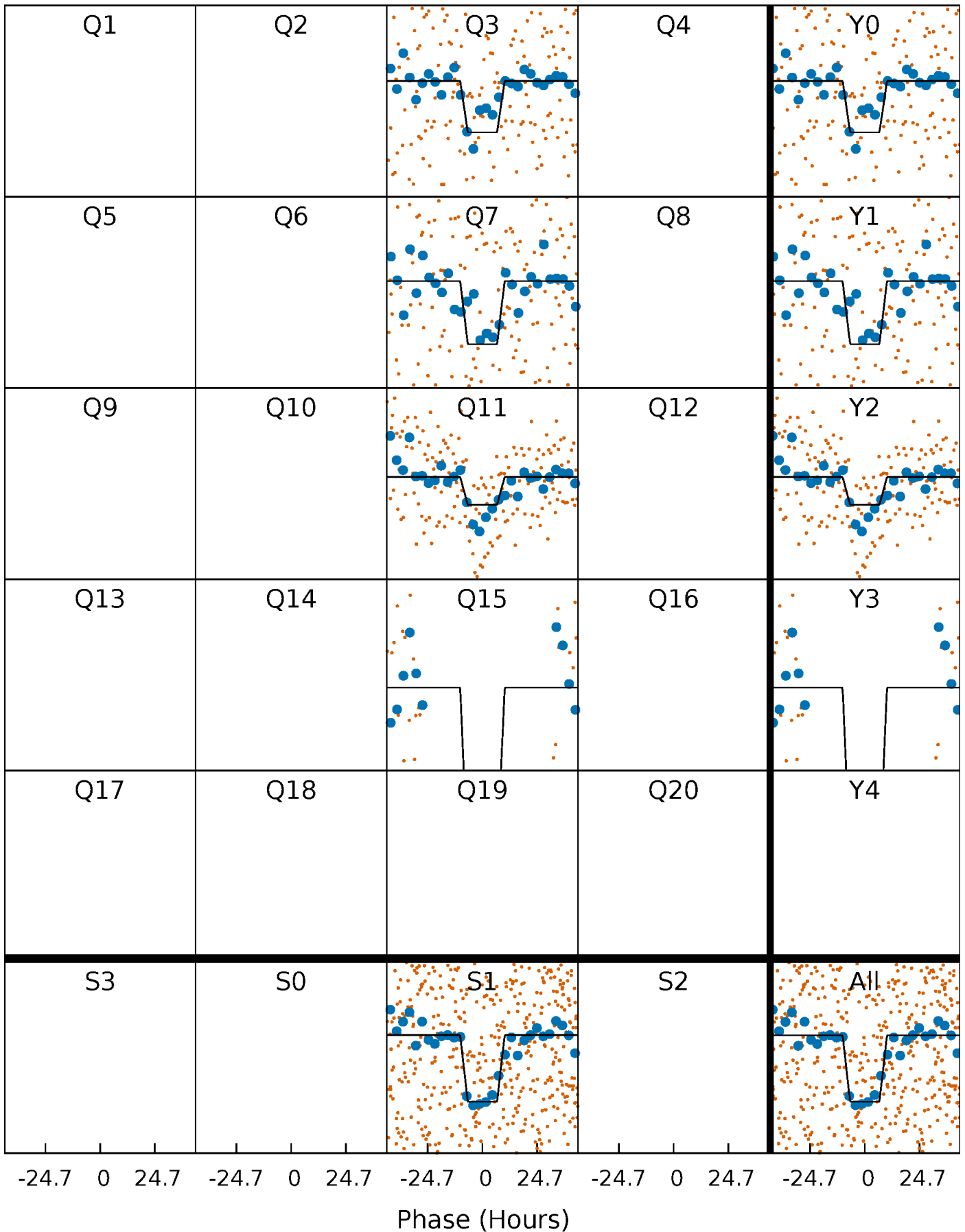
DV Quarter-Phased Transit Curves

TCE 008874266-02 $P=370.913629$ Days $T_0=276.698829$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

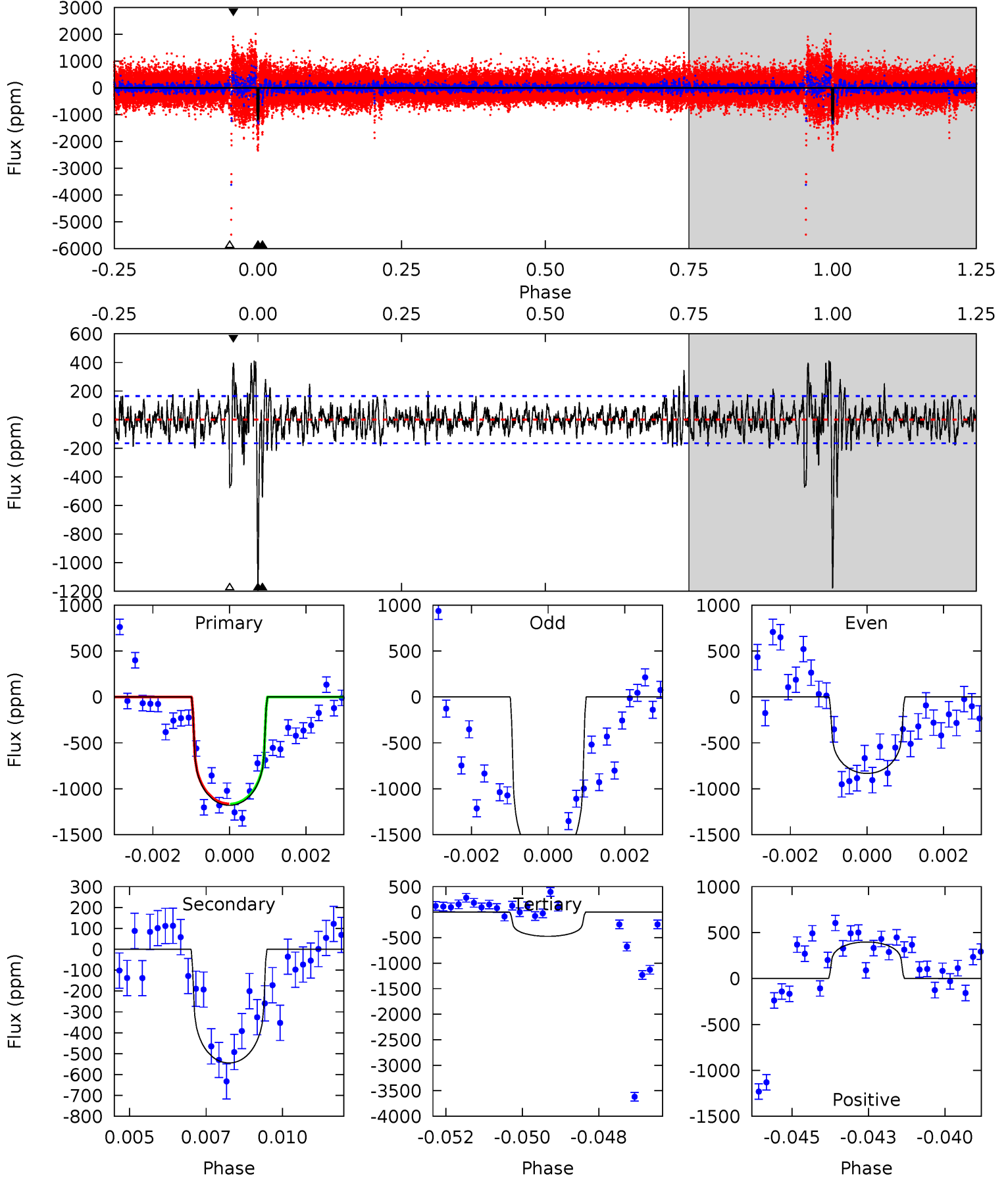
TCE 008874266-02 P=370.862303 Days $T_0=276.725544$ (BKJD)



DV Model-Shift Uniqueness Test

008874266-02, P = 370.913629 Days, E = 276.698829 Days

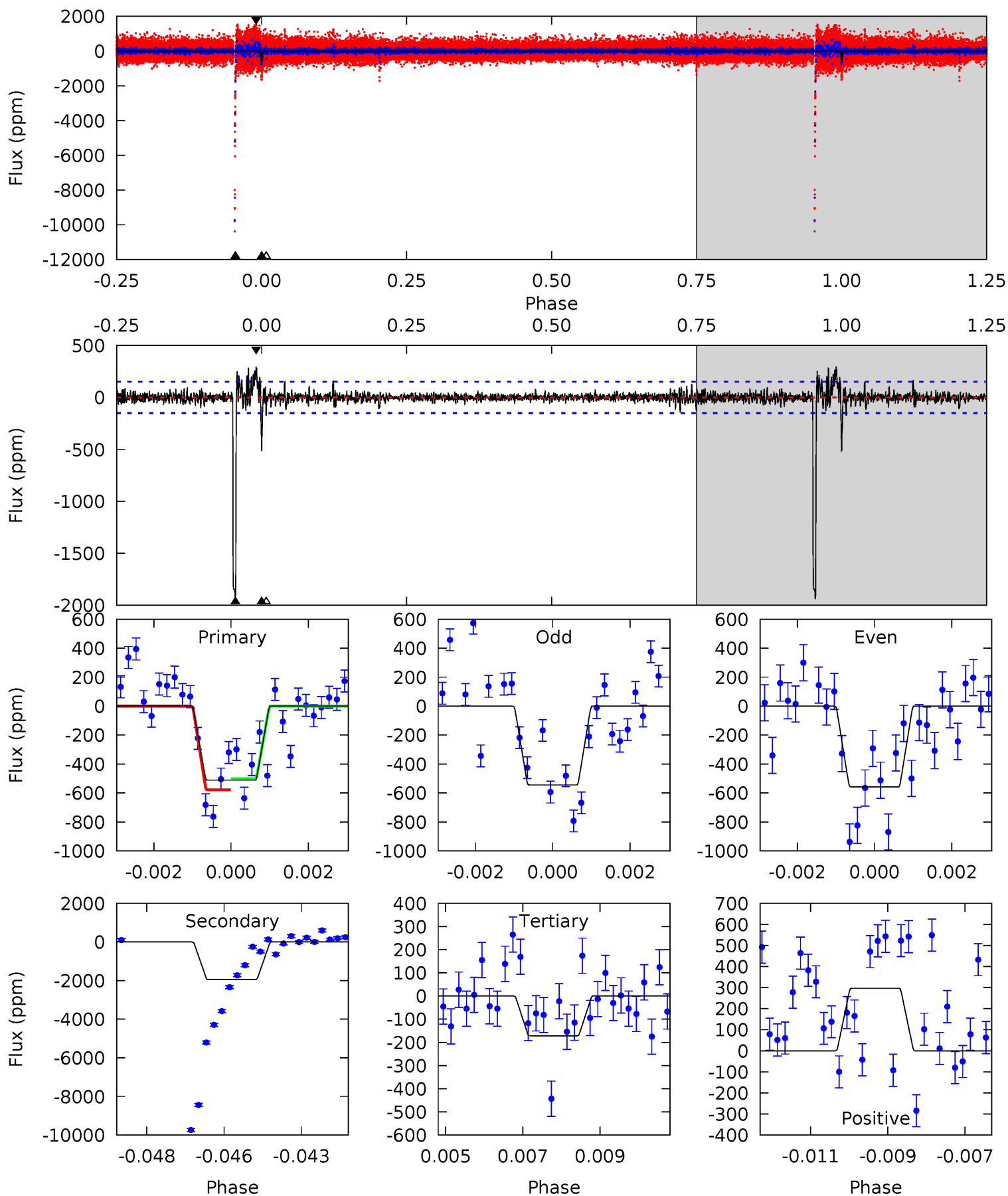
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
37.9	17.5	15.2	12.8	5.30	3.04	2.50	22.7	25.2	2.27	4.73	15.1	1.32	0.26	0.04



Alt Model-Shift Uniqueness Test

008874266-02, P = 370.862303 Days, E = 276.725544 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.0	68.2	6.04	10.4	5.30	3.05	1.79	11.9	7.56	62.2	57.8	0.21	1.24	0.13	1.33



Stellar Parameters For KIC 008874266

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5616^{+152}_{-169}	$4.483^{+0.075}_{-0.175}$	$-0.080^{+0.300}_{-0.300}$	$0.902^{+0.229}_{-0.098}$	$0.901^{+0.104}_{-0.085}$	$1.732^{+0.626}_{-0.791}$
	+3%/-3%	+2%/-4%	+375%/-375%	+25%/-11%	+12%/-9%	+36%/-46%
Source	PHO1	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 008874266-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-545 ± 31	$2.74^{+0.98}_{-1.06}$	336^{+22}_{-15}	5251^{+1293}_{-616}	37409^{+60401}_{-16781}
Alt.	-1939 ± 28	$2.51^{+1.05}_{-0.96}$	337^{+21}_{-15}	7604^{+2686}_{-1289}	$161082^{+254829}_{-80580}$

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 $A_{obs} \gg 1.0$

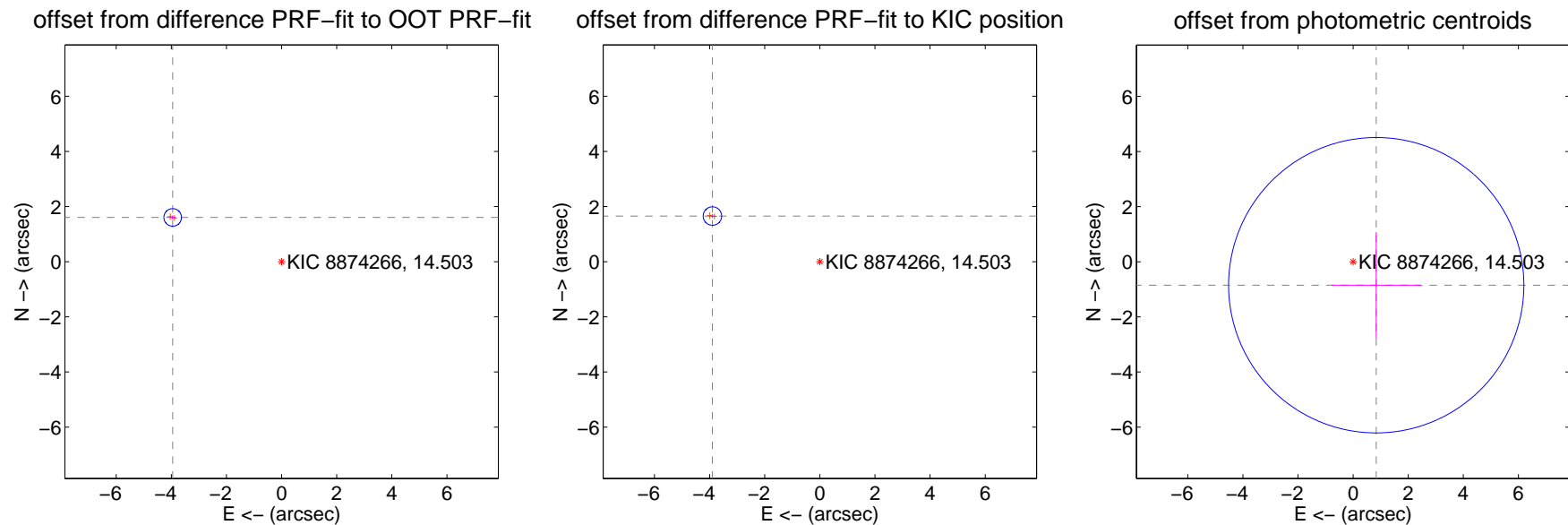
DV Centroid Data

Supplemental centroid analysis for 008874266-02. Kepler magnitude: 14.50. Transit SNR 11.83

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.265 ± 0.106	40.15	3.951 ± 0.111	1.606 ± 0.073
PRF-fit source offset from KIC position	4.234 ± 0.112	37.89	3.897 ± 0.118	1.656 ± 0.069
photometric centroid source offset	1.19 ± 1.79	0.67	-0.84 ± 1.63	-0.85 ± 1.93



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

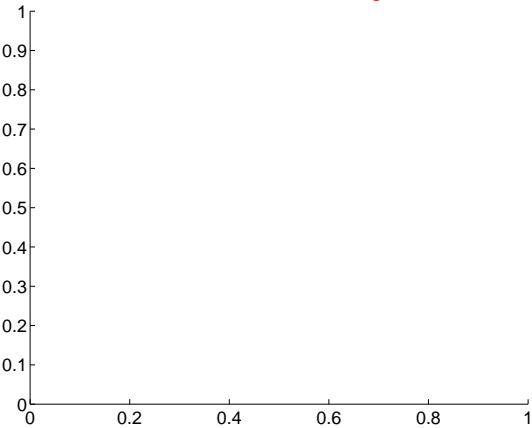
Q1 no difference image



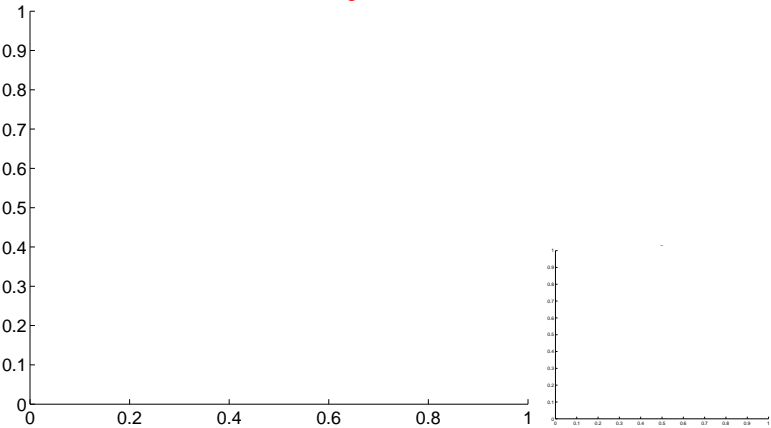
Q1 no OOT image



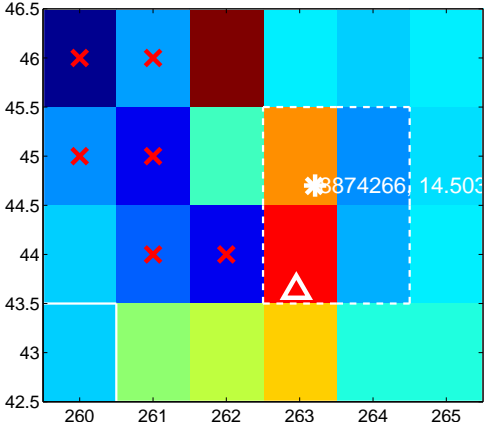
Q2 no difference image



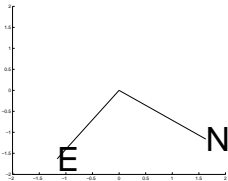
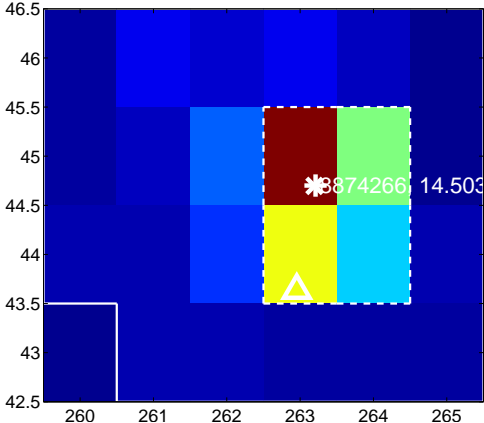
Q2 no OOT image



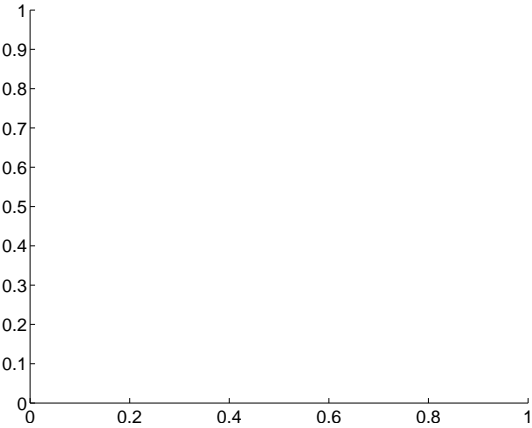
Q3 difference image. Poor Quality



Q3 OOT image



Q4 no difference image



Q4 no OOT image



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

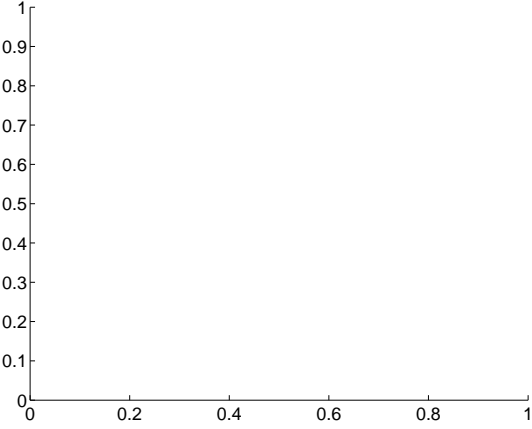
Q5 no difference image



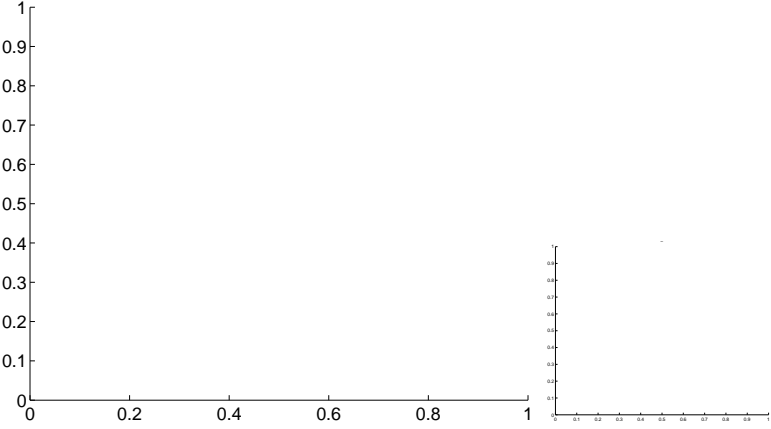
Q5 no OOT image



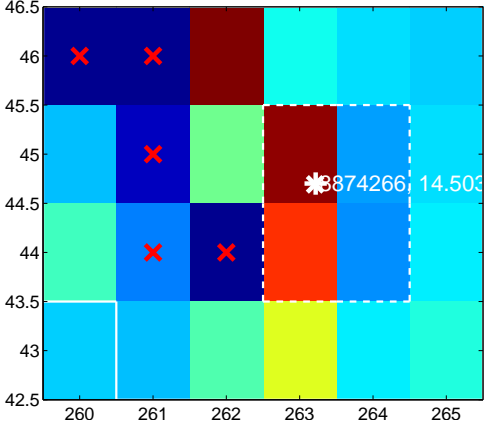
Q6 no difference image



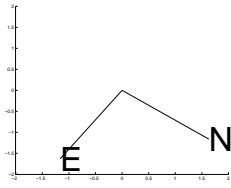
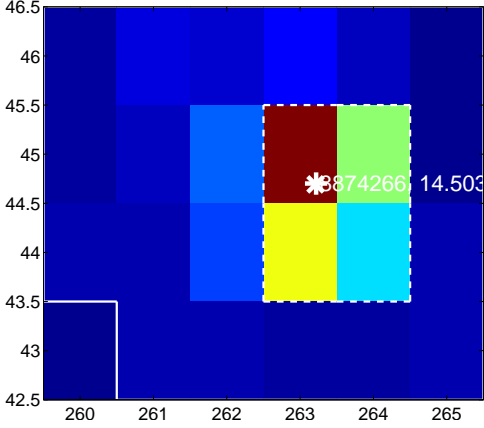
Q6 no OOT image



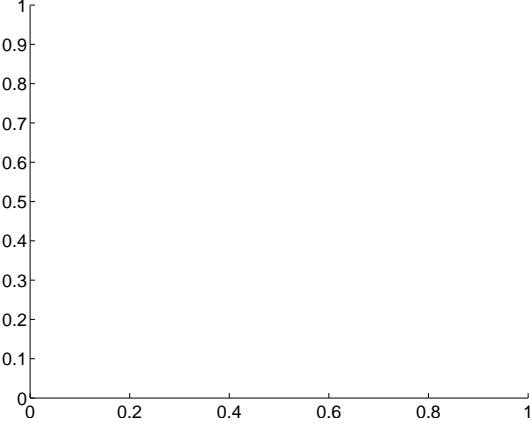
Q7 difference image. Poor Quality



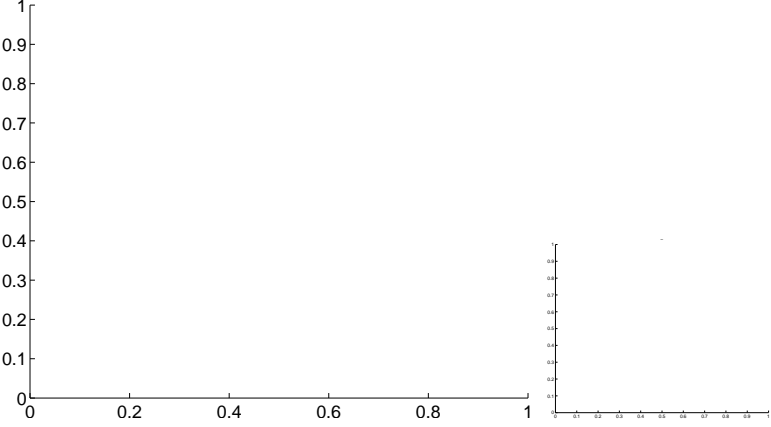
Q7 OOT image



Q8 no difference image



Q8 no OOT image



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

Q9 no difference image



Q9 no OOT image



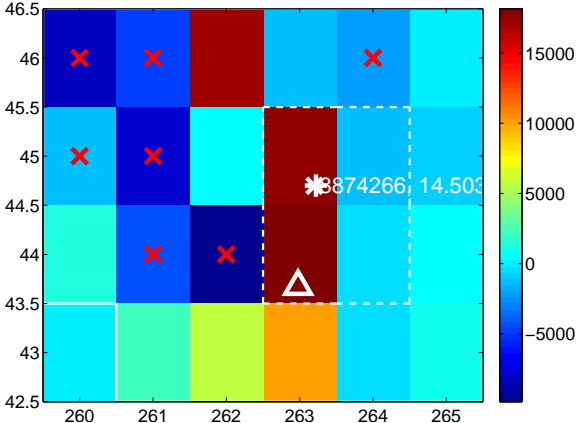
Q10 no difference image



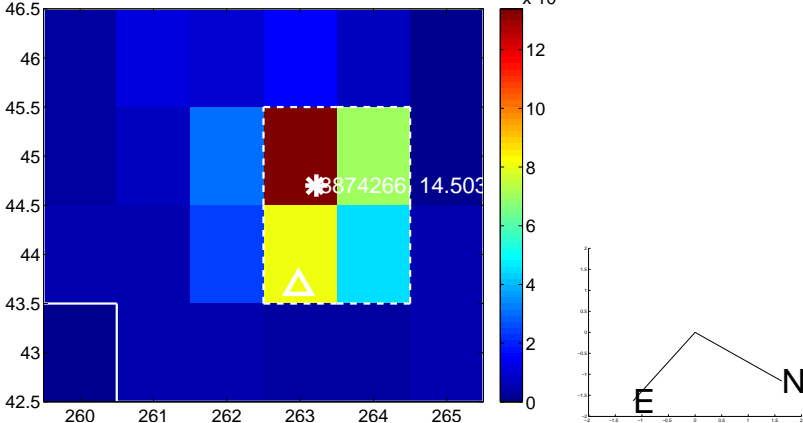
Q10 no OOT image



Q11 difference image. Poor Quality



Q11 OOT image



Q12 no difference image



Q12 no OOT image



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

Q13 no difference image



Q13 no OOT image



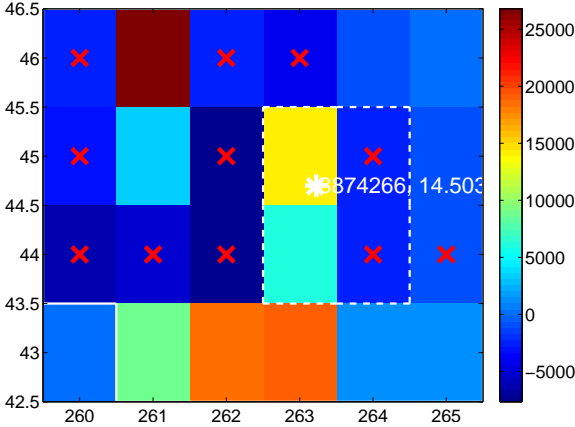
Q14 no difference image



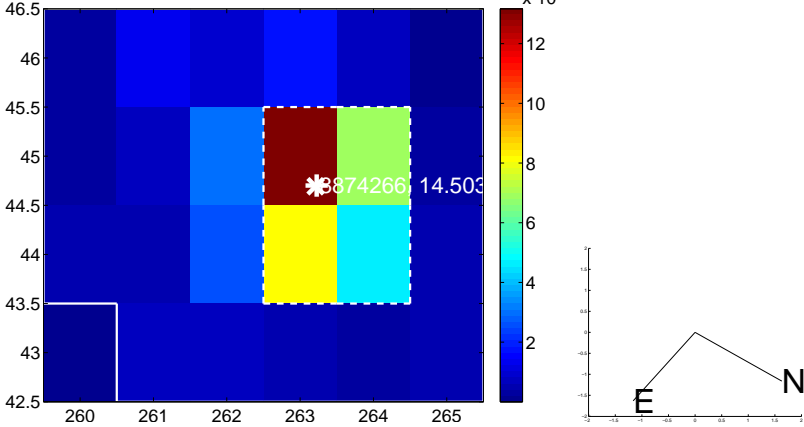
Q14 no OOT image



Q15 difference image. Poor Quality



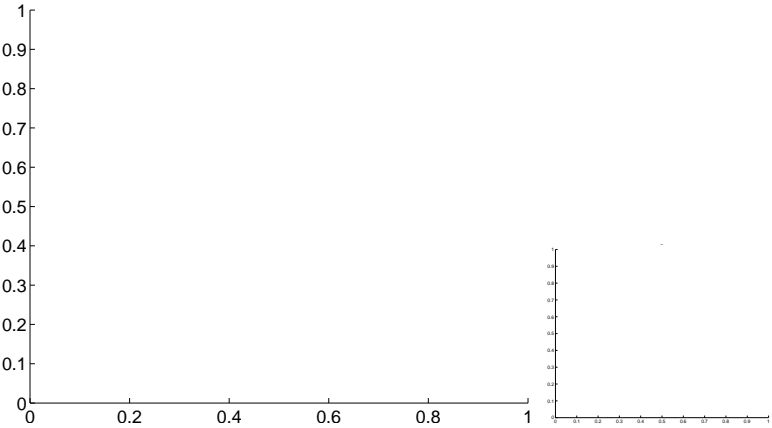
Q15 OOT image



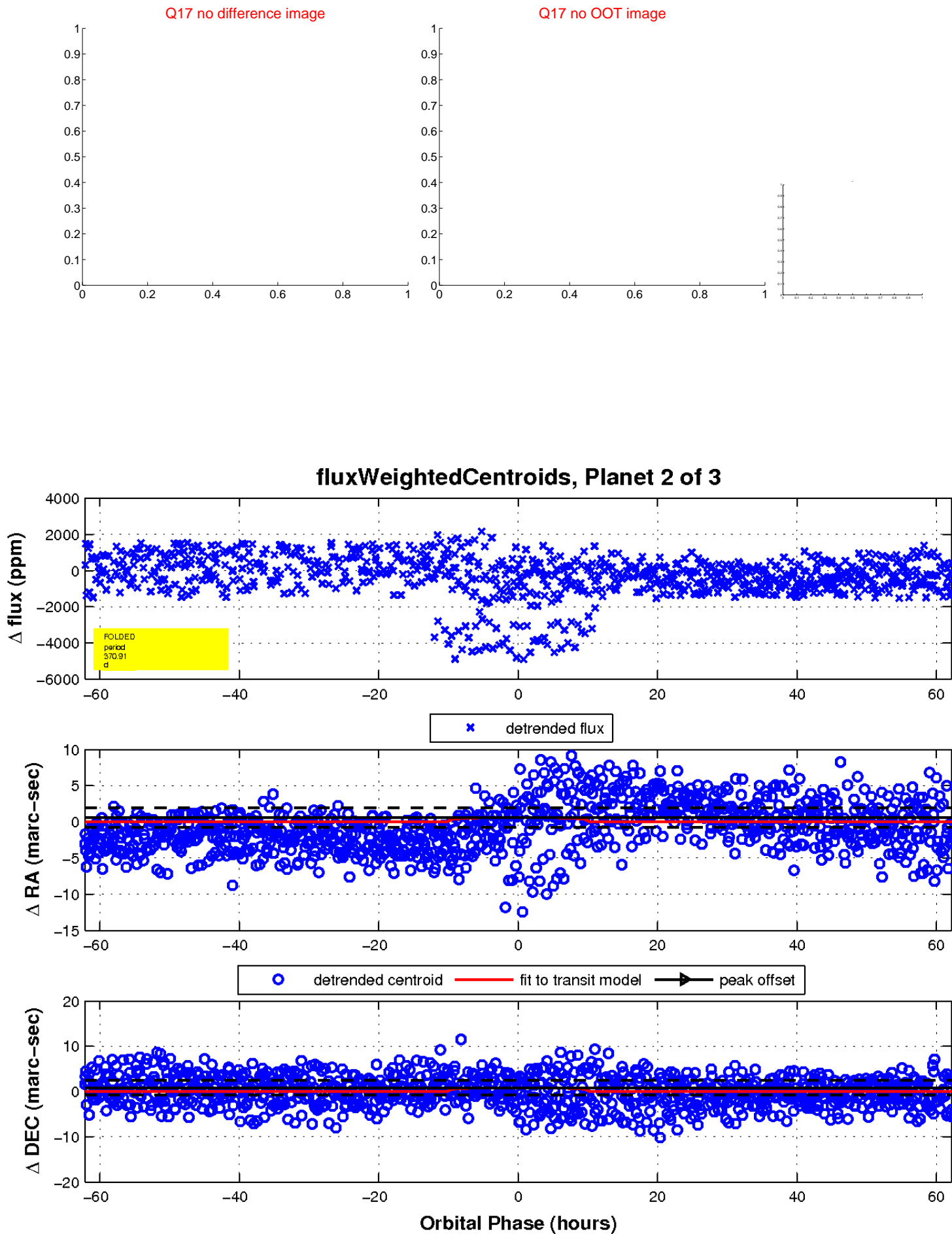
Q16 no difference image



Q16 no OOT image

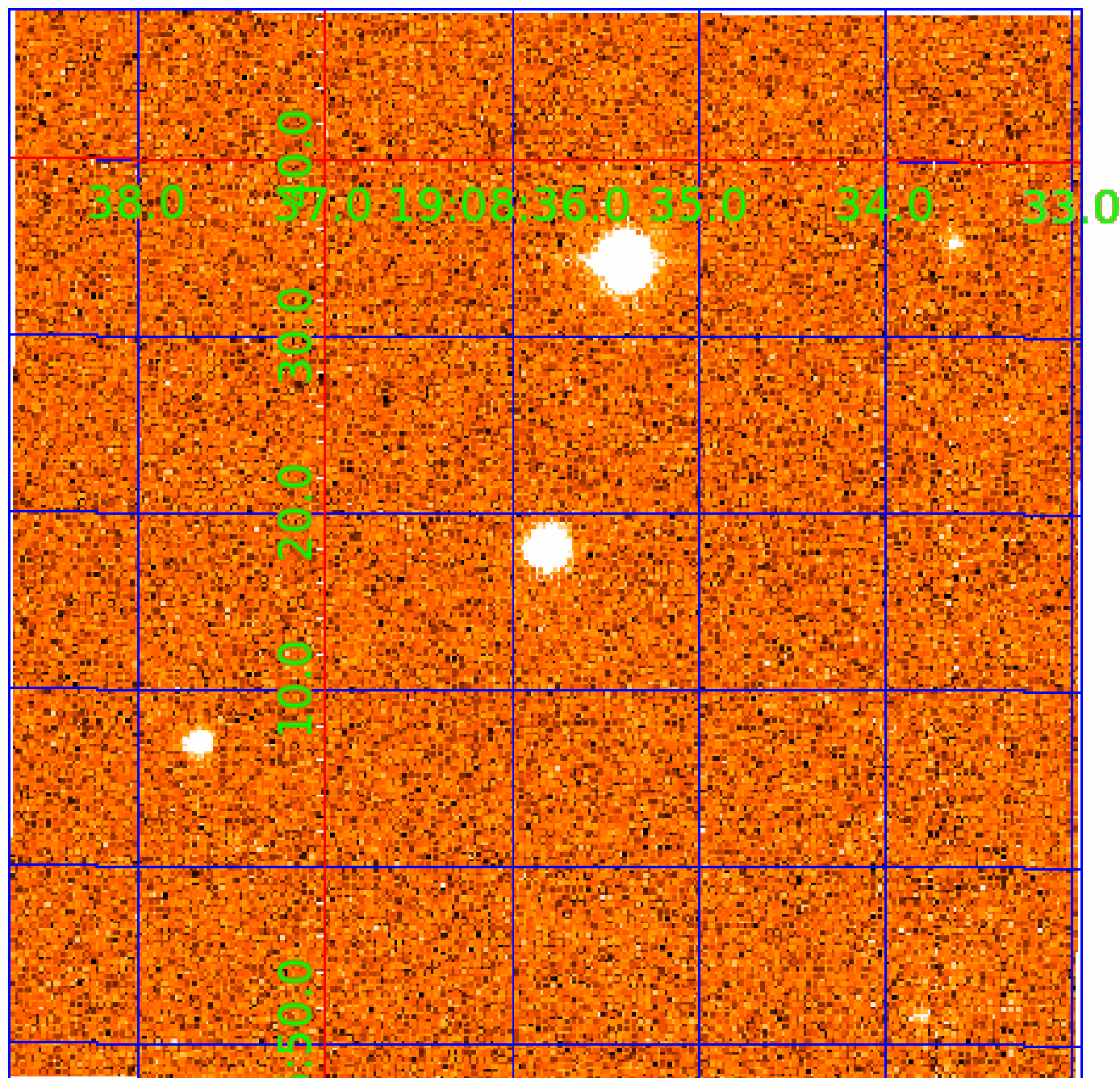


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008874266

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})
008874266-01	OBS	No	376.939048	258.628353	749.6	19.071	9.9	9.2	0.90	5616	4.88	0.74
008874266-02	OBS	No	370.913629	276.698829	811.7	20.730	10.4	11.8	0.90	5616	2.68	0.76
008874266-03	OBS	No	370.897935	267.632055	669.2	15.254	8.8	9.3	0.90	5616	2.98	0.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008874266-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—CENT_FEW_DIFFS
008874266-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS—HALO_GHOST
008874266-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— SAME_NTL_PERIOD—CENT_FEW_DIFFS

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

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

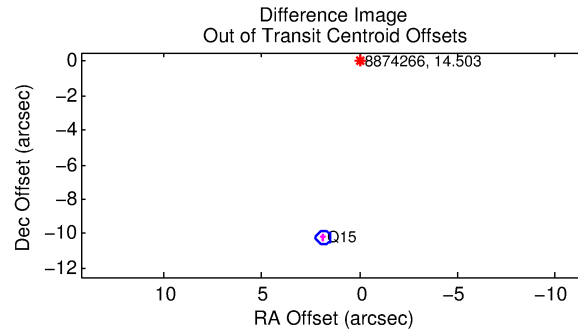
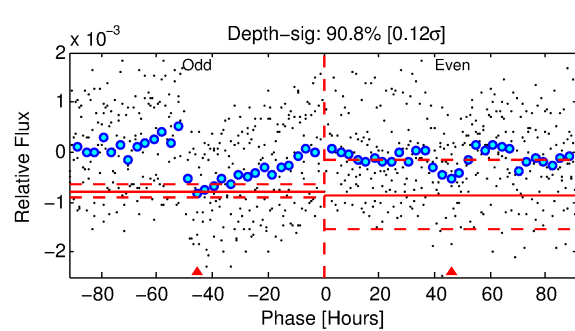
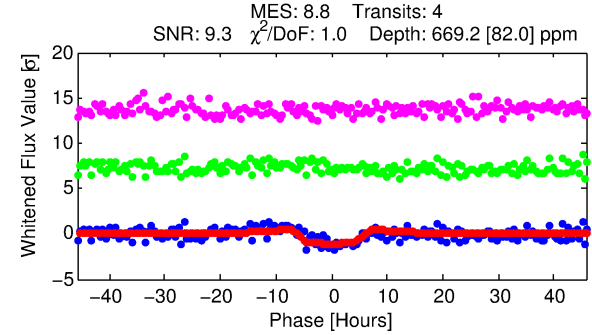
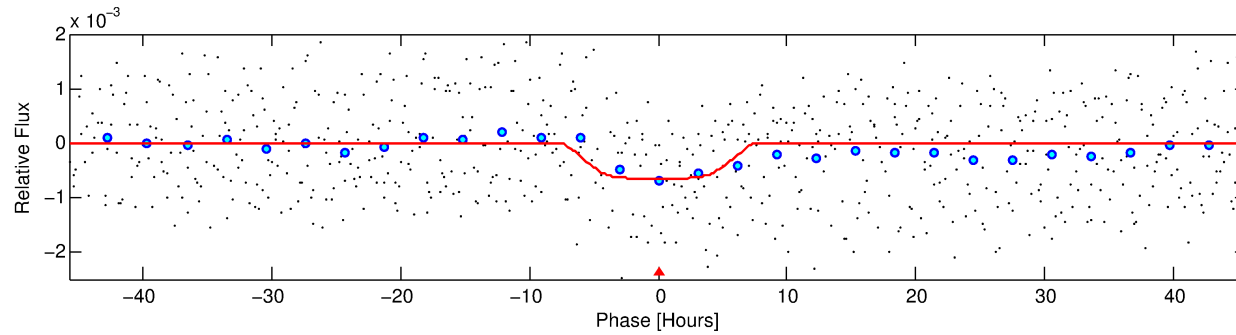
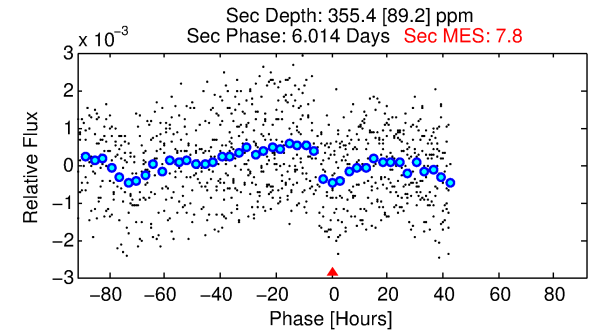
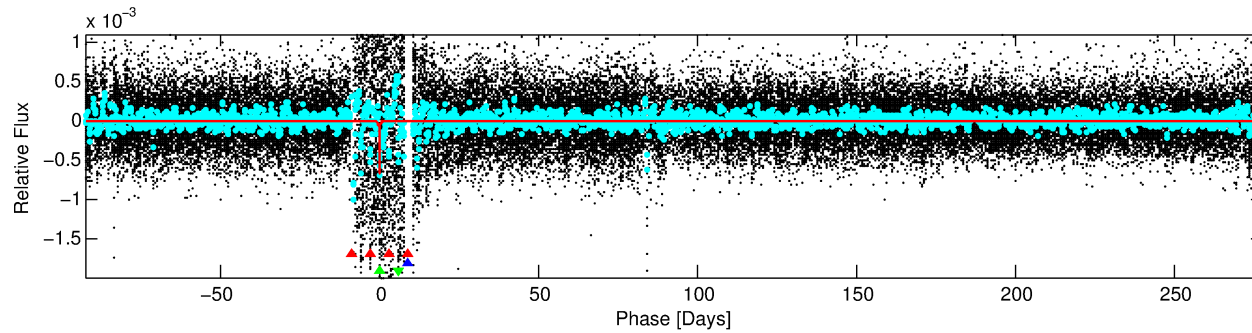
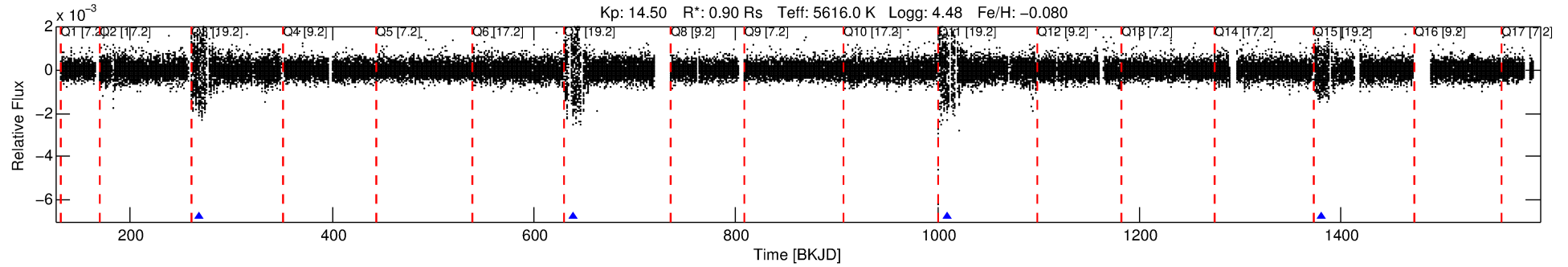
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008874266-03

No Significant Match Found

DV One-Page Summary

KIC: 8874266 Candidate: 3 of 3 Period: 370.898 d



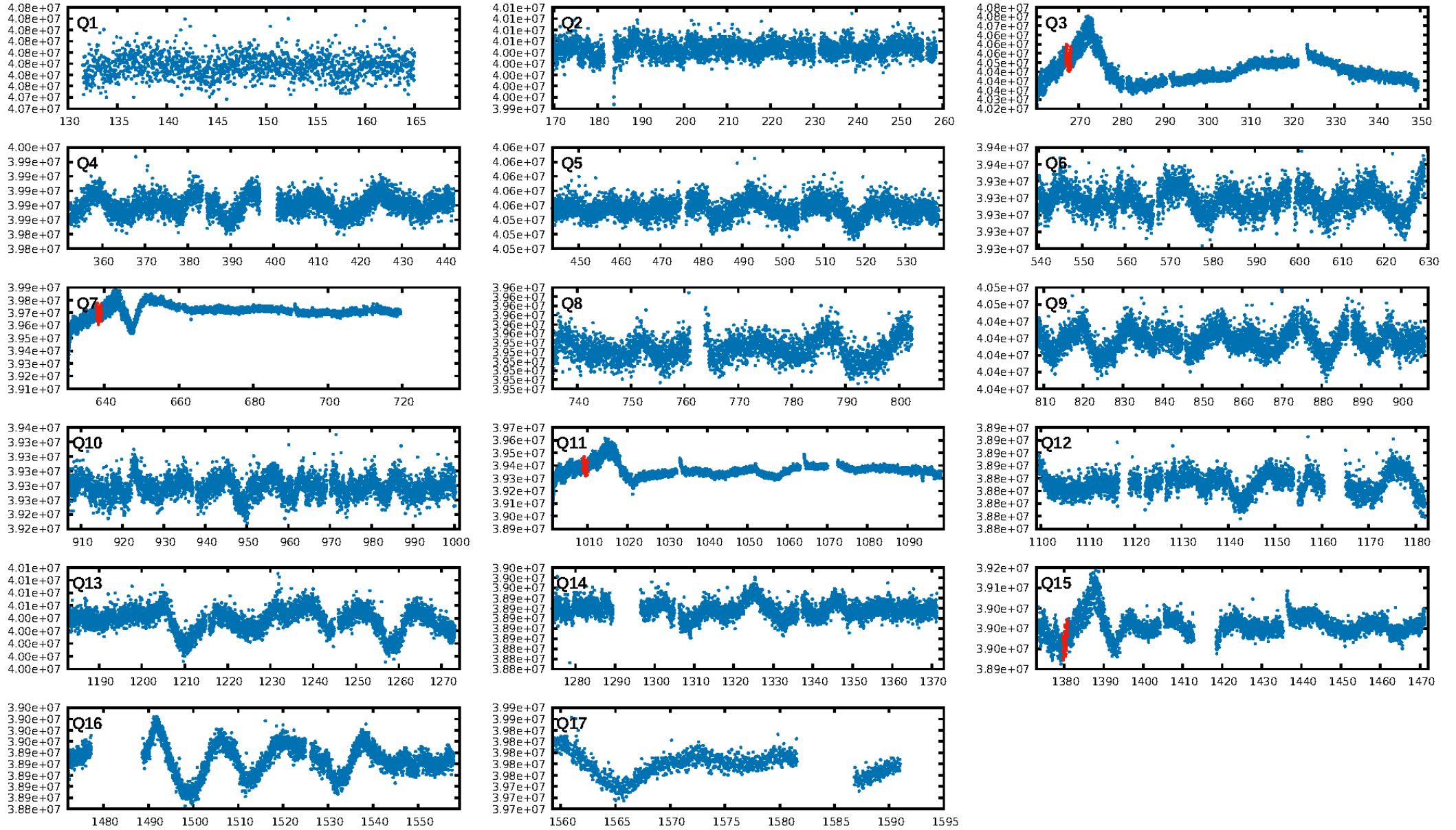
DV Fit Results:

Period = 370.89793 [0.01333] d
Epoch = 267.6321 [0.0247] BKJD
Rp/R* = 0.0303 [0.0026]
a/R* = 74.38 [16.24]
b = 0.95 [0.02]
Seff = 0.76 [0.26]
Teq = 238 [20] K
Rp = 2.98 [0.80] Re
a = 0.9765 [0.2110] AU
Ag = 20994.69 [9246.72] [2.27σ]
Teff = 4432 [364] K [11.52σ]

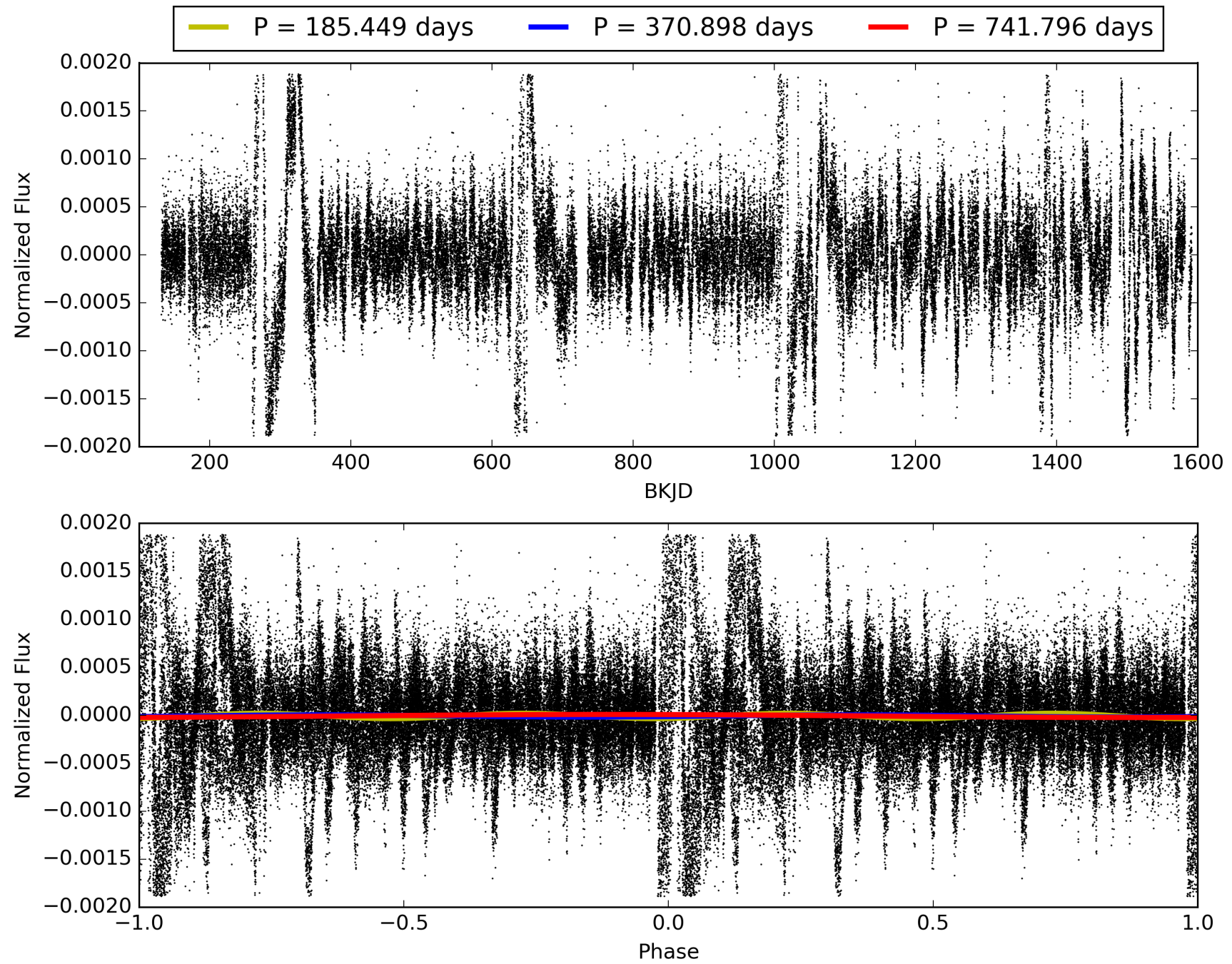
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 1.2% [0.01σ]
ModelChiSquare2-sig: 47.9%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 3.00e-10
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 2.527
Centroid-sig: 0.2%
Centroid-so: 6.076 arcsec [2.90σ]
OotOffset-rm: 10.388 arcsec [79.45σ]
KicOffset-rm: 10.340 arcsec [79.06σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [2/2]

TCE 008874266-03, PDC Light Curves

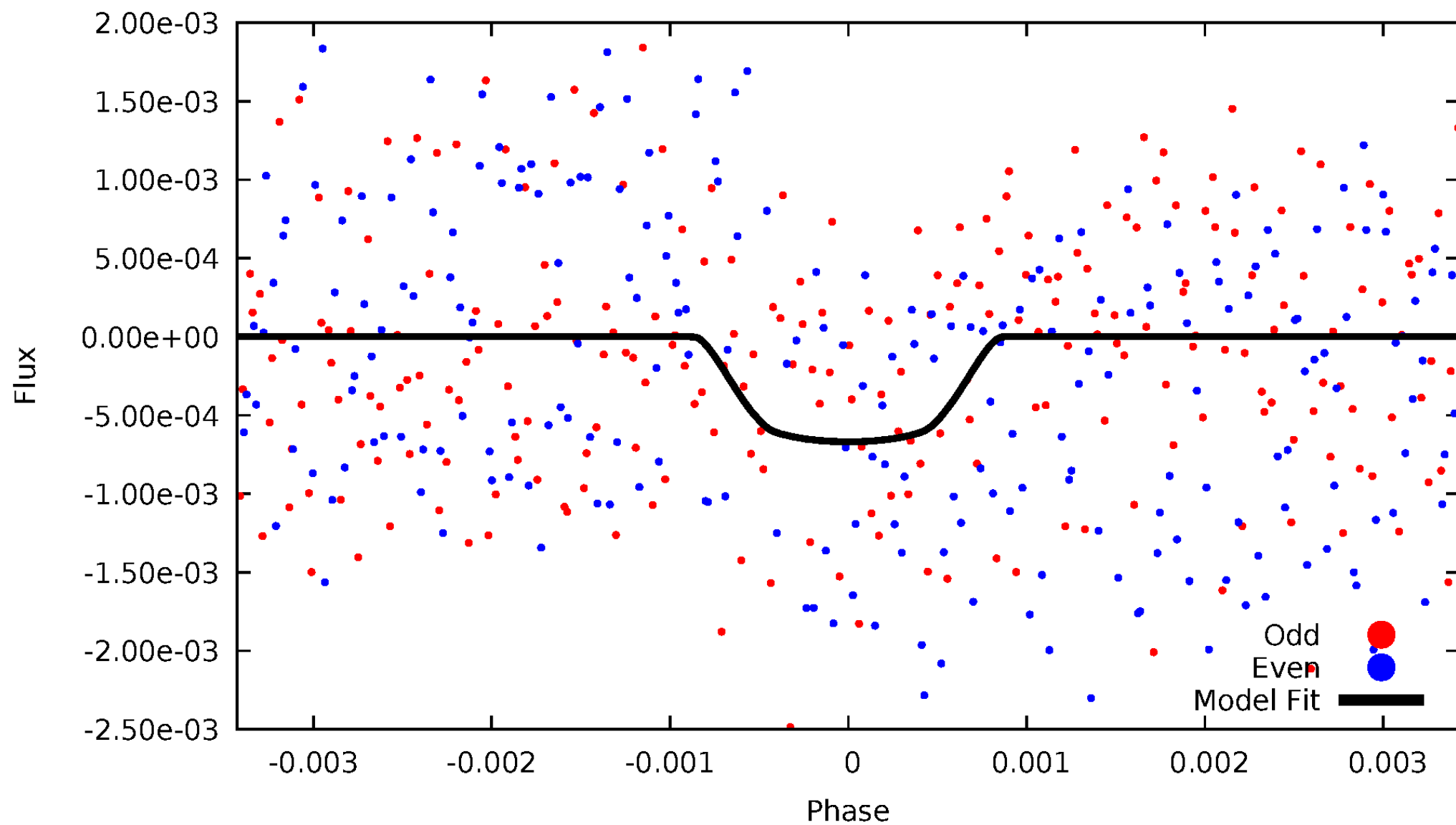


TCE 008874266-03



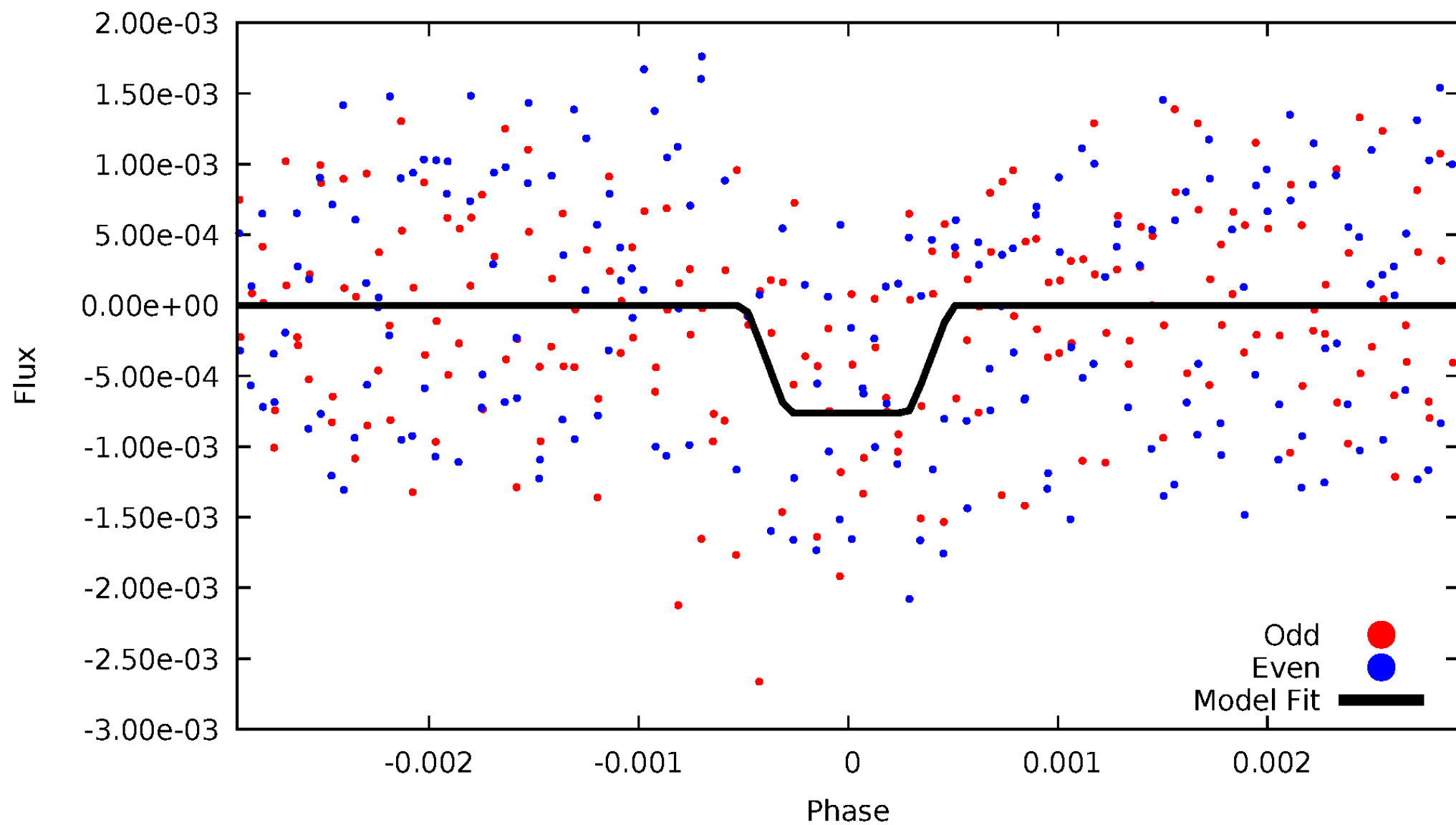
DV Odd/Even

TCE 008874266-03

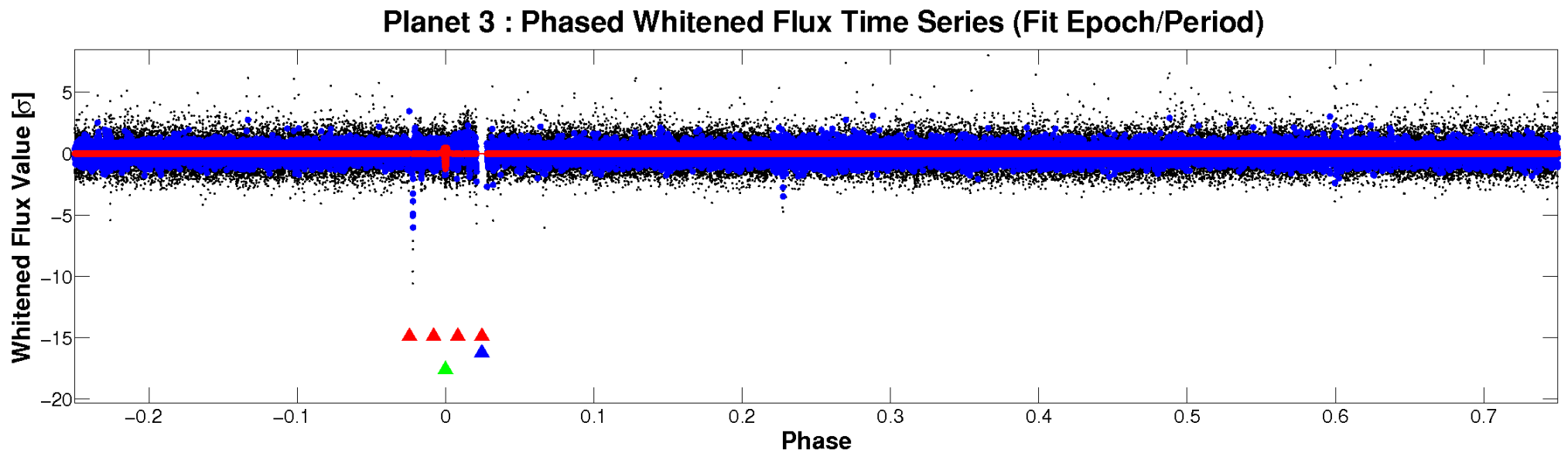
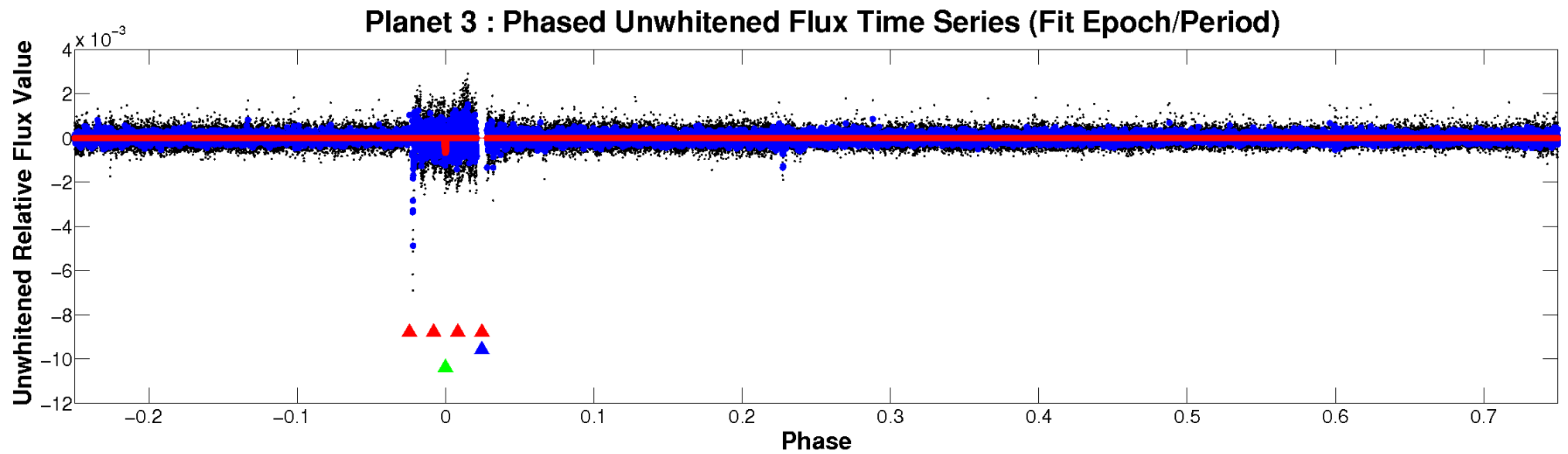


ALT Odd/Even

TCE 008874266-03

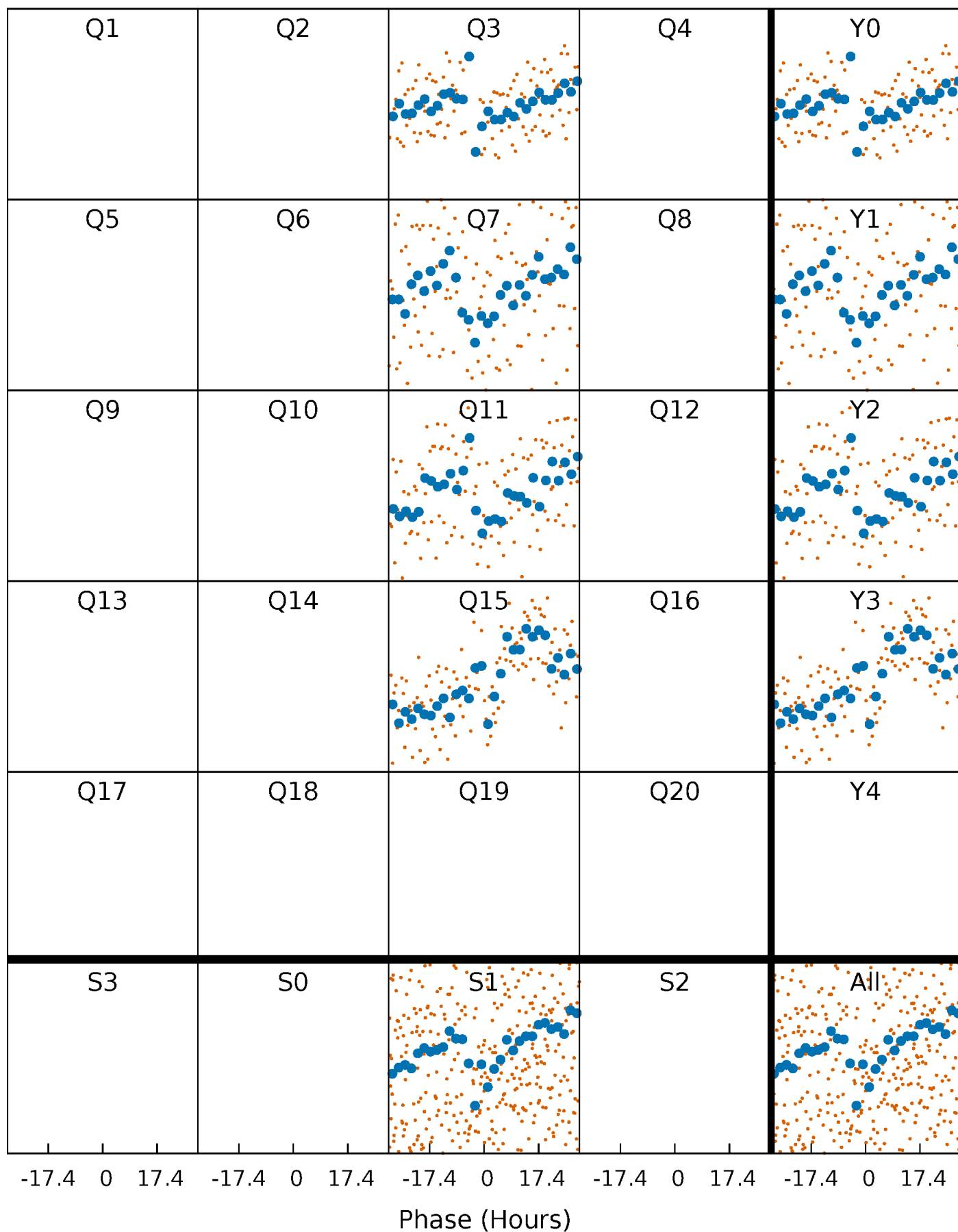


Non-Whitened Vs. Whitened Light Curve



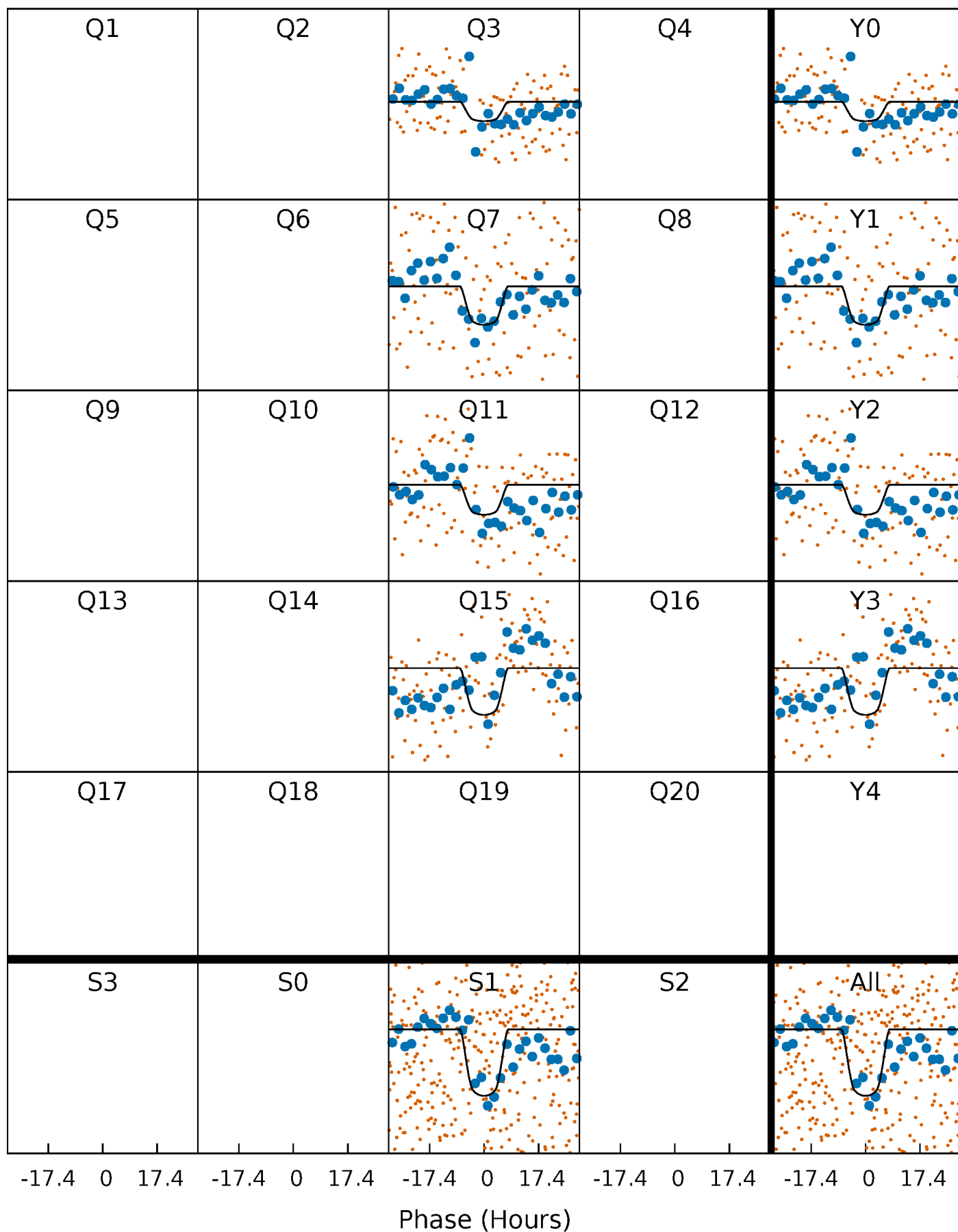
PDC Quarter-Phased Transit Curves

TCE 008874266-03 $P=370.897935$ Days $T_0=267.632055$ (BKJD)



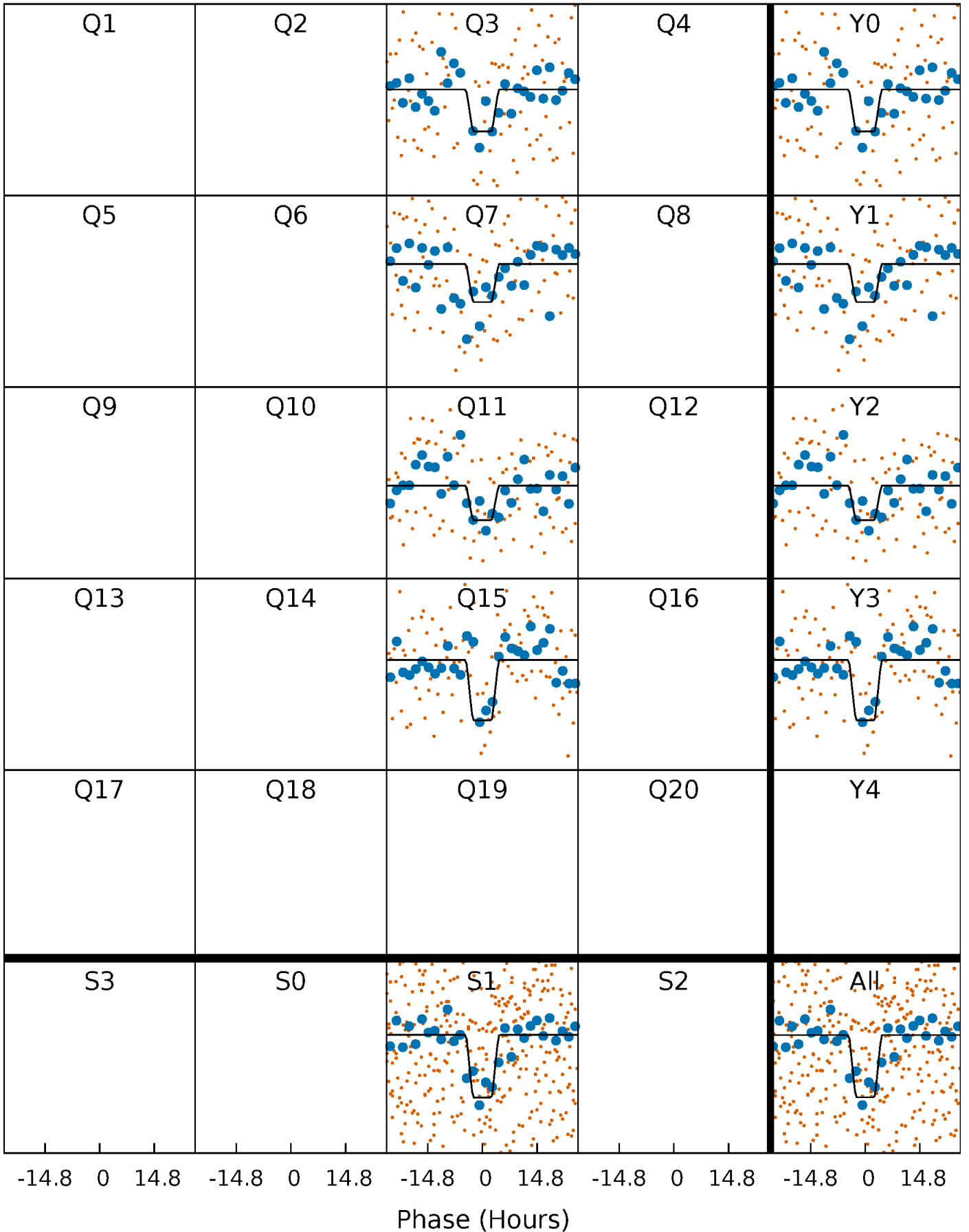
DV Quarter-Phased Transit Curves

TCE 008874266-03 $P=370.897935$ Days $T_0=267.632055$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

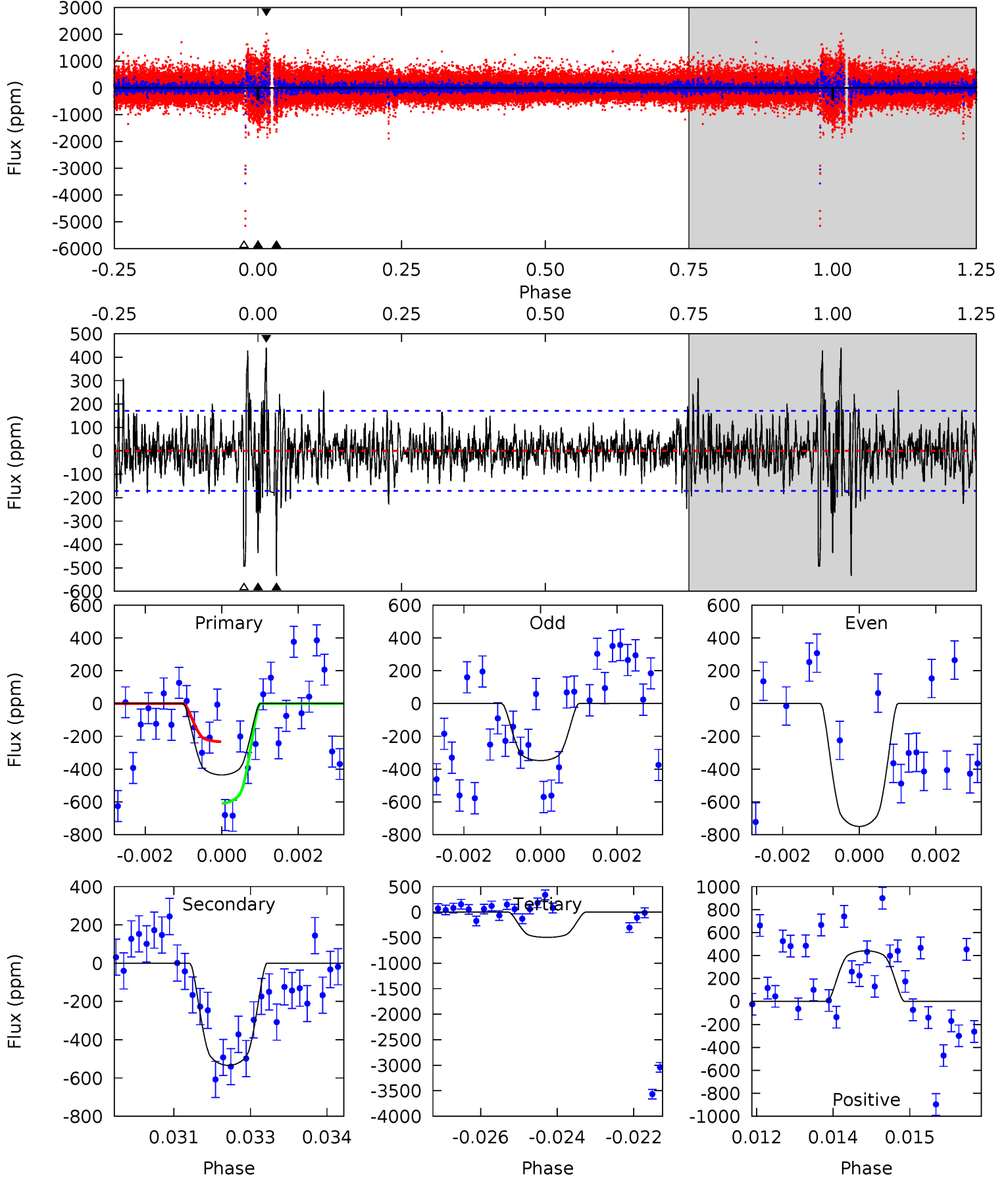
TCE 008874266-03 $P=370.909981$ Days $T_0=267.657262$ (BKJD)



DV Model-Shift Uniqueness Test

008874266-03, P = 370.897935 Days, E = 267.632055 Days

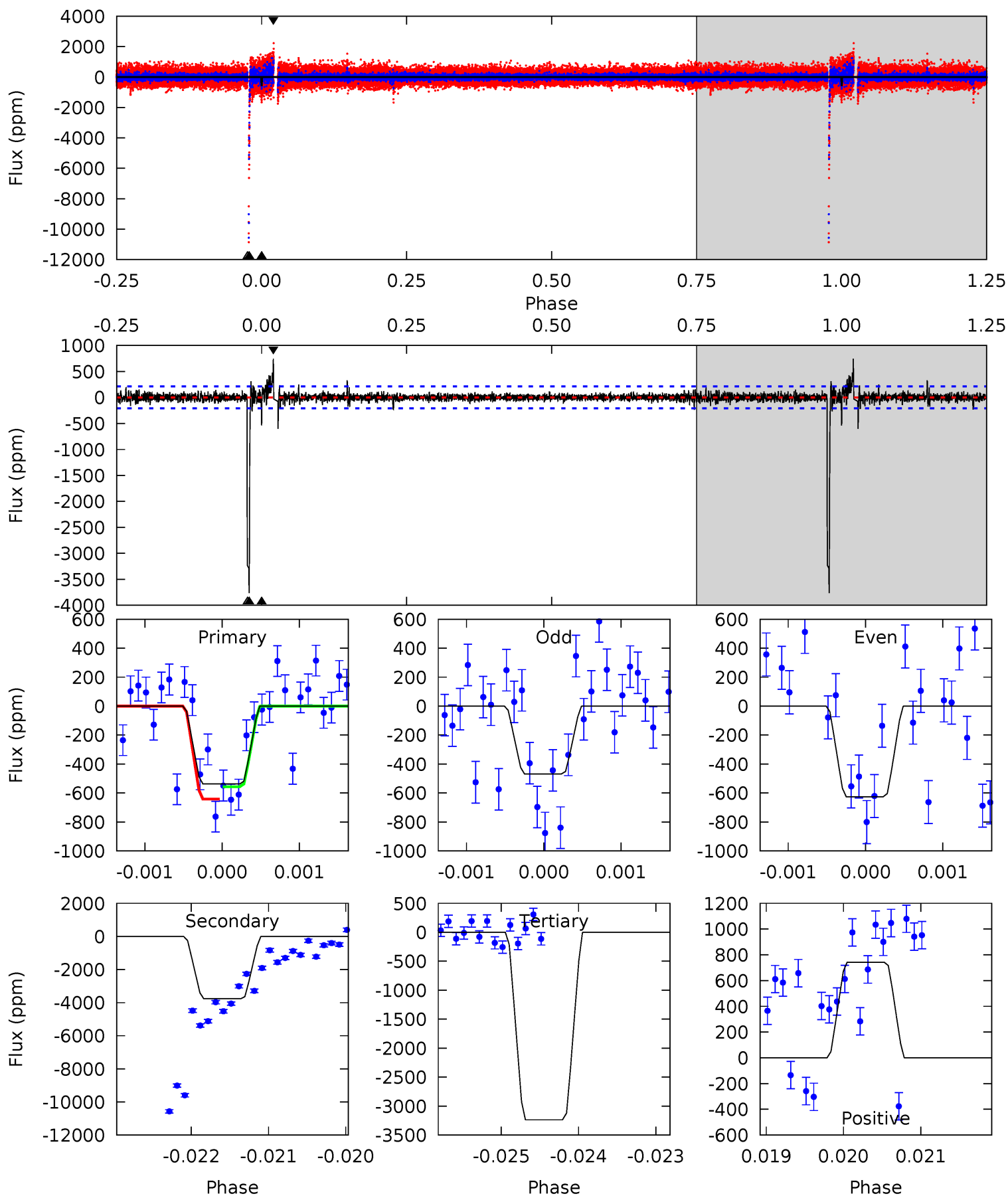
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.6	16.7	15.5	13.8	5.35	3.13	2.17	-1.85	-0.16	1.22	2.91	6.30	0.87	0.45	5.91



Alt Model-Shift Uniqueness Test

008874266-03, P = 370.909981 Days, E = 267.657262 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.8	97.0	83.4	19.1	5.44	3.28	1.81	-69.5	-5.29	13.6	77.9	1.84	0.94	0.16	1.07



Stellar Parameters For KIC 008874266

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5616^{+152}_{-169}	$4.483^{+0.075}_{-0.175}$	$-0.080^{+0.300}_{-0.300}$	$0.902^{+0.229}_{-0.098}$	$0.901^{+0.104}_{-0.085}$	$1.732^{+0.626}_{-0.791}$
	+3%/-3%	+2%/-4%	+375%/-375%	+25%/-11%	+12%/-9%	+36%/-46%
Source	PHO1	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 008874266-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-534 ± 32	$3.05^{+0.44}_{-0.34}$	335^{+21}_{-15}	4970^{+235}_{-215}	29980^{+8018}_{-6926}
Alt.	-3766 ± 39	$2.78^{+0.46}_{-0.35}$	336^{+22}_{-16}	8691^{+733}_{-609}	253744^{+76452}_{-64966}

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

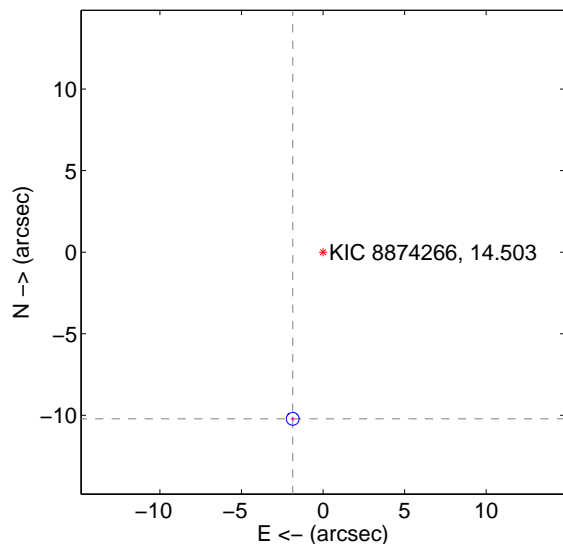
Supplemental centroid analysis for 008874266-03. Kepler magnitude: 14.50. Transit SNR 9.34

There are 0 quarters with good PRF difference image offsets

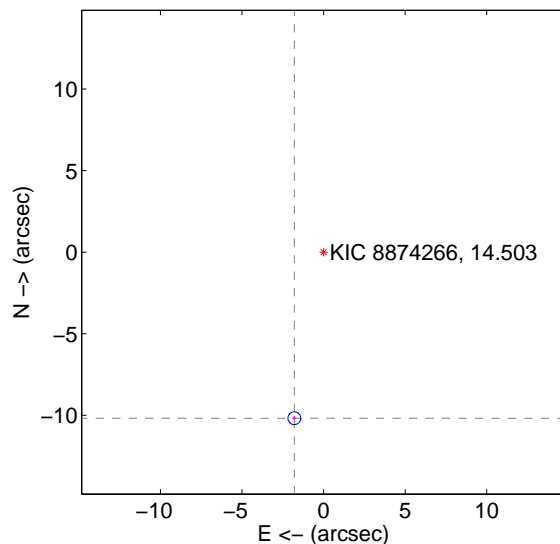
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	10.388 ± 0.131	79.45	1.859 ± 0.118	-10.221 ± 0.131
PRF-fit source offset from KIC position	10.340 ± 0.131	79.06	1.795 ± 0.118	-10.183 ± 0.131
photometric centroid source offset	6.08 ± 2.10	2.90	-6.07 ± 2.10	-0.33 ± 2.50

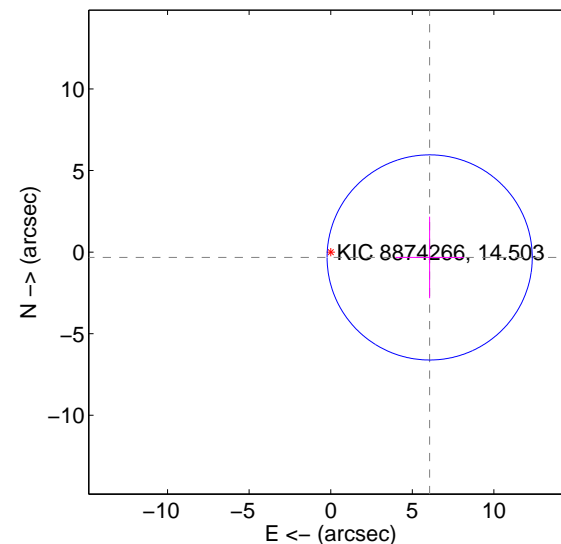
offset from difference PRF-fit to OOT PRF-fit



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.

Q5 no difference image



Q5 no OOT image



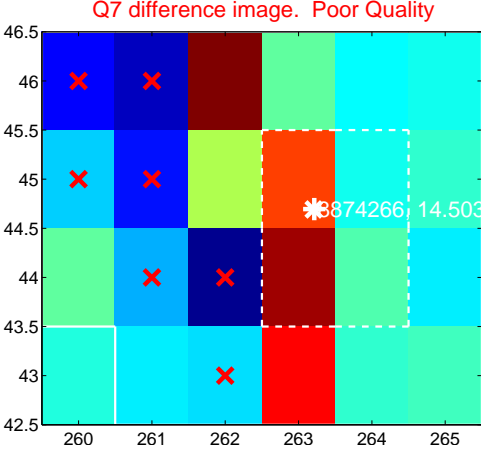
Q6 no difference image



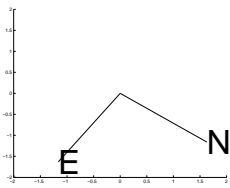
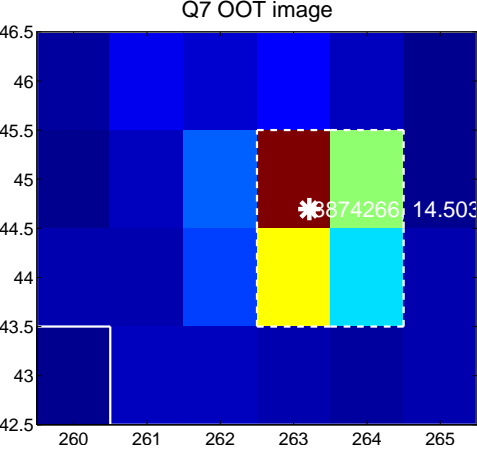
Q6 no OOT image



Q7 difference image. Poor Quality



Q7 OOT image



Q8 no difference image



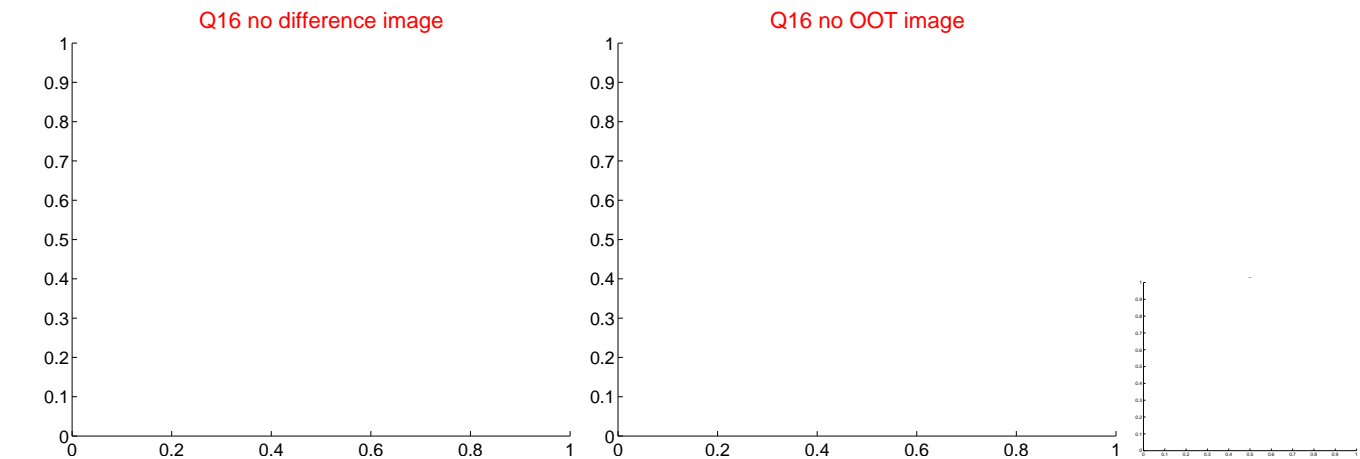
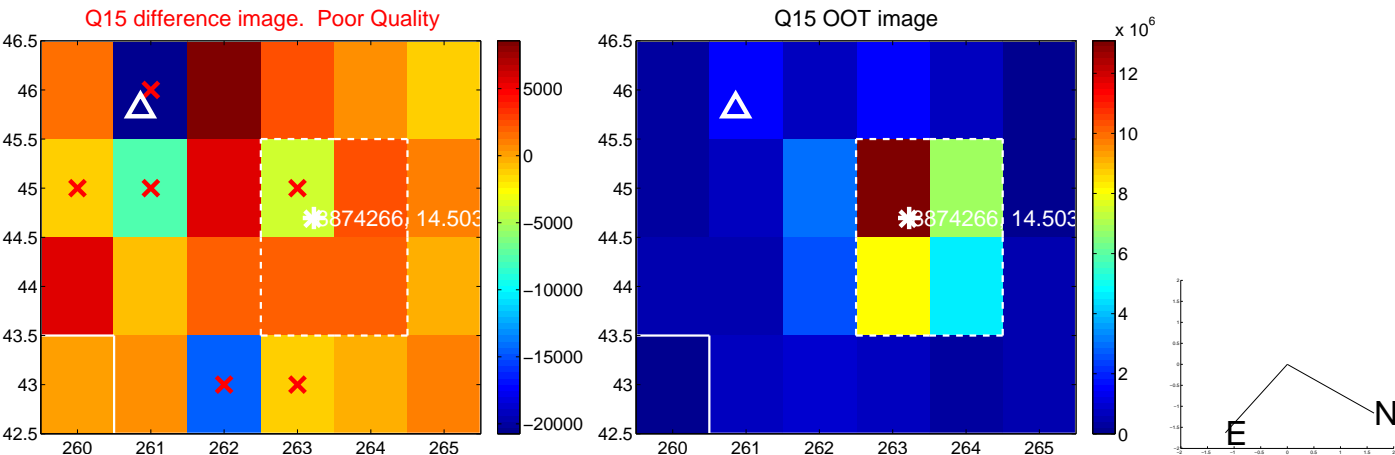
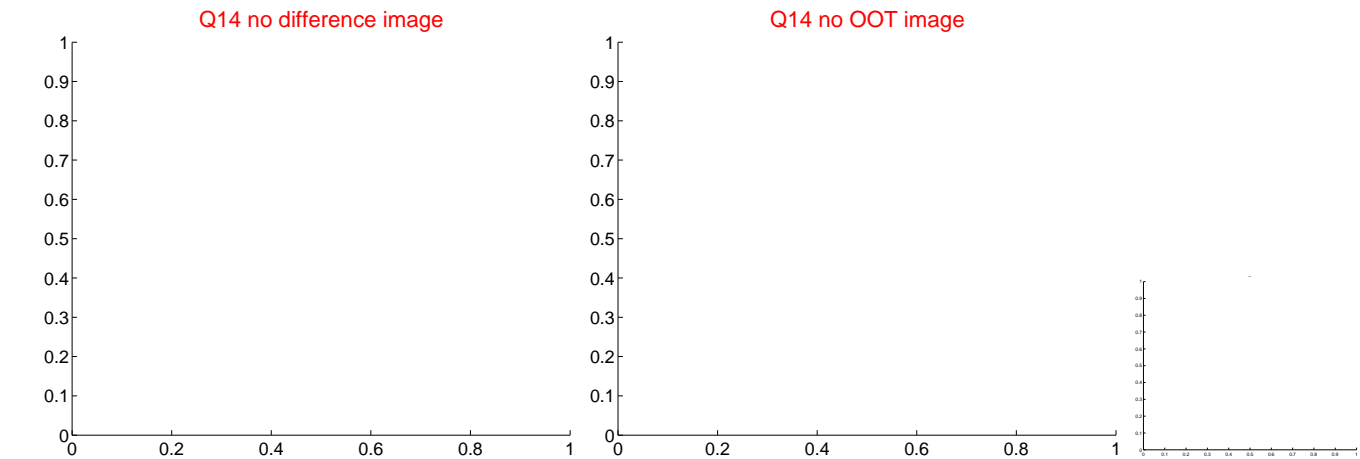
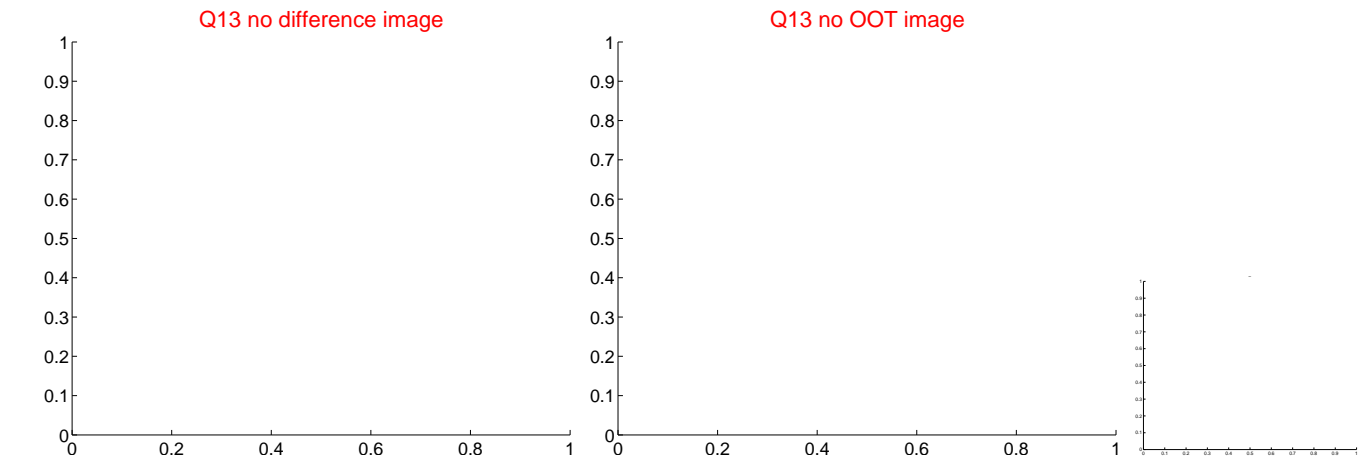
Q8 no OOT image



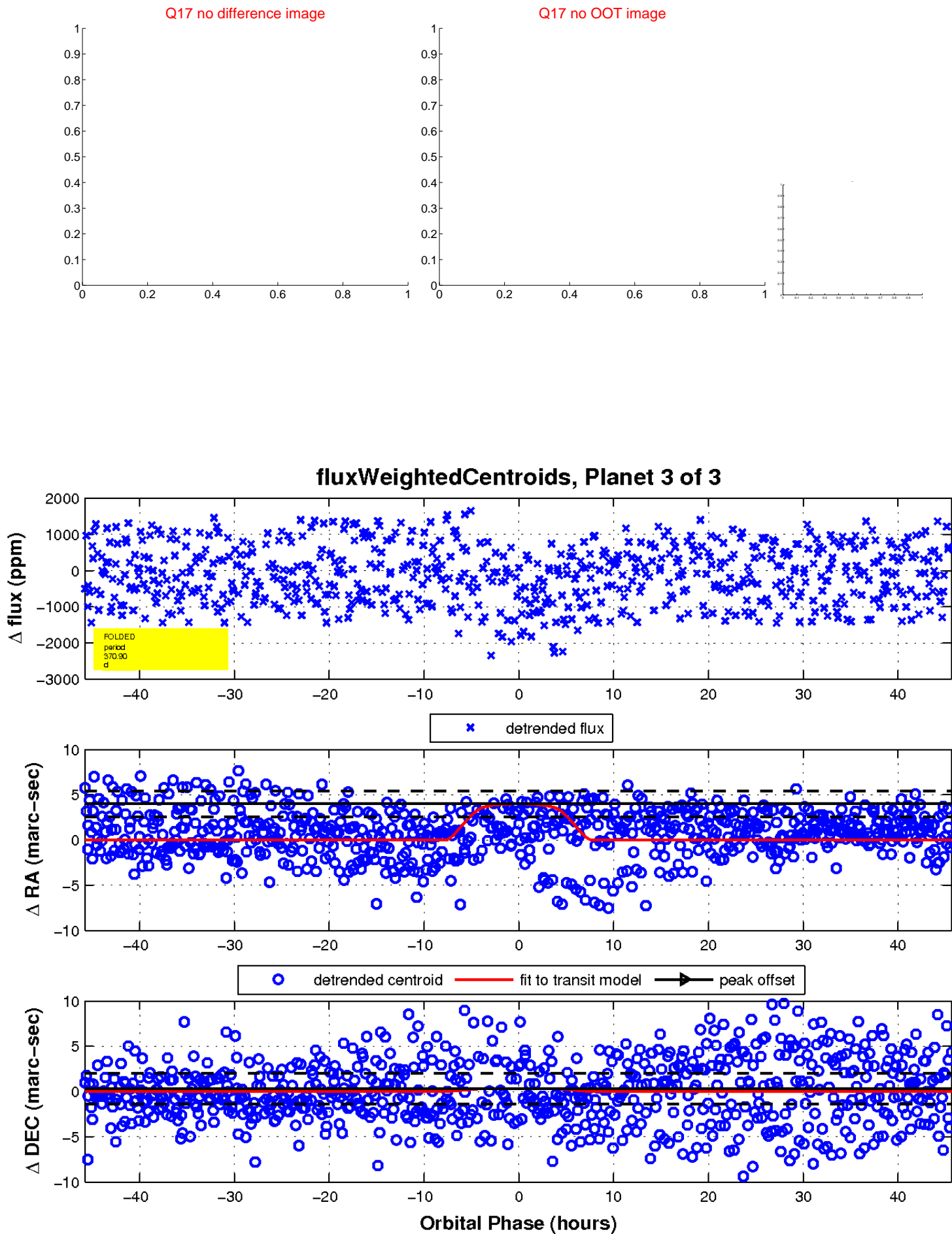
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

