

KIC 007848068

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})
007848068-01	OBS	No	575.521187	208.337675	333.1	8.998	14.3	3.9	3.94	5189	7.08	3.71
007848068-02	OBS	No	448.713744	196.520832	454.9	21.491	13.2	6.0	3.94	5189	8.30	5.17
007848068-04	OBS	No	437.787617	373.711139	588.1	7.491	9.5	7.8	3.94	5189	12.15	5.34

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007848068-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007848068-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
007848068-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—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.

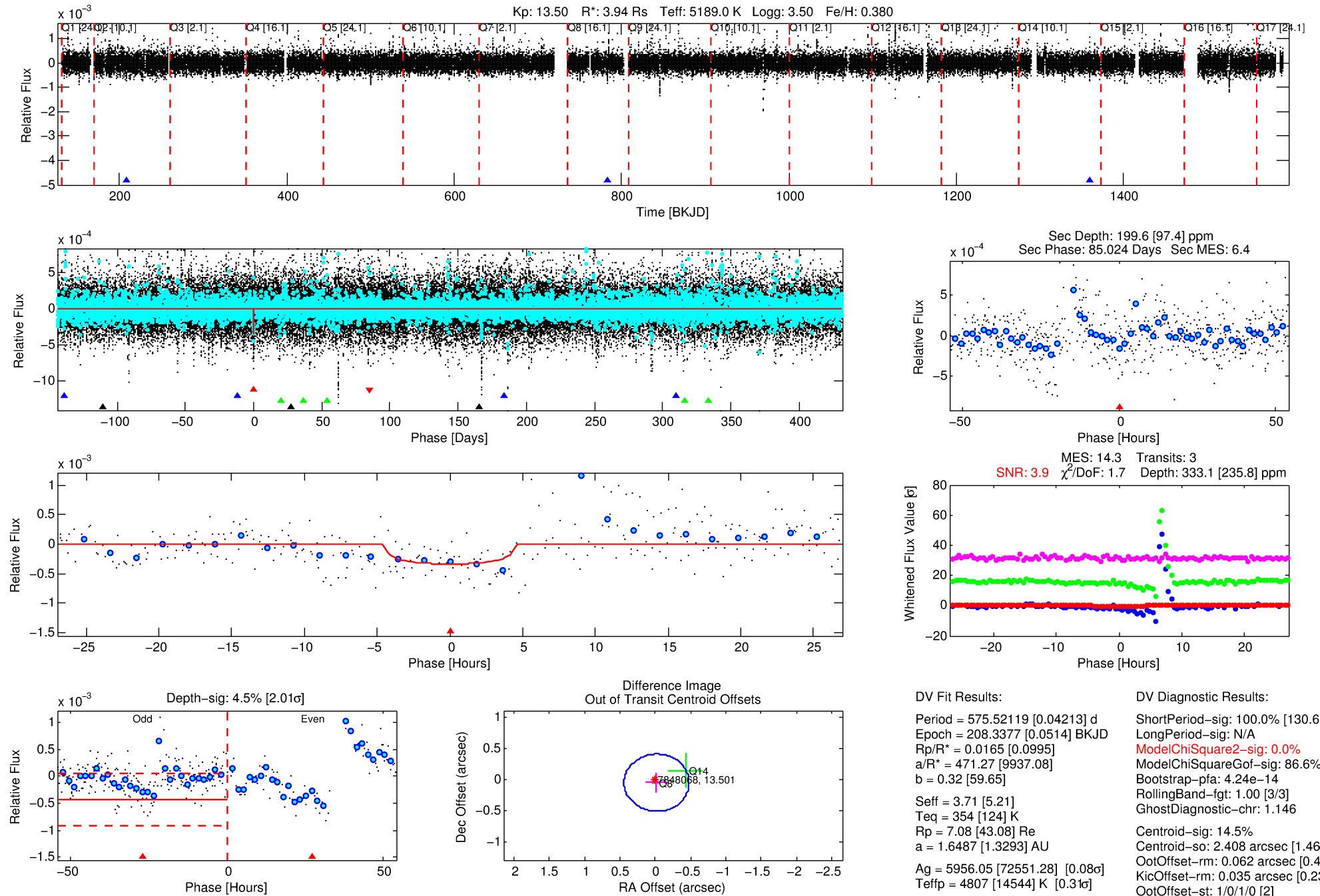
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007848068-01

No Significant Match Found

DV One-Page Summary

KIC: 7848068 Candidate: 1 of 4 Period: 575.521 d



DV Fit Results:

Period = 575.52119 [0.04213] d
Epoch = 208.3377 [0.0514] BKJD
Rp/R* = 0.0165 [0.0995]
a/R* = 471.27 [9937.08]
b = 0.32 [59.65]
Seff = 3.71 [5.21]
Teq = 354 [124] K
Rp = 7.08 [43.08] Re
a = 1.6487 [1.3293] AU
Ag = 5956.05 [72551.28] [0.08 σ]
Teffp = 4807 [14544] K [0.31 σ]

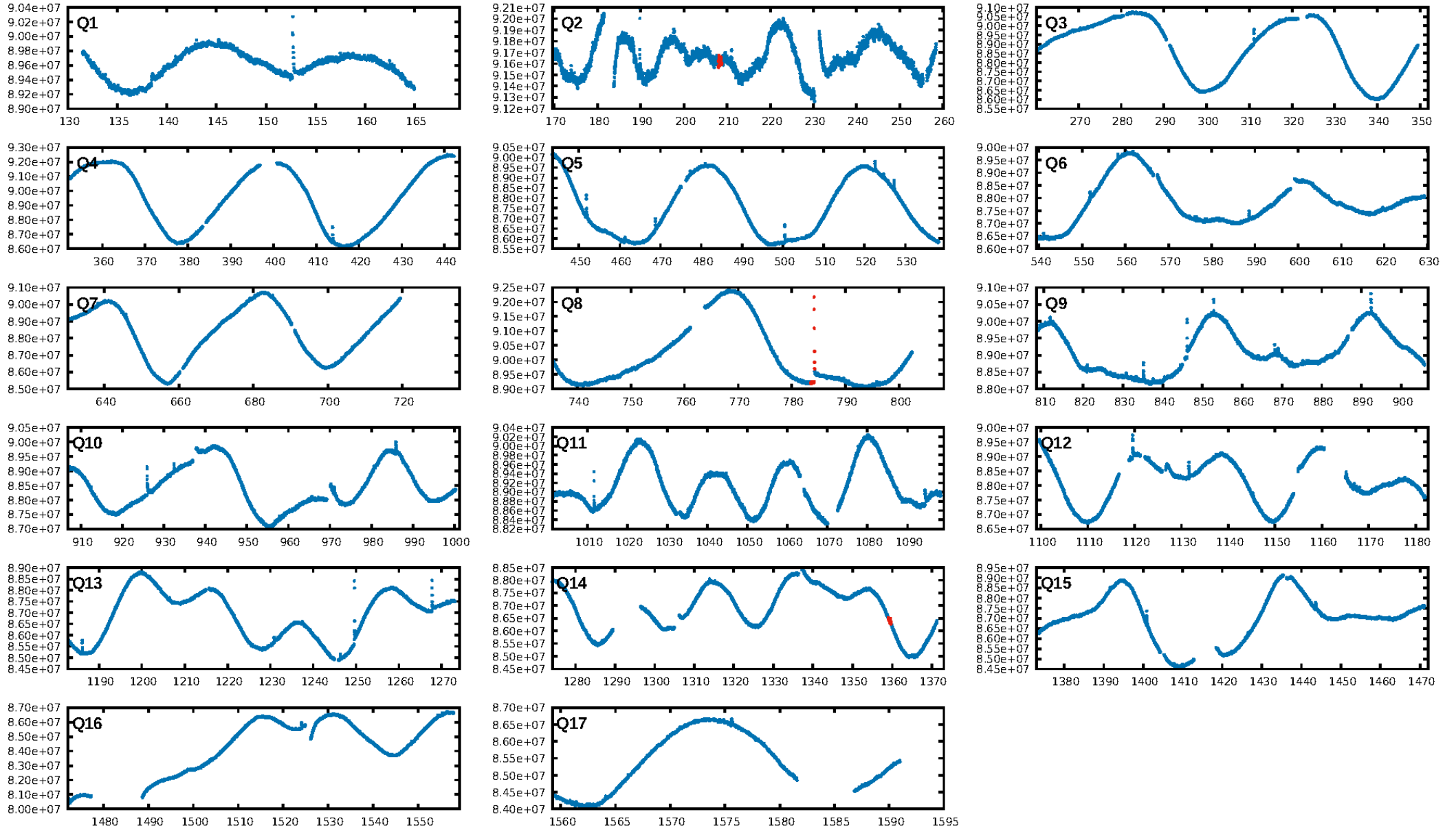
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [130.63 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 86.6%
Bootstrap-pfa: 4.24e-14
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.146
Centroid-sig: 14.5%
Centroid-so: 2.408 arcsec [1.46 σ]
OotOffset-rm: 0.062 arcsec [0.40 σ]
KicOffset-rm: 0.035 arcsec [0.23 σ]
OotOffset-st: 1/0/1/0 [2]
KicOffset-st: 1/0/1/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [3/3]

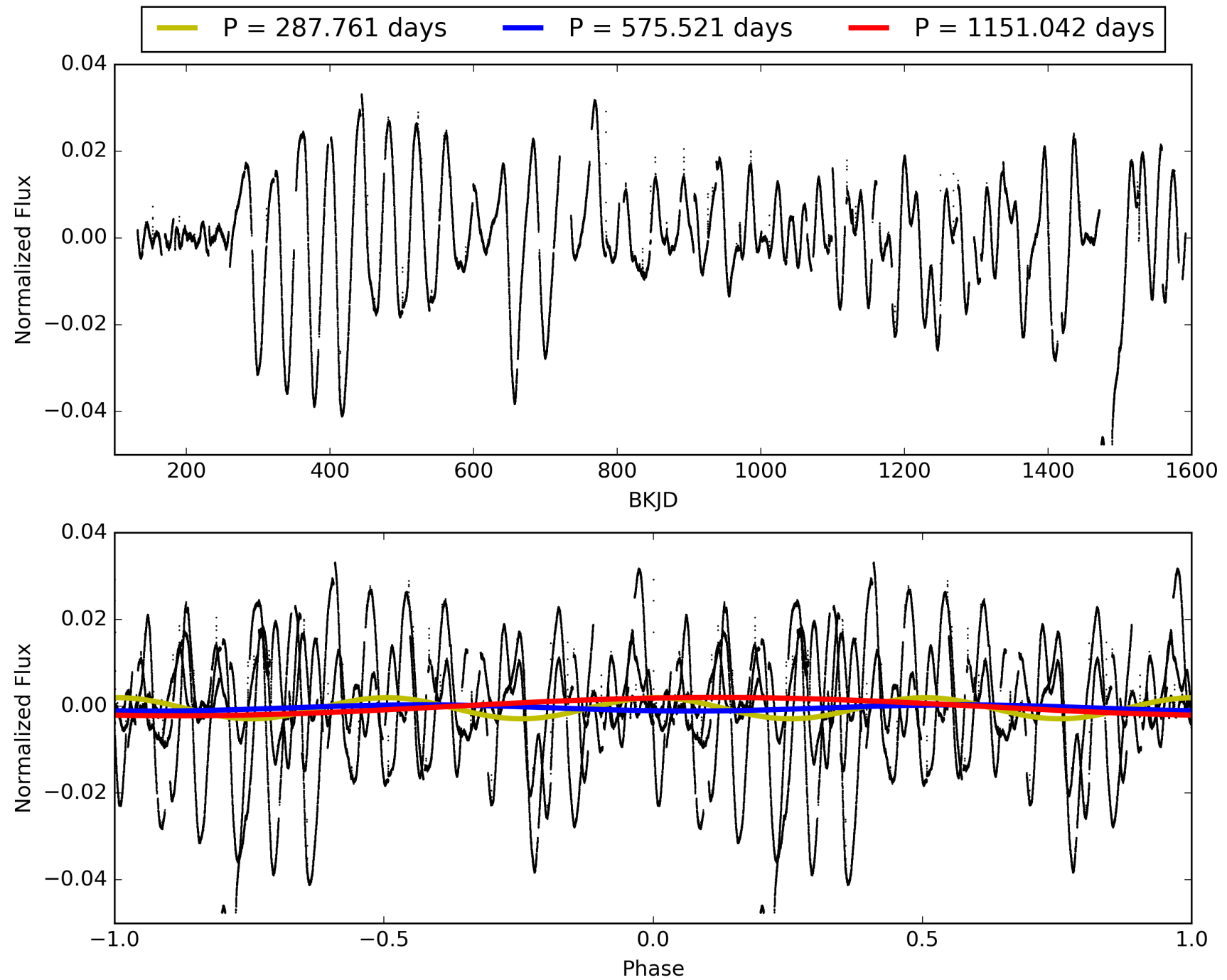
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 09:13:27 Z

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

TCE 007848068-01, PDC Light Curves

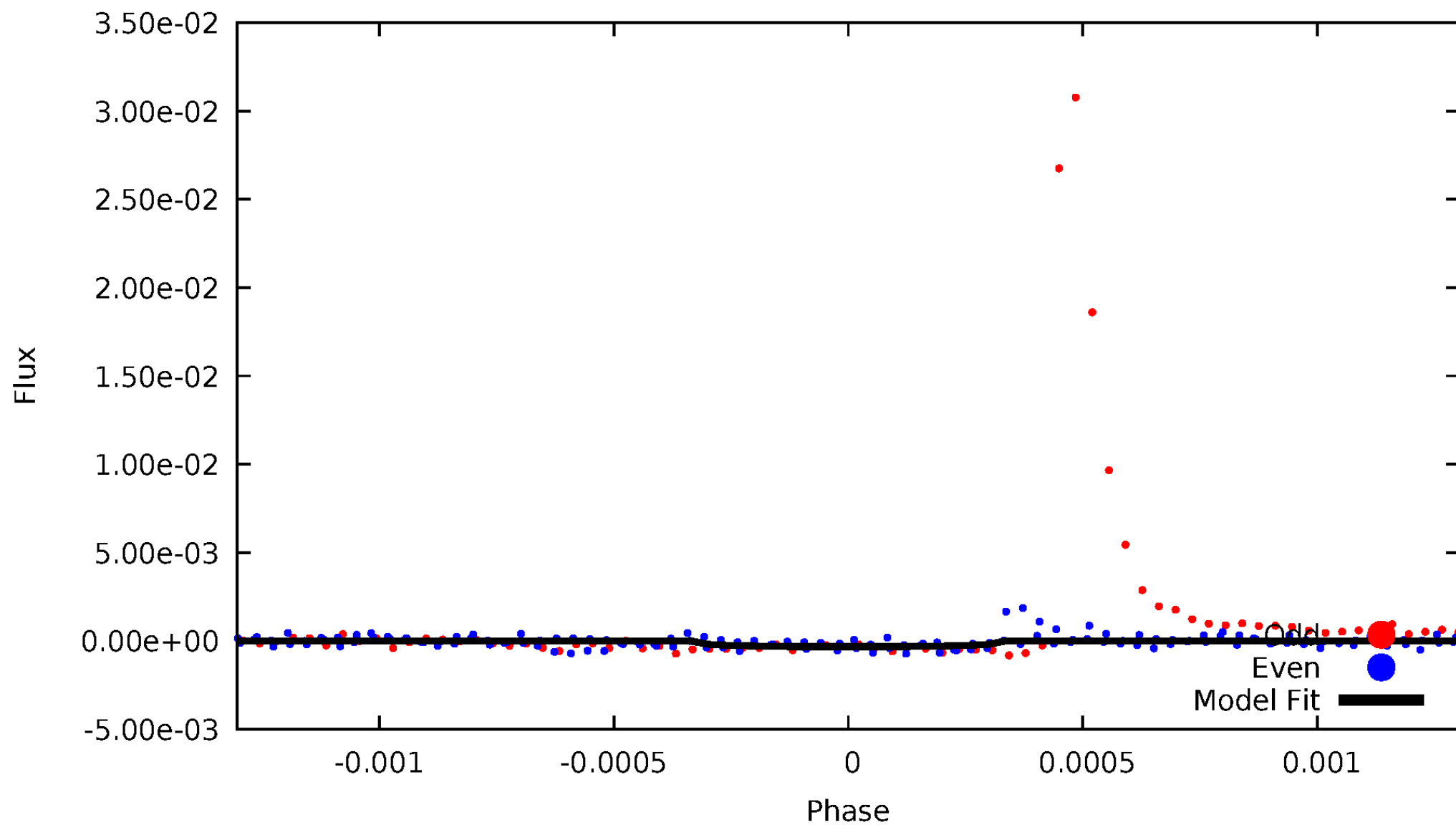


TCE 007848068-01



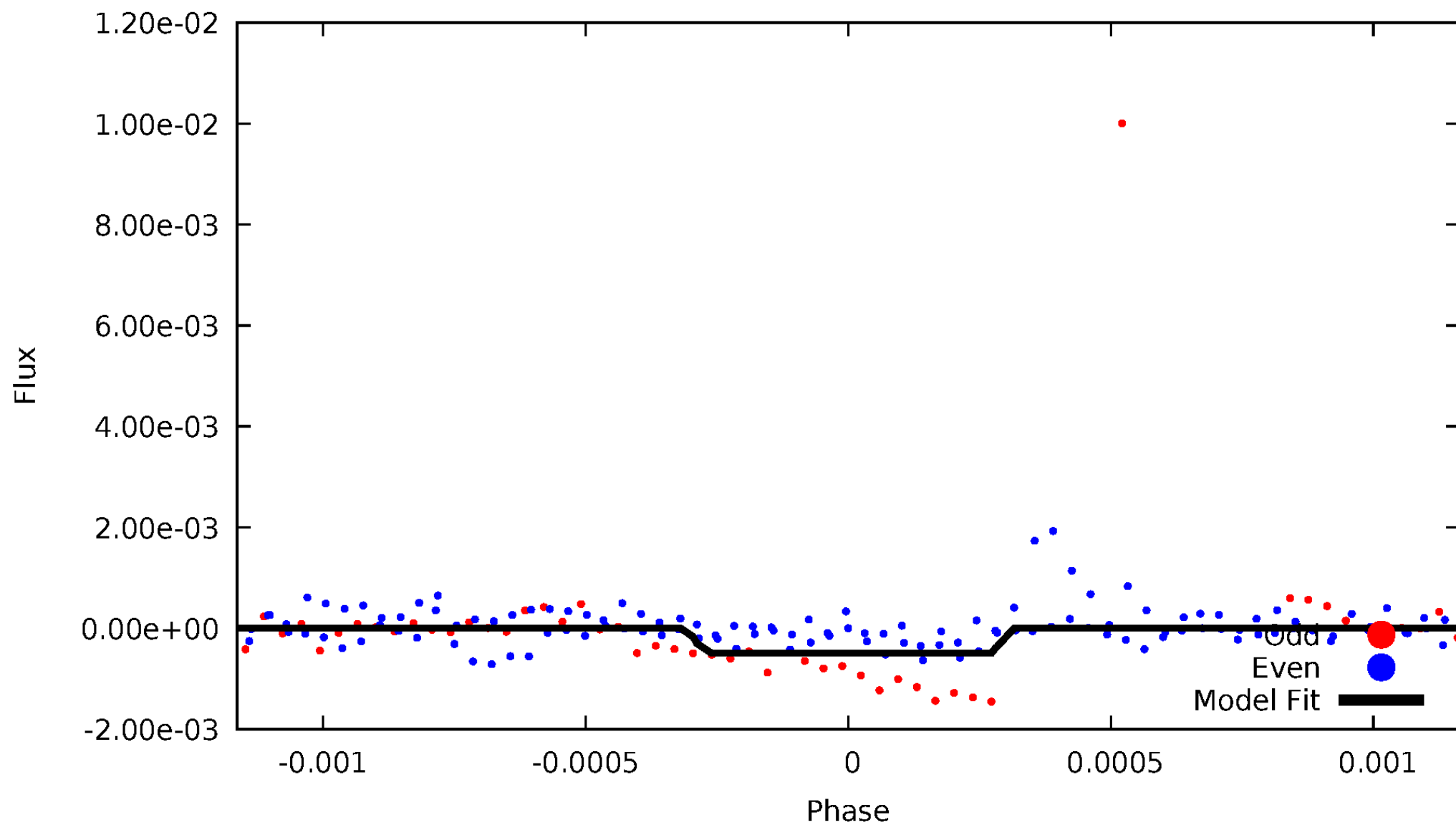
DV Odd/Even

TCE 007848068-01



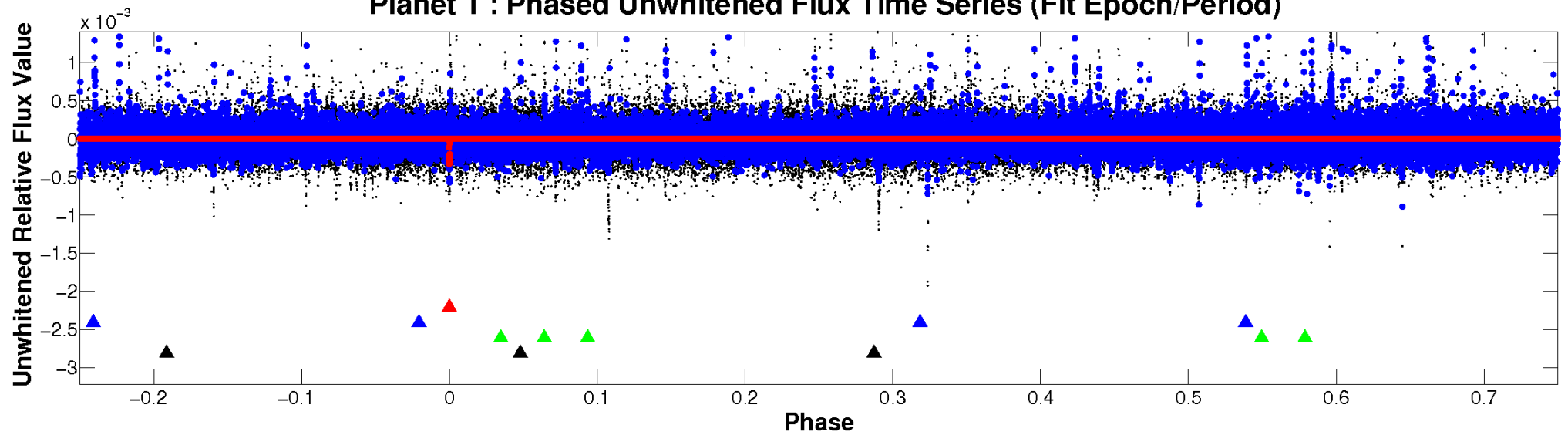
ALT Odd/Even

TCE 007848068-01

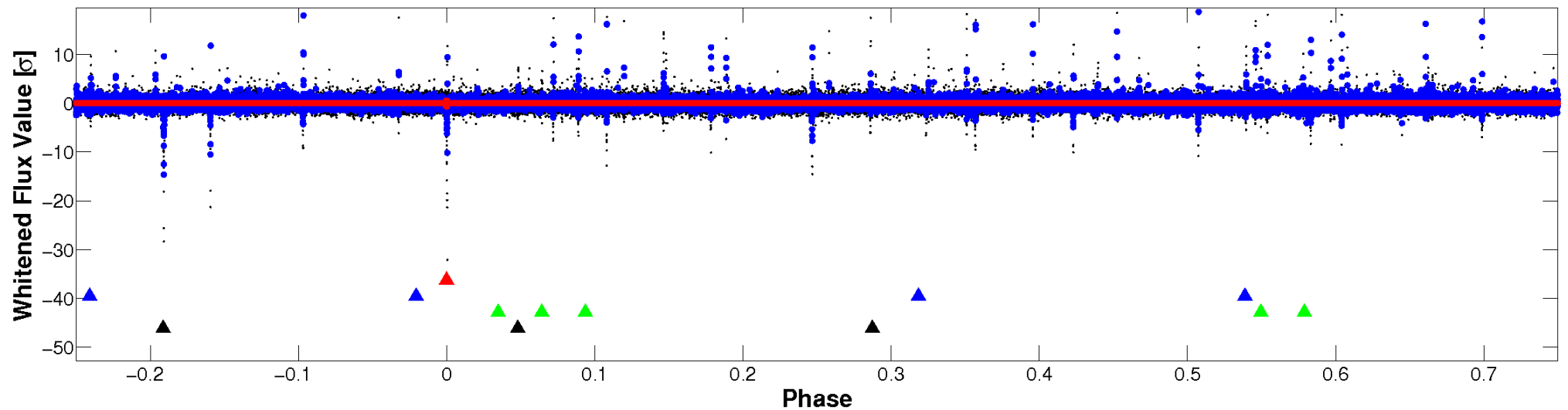


Non-Whitened Vs. Whitened Light Curve

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

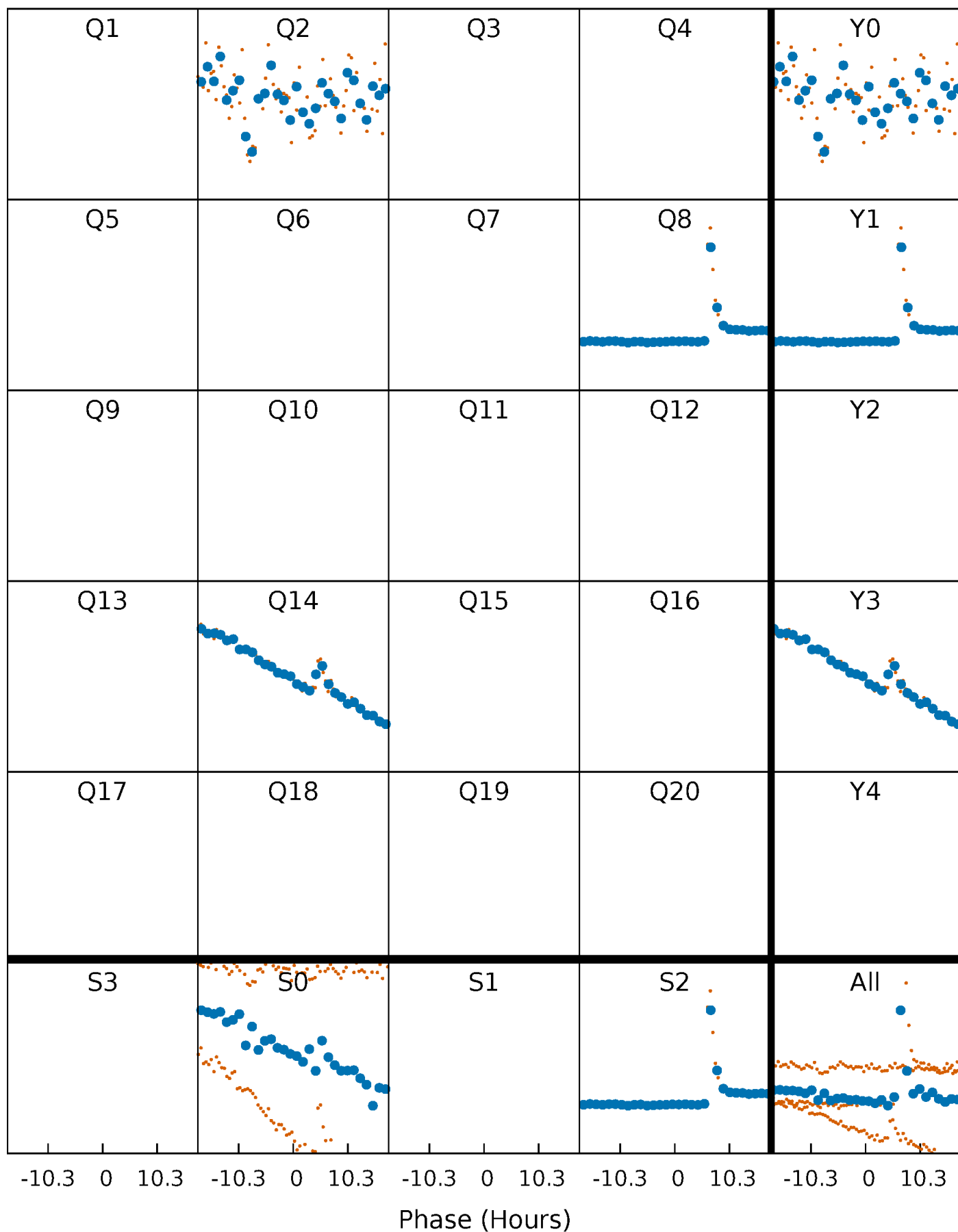


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



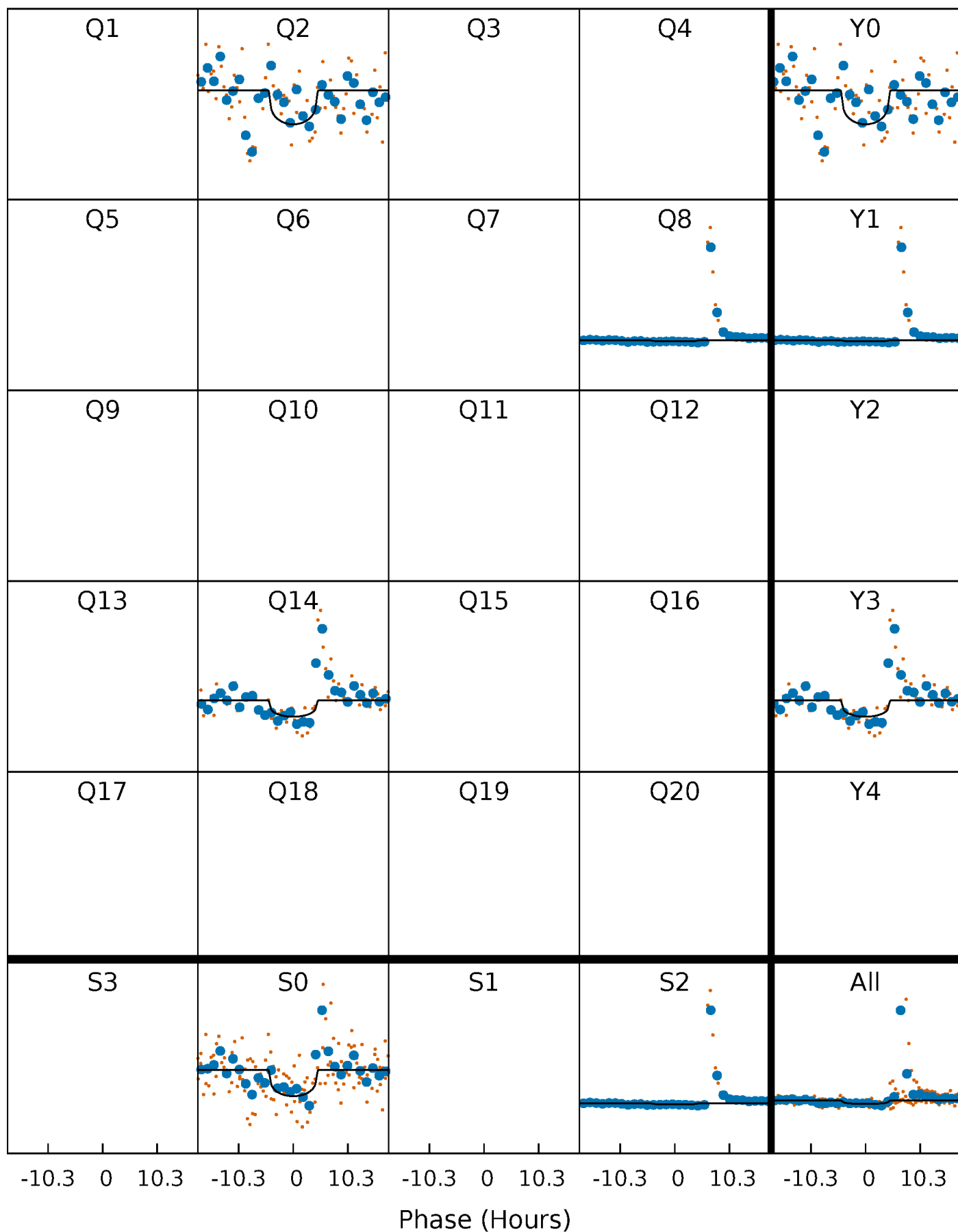
PDC Quarter-Phased Transit Curves

TCE 007848068-01 P=575.521187 Days $T_0=208.337675$ (BKJD)



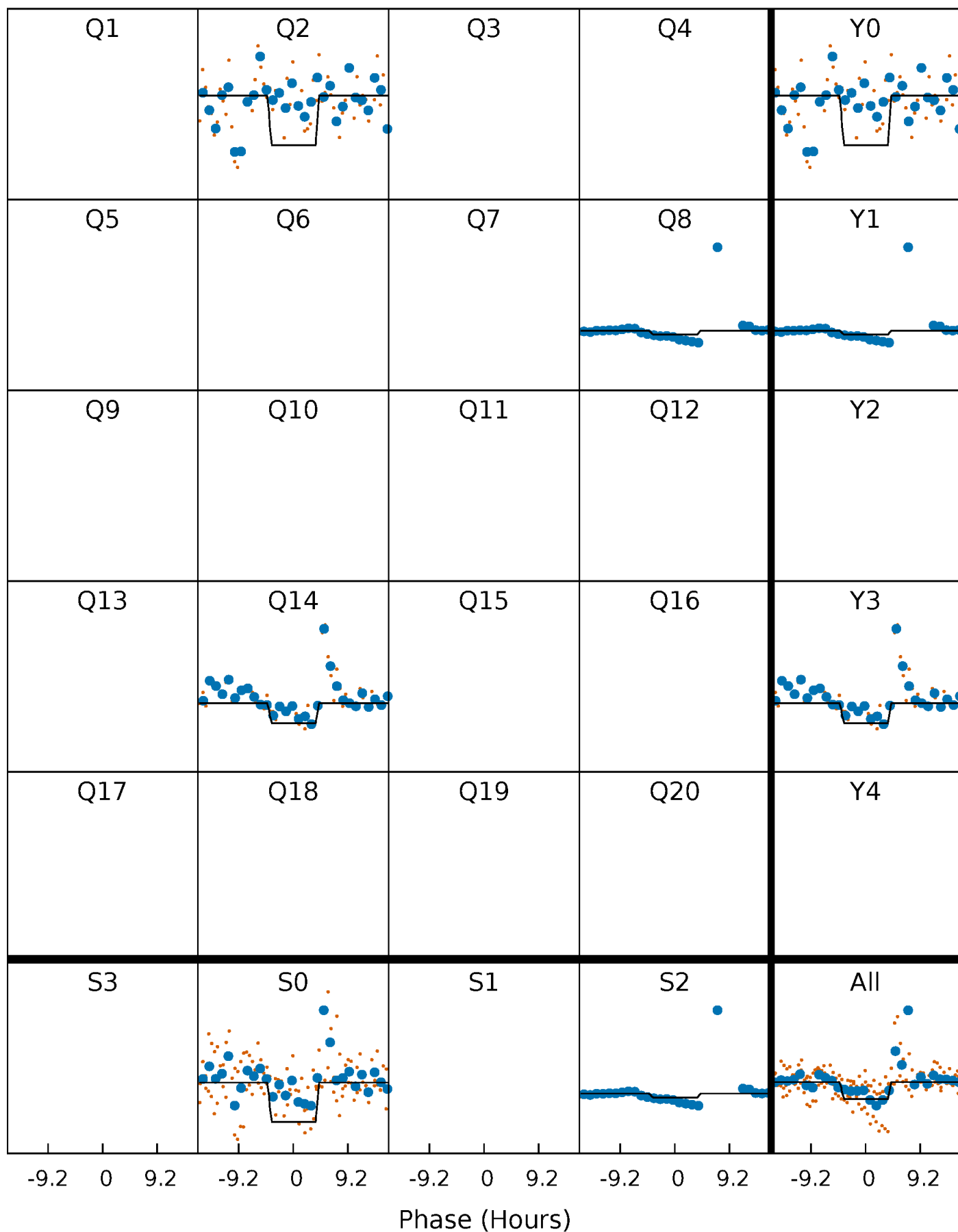
DV Quarter-Phased Transit Curves

TCE 007848068-01 P=575.521187 Days $T_0=208.337675$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

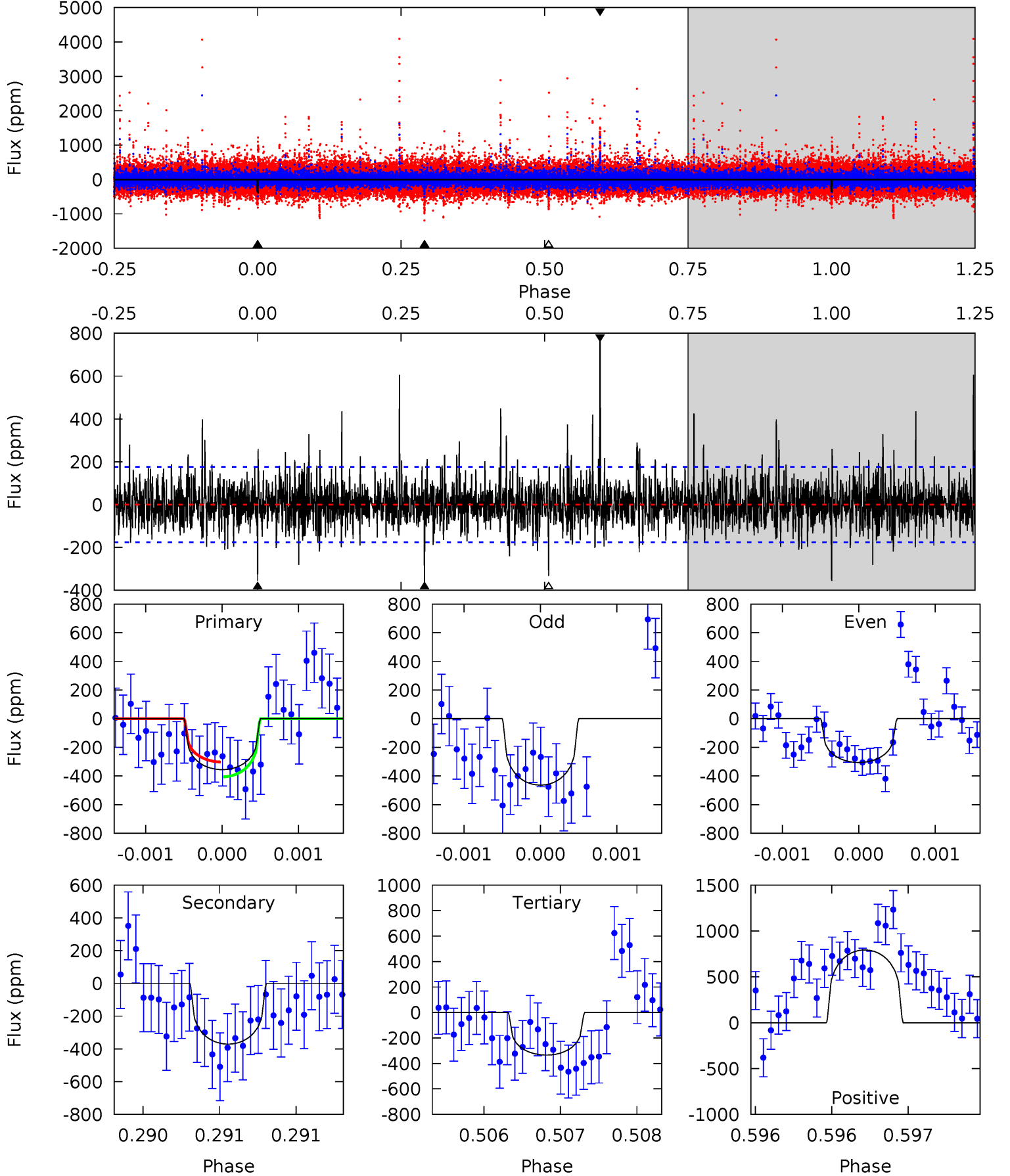
TCE 007848068-01 P=575.490784 Days $T_0=208.388050$ (BKJD)



DV Model-Shift Uniqueness Test

007848068-01, P = 575.521187 Days, E = 208.337675 Days

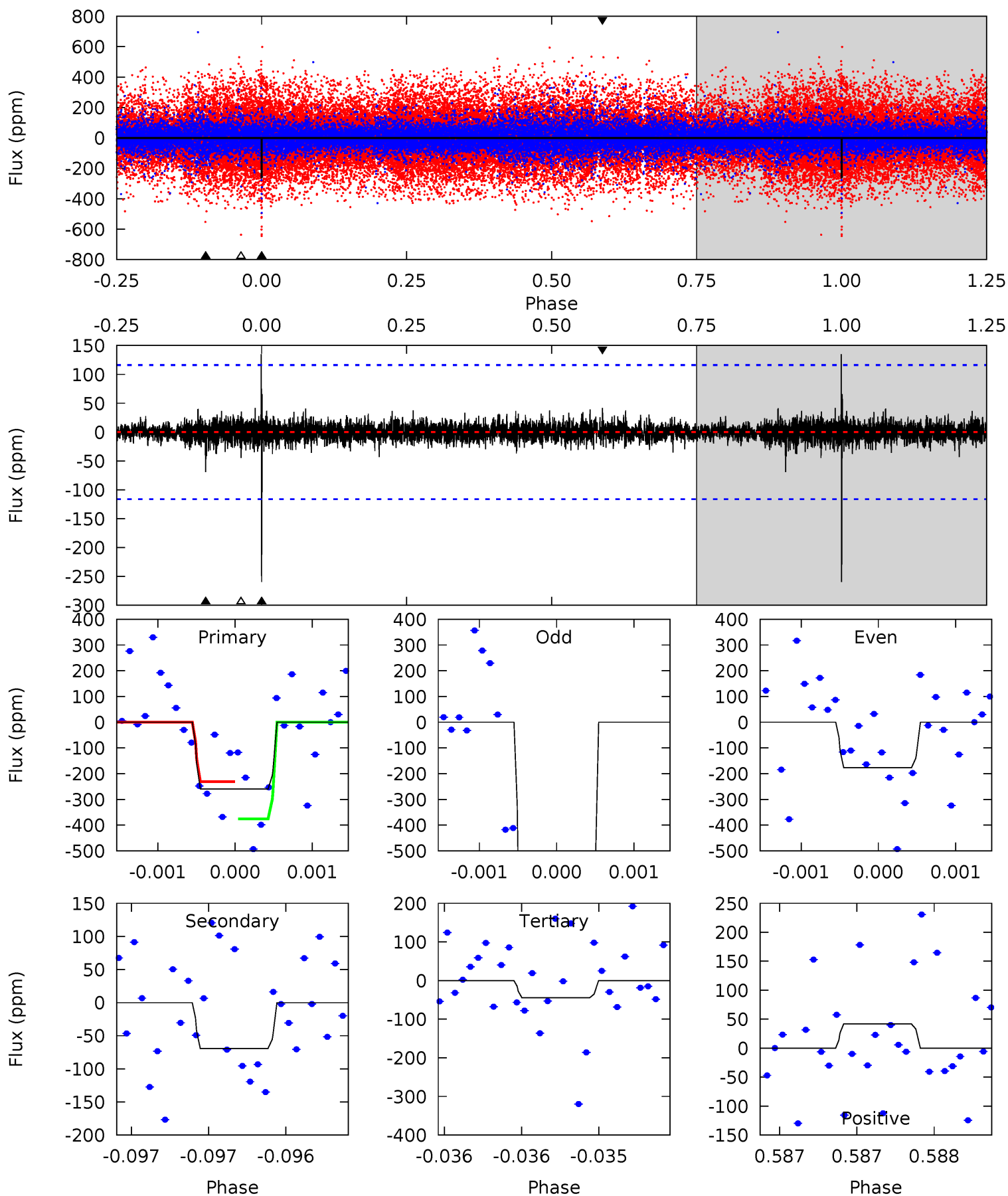
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	11.6	10.5	24.8	5.52	3.40	2.50	0.68	-13.7	1.14	-13.2	1.83	0.83	0.68	1.63



Alt Model-Shift Uniqueness Test

007848068-01, P = 575.490784 Days, E = 208.388050 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.4	3.31	2.12	2.00	5.55	3.44	0.46	10.3	10.4	1.18	1.31	22.1	1.61	0.34	3.42



Stellar Parameters For KIC 007848068

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5189^{+186}_{-207}	$3.503^{+0.856}_{-0.214}$	$0.380^{+0.100}_{-0.300}$	$3.941^{+1.184}_{-2.763}$	$1.805^{+0.214}_{-0.858}$	$0.042^{+1.121}_{-0.022}$
	+4%/-4%	+24%/-6%	+26%/-79%	+30%/-70%	+12%/-48%	+2699%/-53%
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 007848068-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-371 ± 32	$25.79^{+33.95}_{-18.03}$	478^{+59}_{-92}	3209^{+1538}_{-584}	774^{+7700}_{-627}
Alt.	-69 ± 21	$28.10^{+32.32}_{-19.44}$	484^{+55}_{-87}	2512^{+1001}_{-390}	122^{+1227}_{-99}

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 $A_{obs} \gg 1.0$

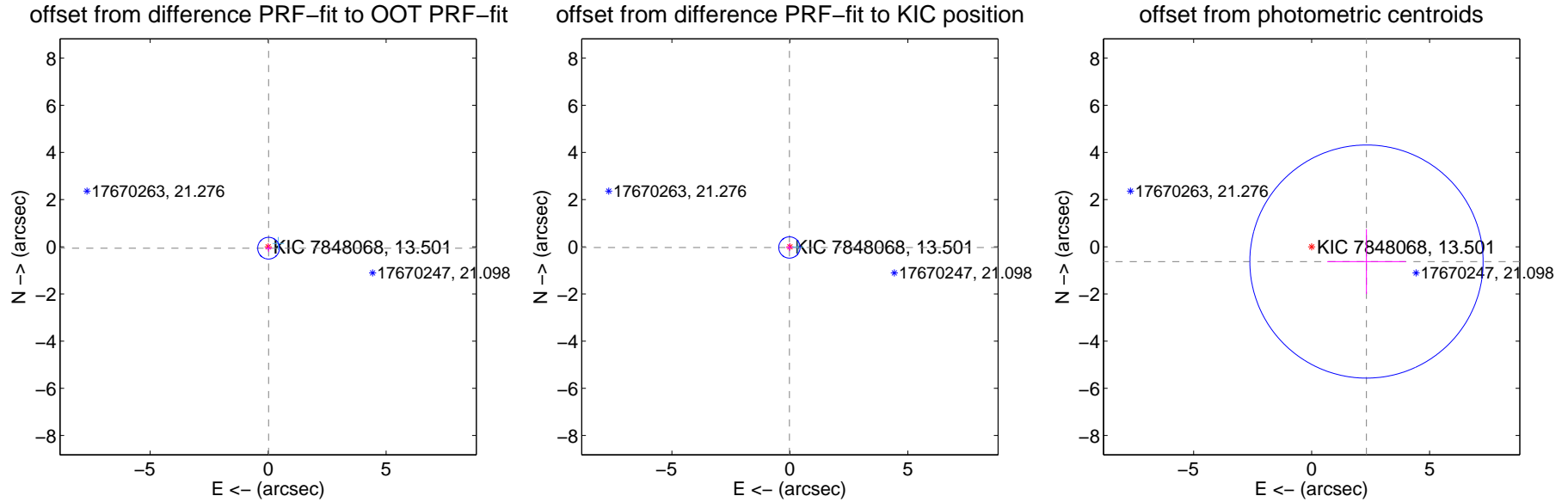
DV Centroid Data

Supplemental centroid analysis for 007848068-01. Kepler magnitude: 13.50. Transit SNR 3.86

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.062 ± 0.154	0.40	-0.018 ± 0.140	-0.059 ± 0.155
PRF-fit source offset from KIC position	0.035 ± 0.151	0.23	0.019 ± 0.140	-0.029 ± 0.155
photometric centroid source offset	2.41 ± 1.65	1.46	-2.33 ± 1.67	-0.63 ± 1.38



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.

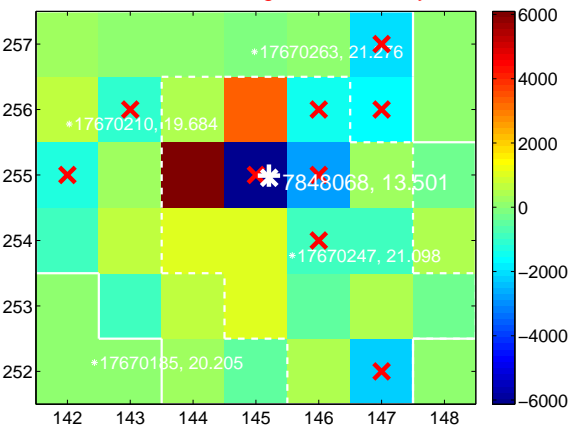
Q1 no difference image



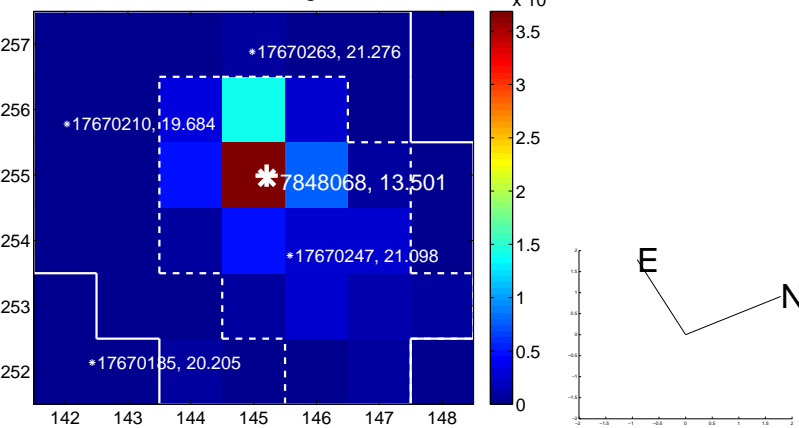
Q1 no OOT image



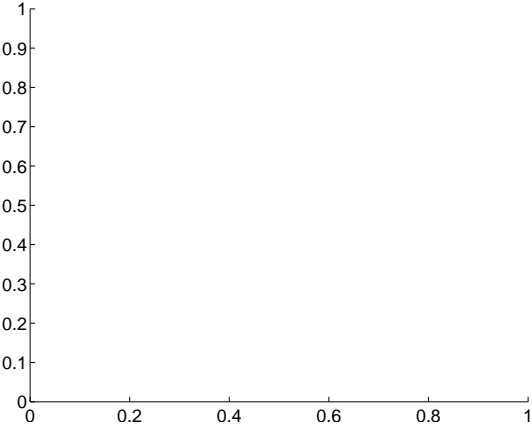
Q2 difference image. Poor Quality



Q2 OOT image



Q3 no difference image



Q3 no OOT image



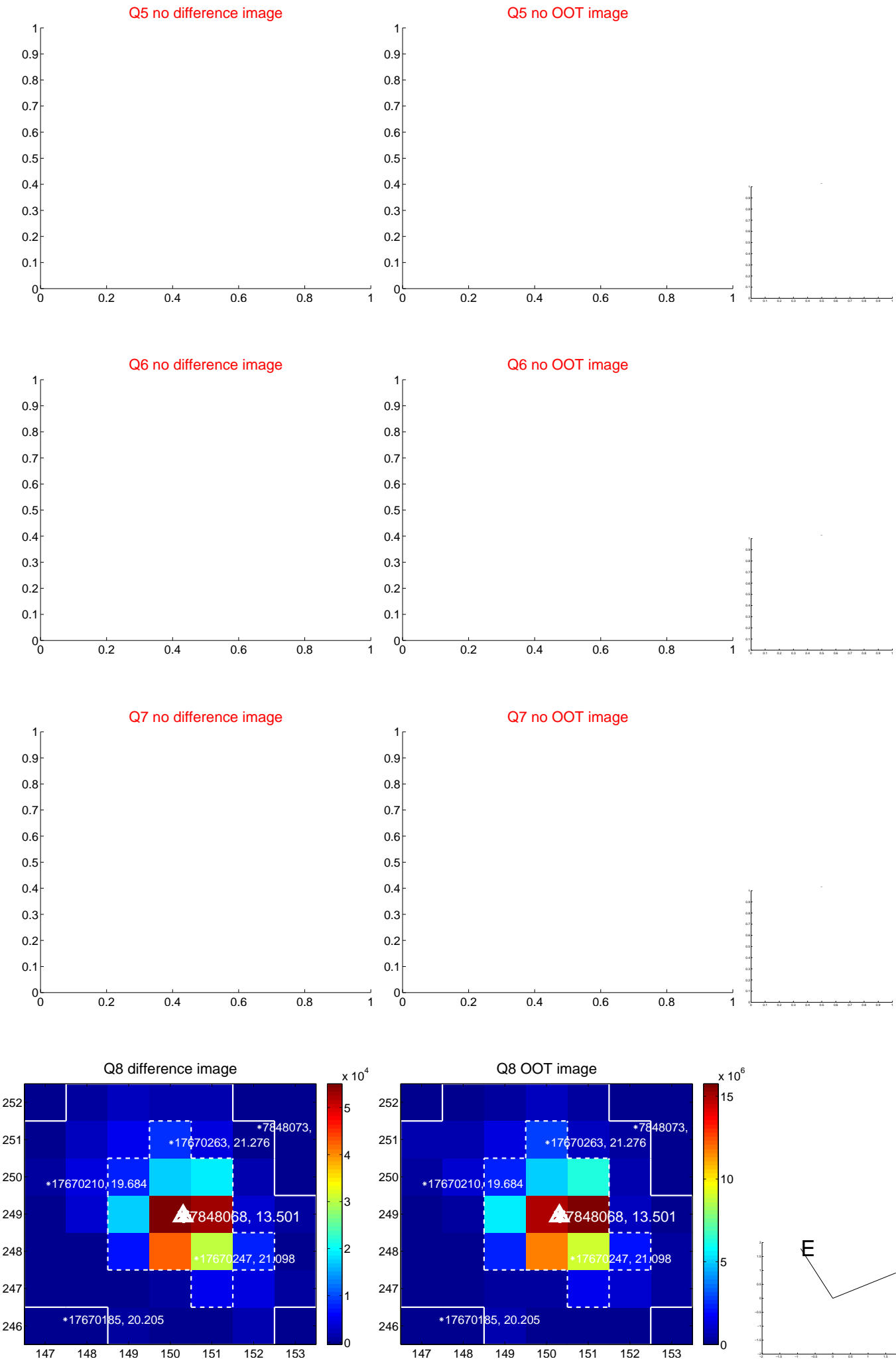
Q4 no difference image



Q4 no OOT image



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



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.

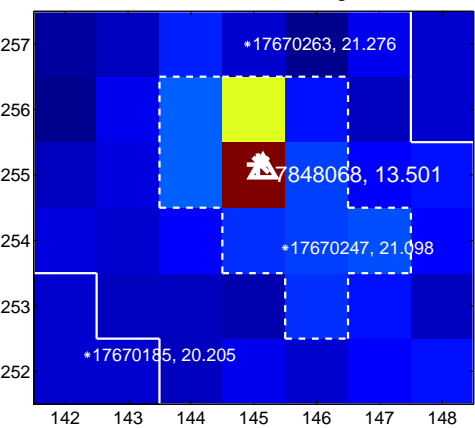
Q13 no difference image



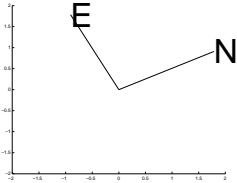
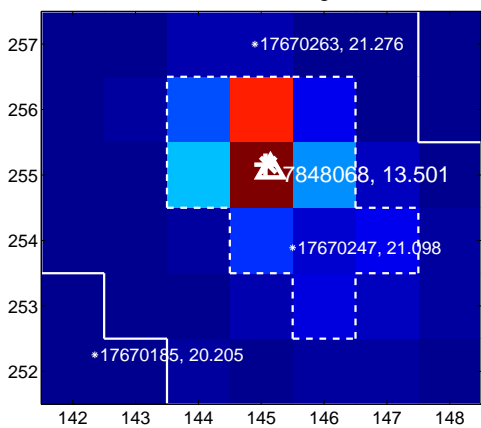
Q13 no OOT image



Q14 difference image



Q14 OOT image



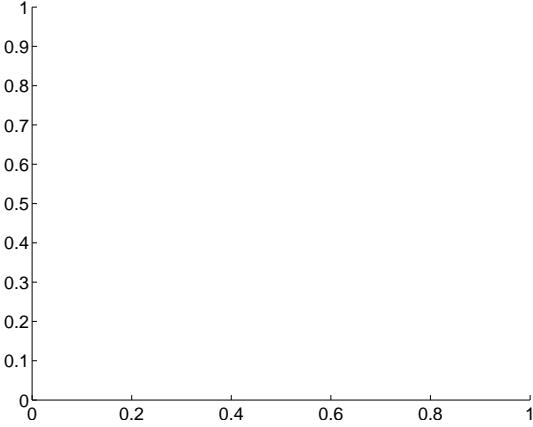
Q15 no difference image



Q15 no OOT image



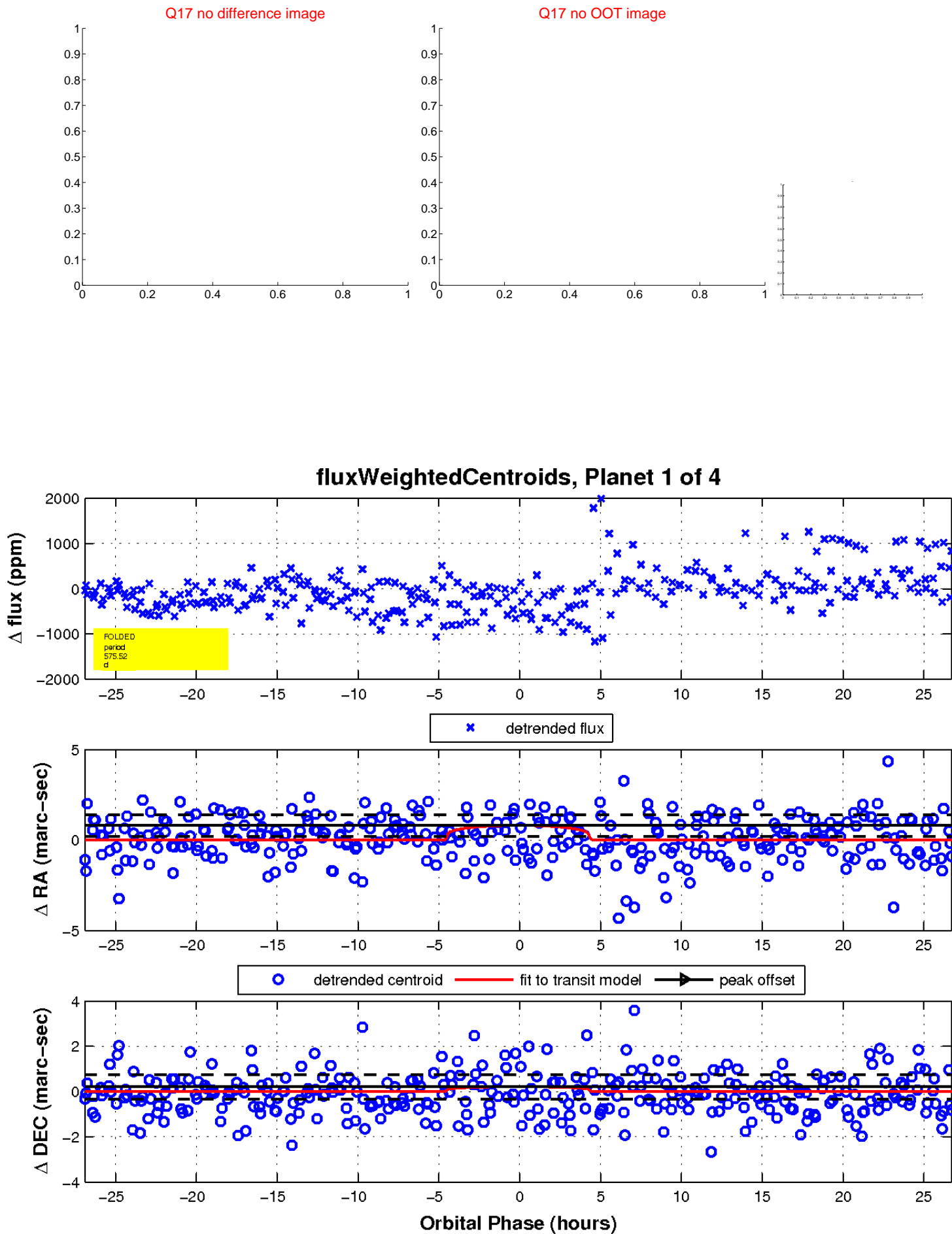
Q16 no difference image



Q16 no OOT image

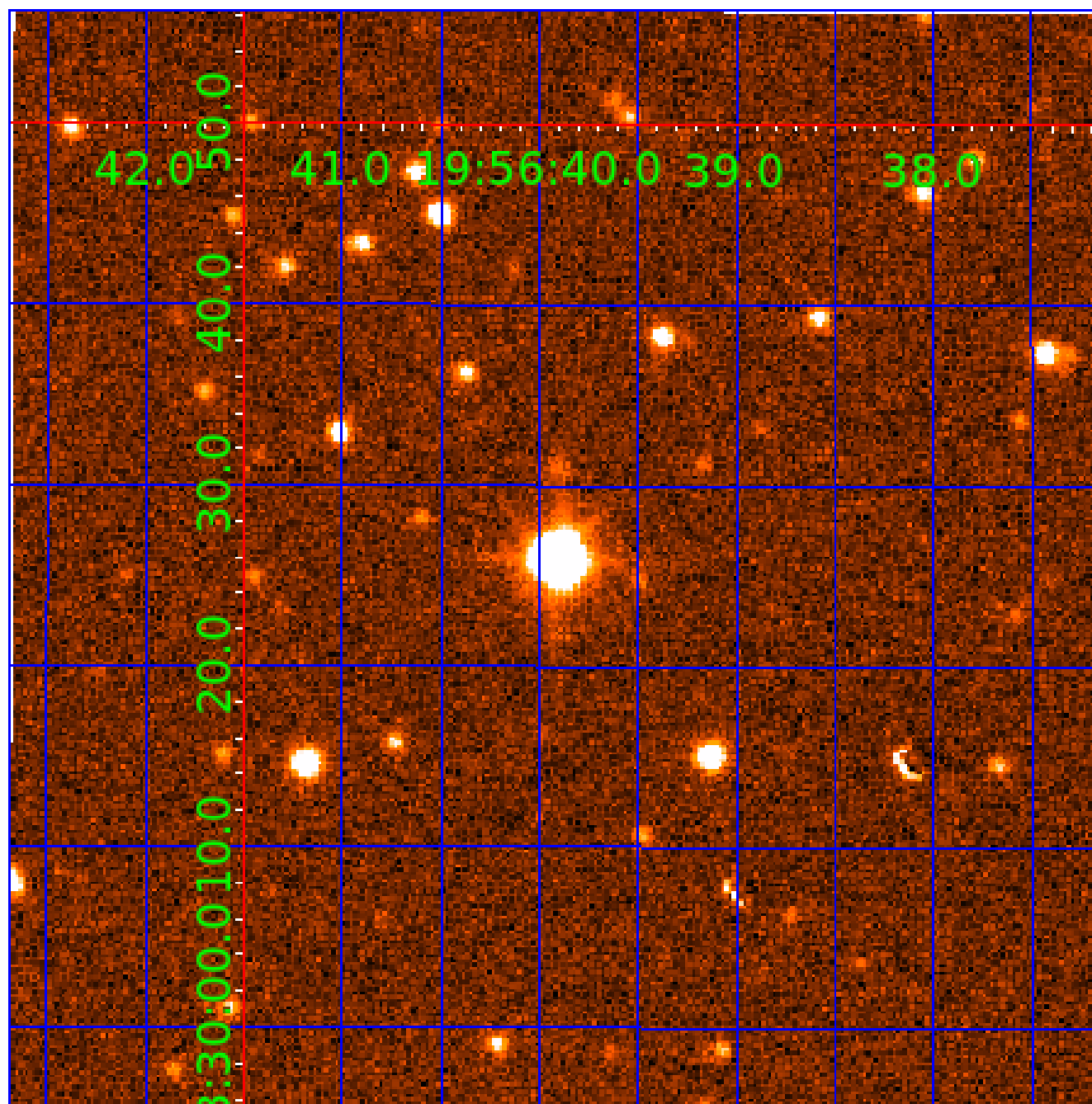


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007848068

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})
007848068-01	OBS	No	575.521187	208.337675	333.1	8.998	14.3	3.9	3.94	5189	7.08	3.71
007848068-02	OBS	No	448.713744	196.520832	454.9	21.491	13.2	6.0	3.94	5189	8.30	5.17
007848068-04	OBS	No	437.787617	373.711139	588.1	7.491	9.5	7.8	3.94	5189	12.15	5.34

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007848068-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007848068-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
007848068-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—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.

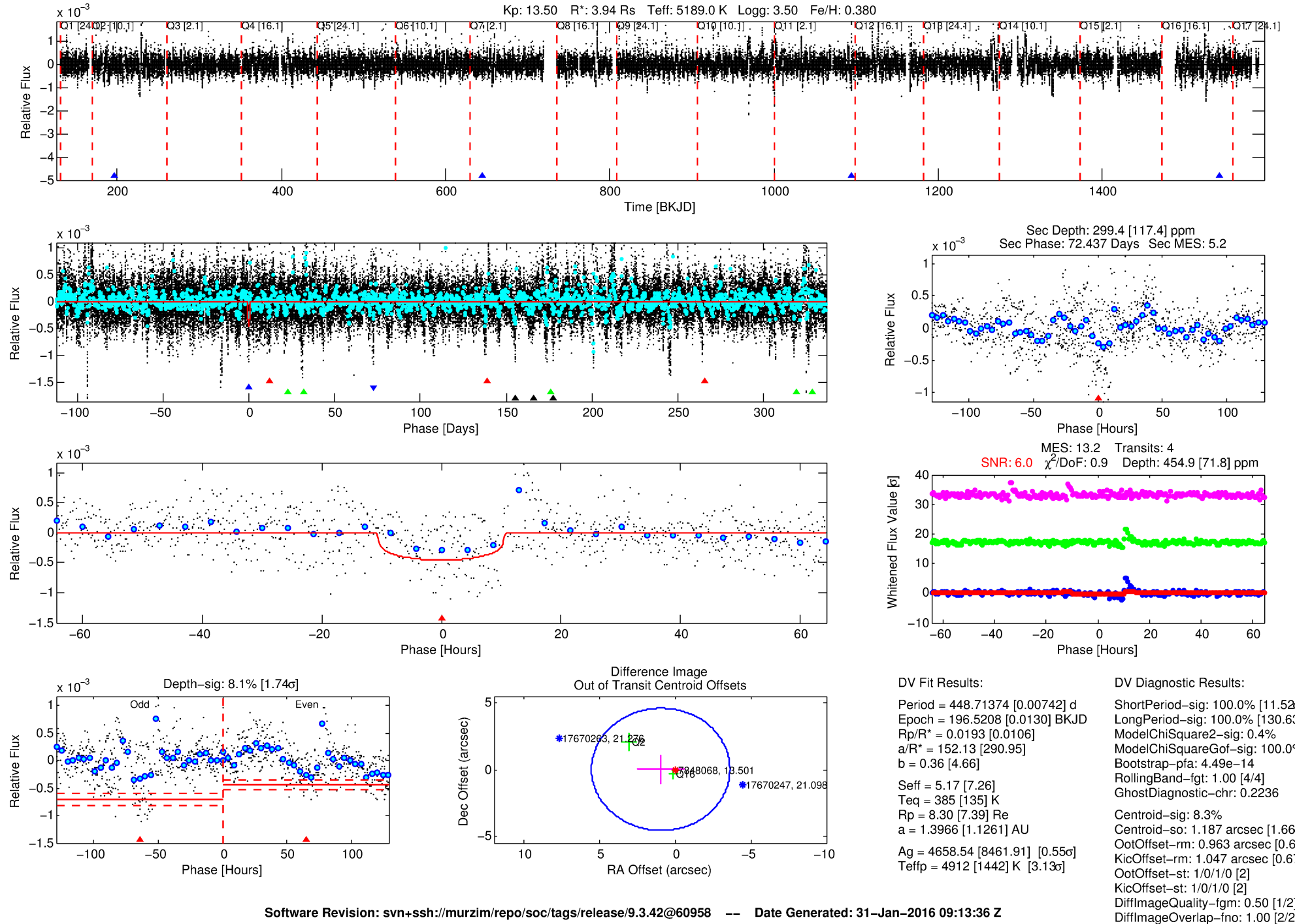
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007848068-02

No Significant Match Found

DV One-Page Summary

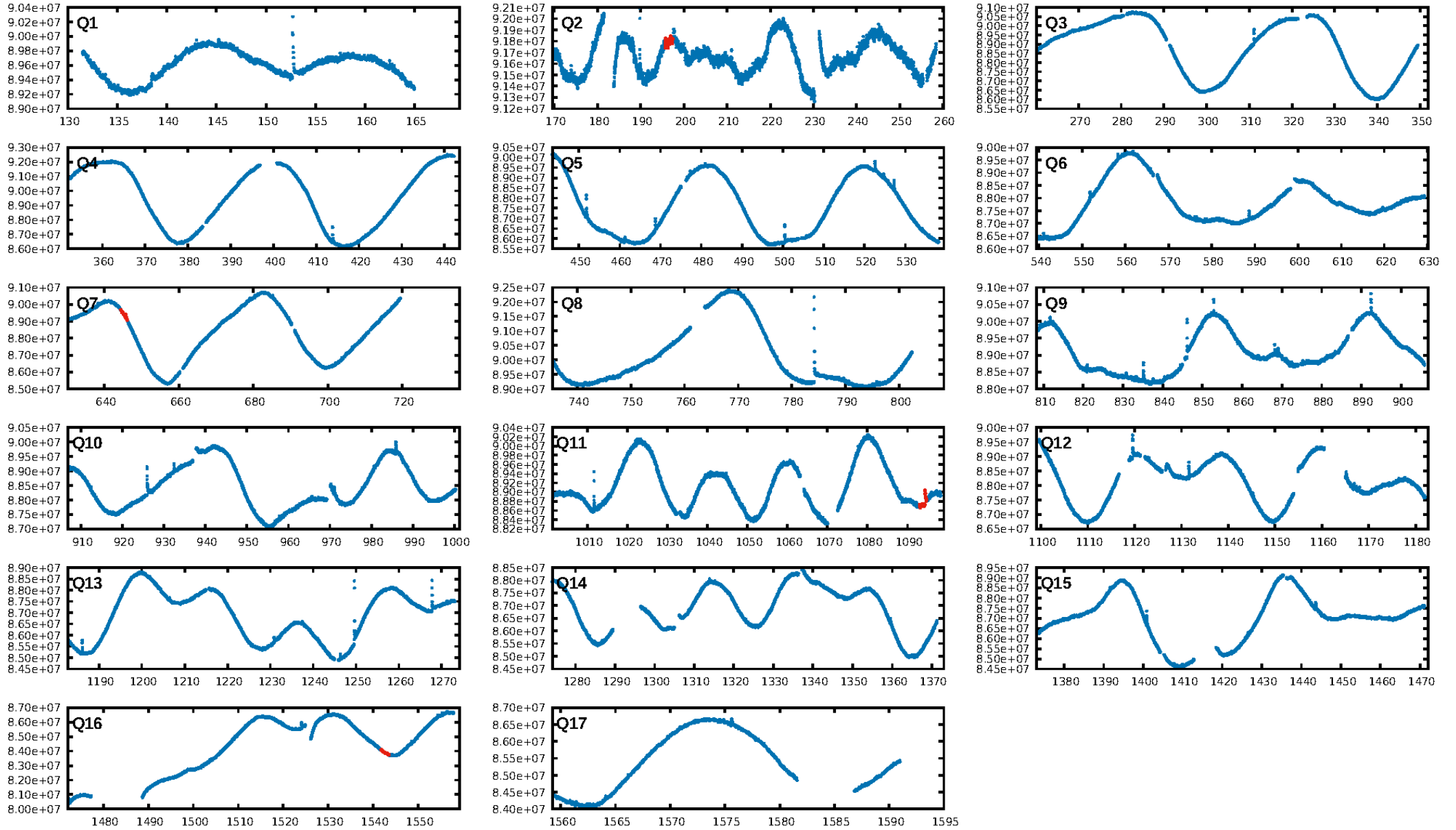
KIC: 7848068 Candidate: 2 of 4 Period: 448.714 d



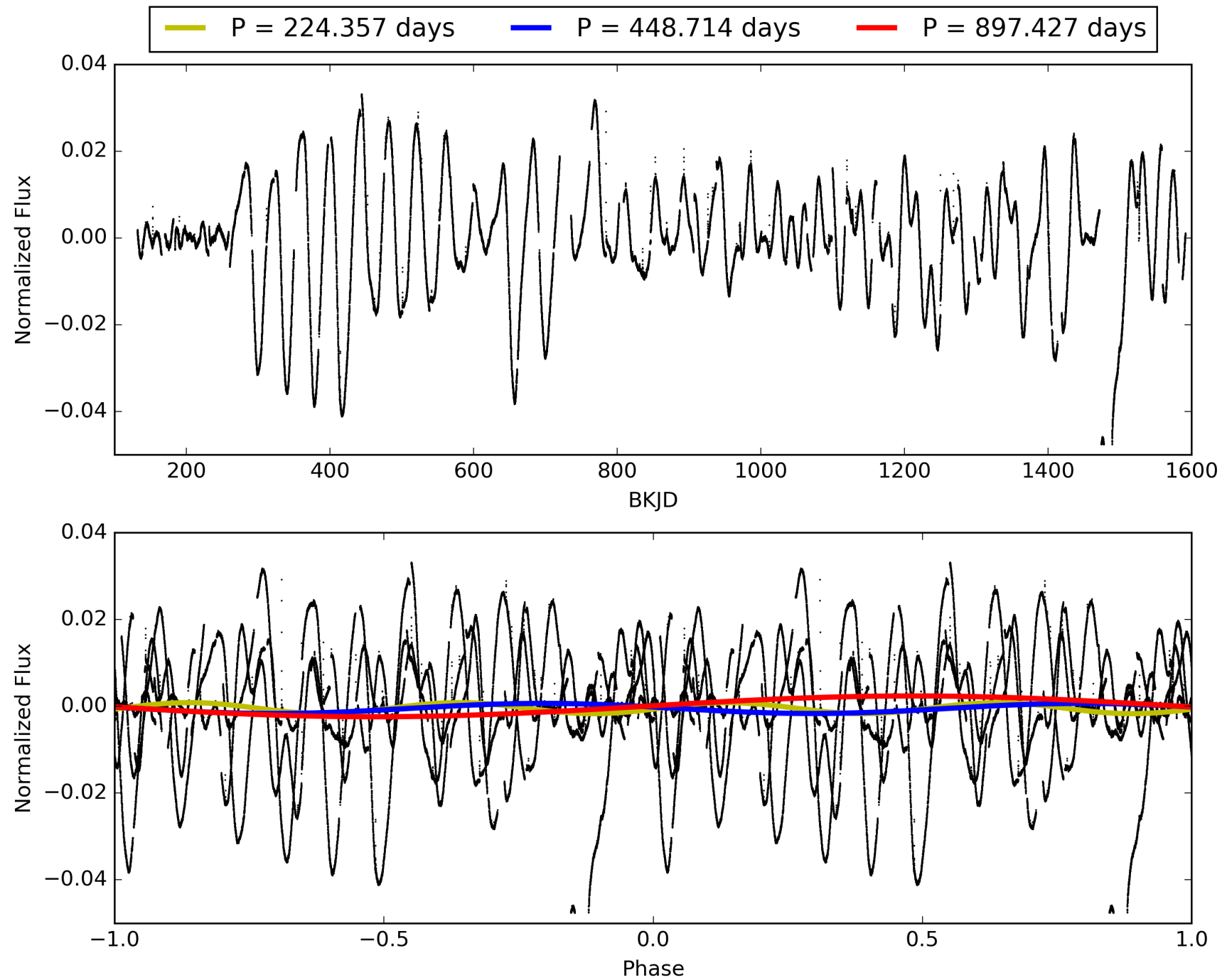
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 09:13:36 Z

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

TCE 007848068-02, PDC Light Curves

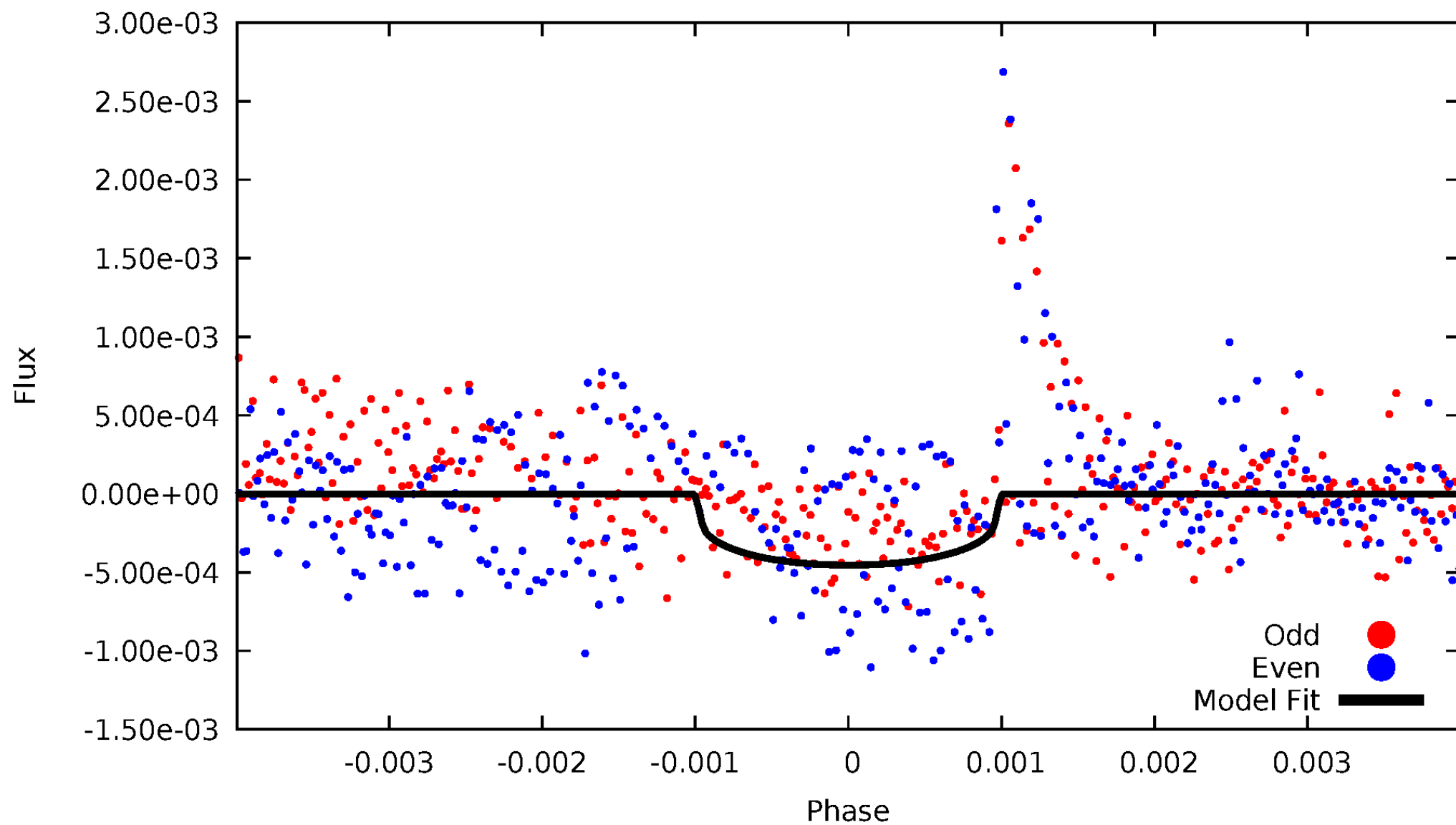


TCE 007848068-02



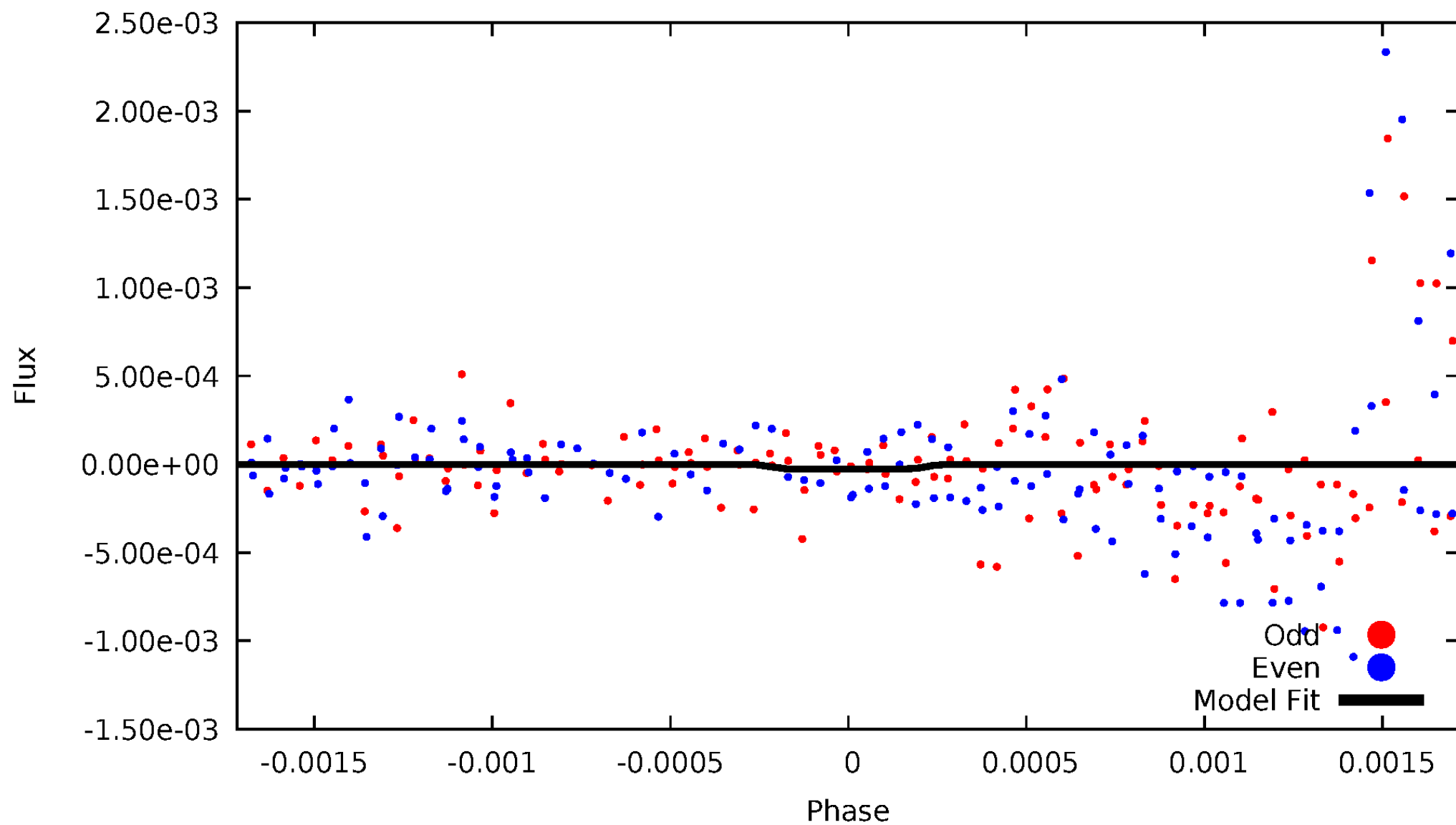
DV Odd/Even

TCE 007848068-02



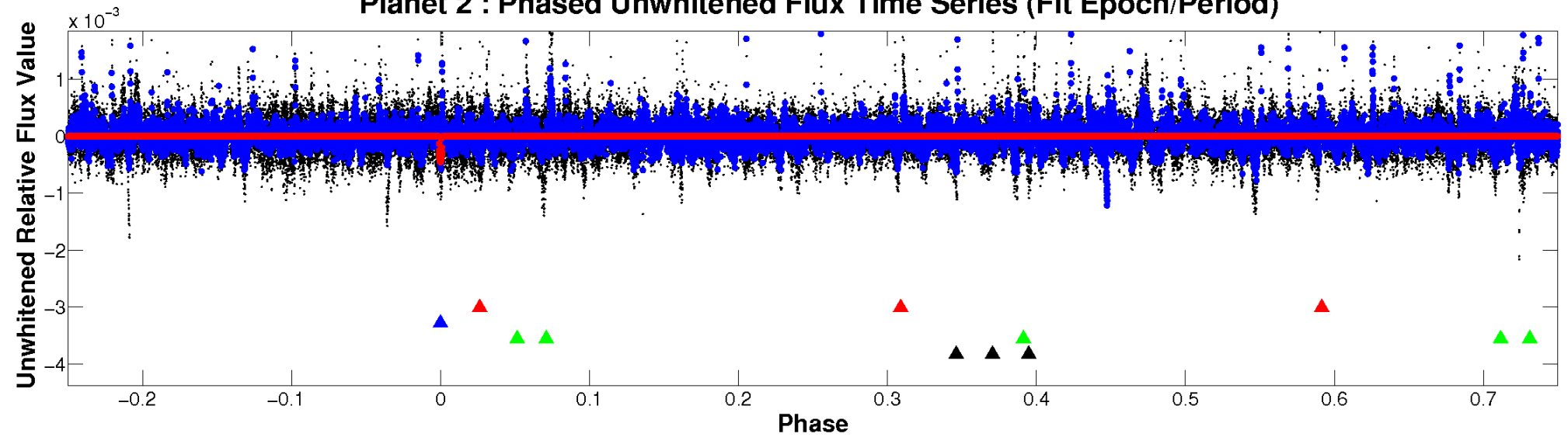
ALT Odd/Even

TCE 007848068-02

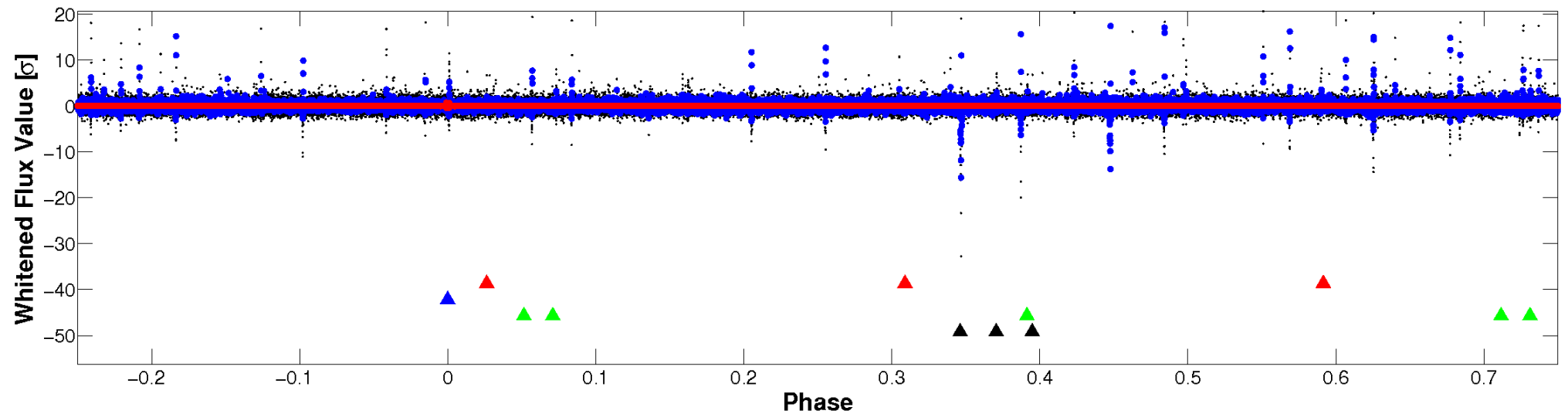


Non-Whitened Vs. Whitened Light Curve

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

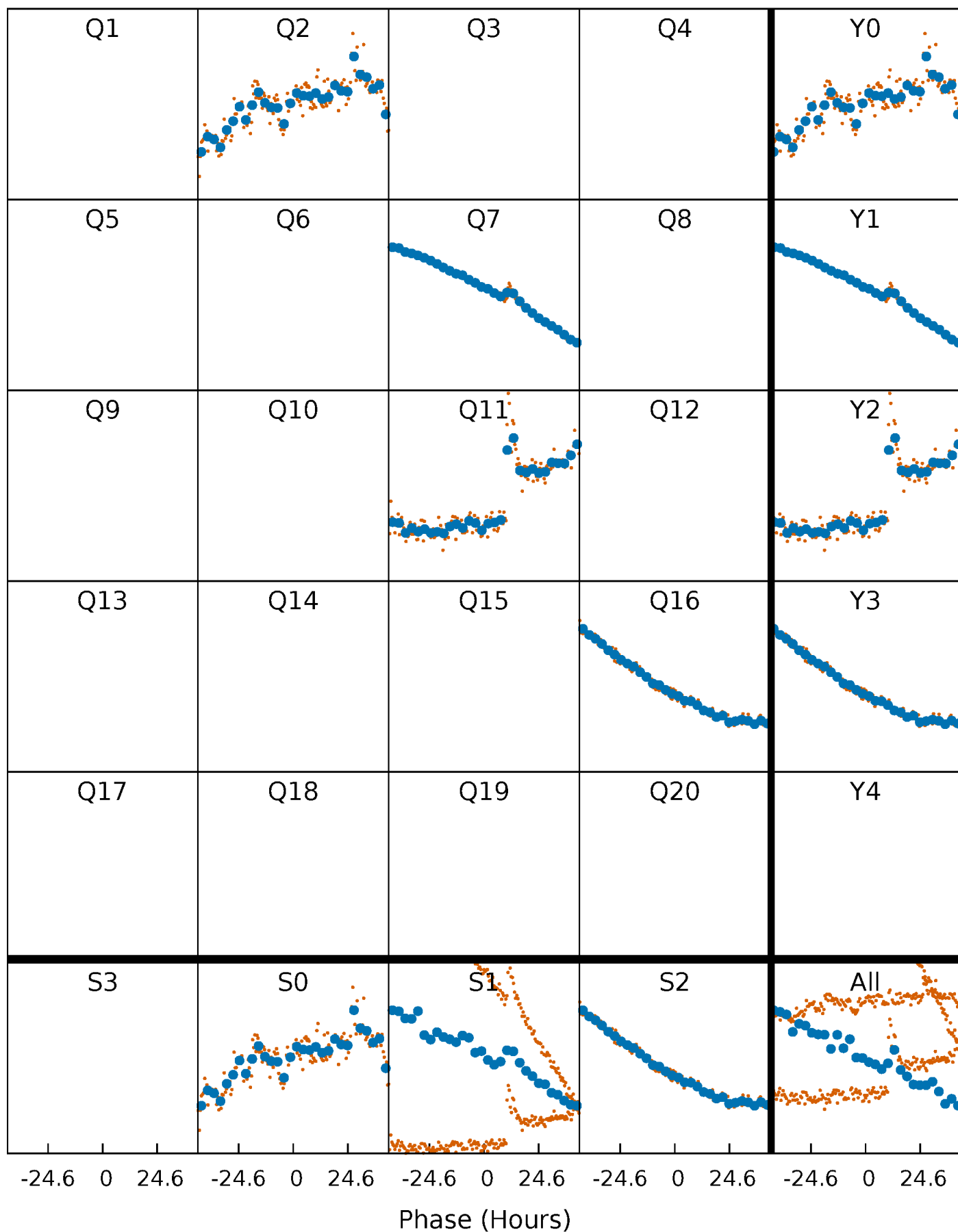


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



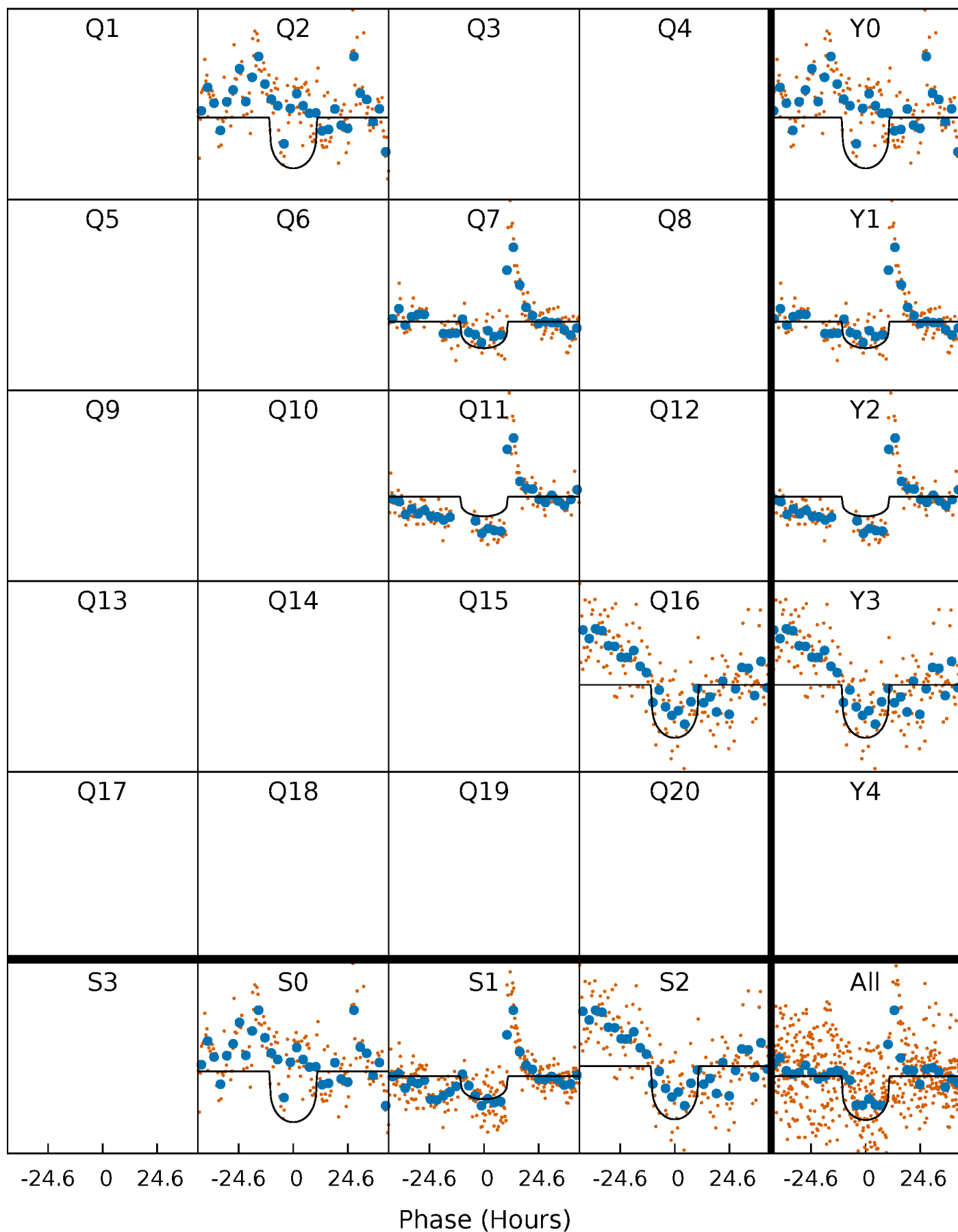
PDC Quarter-Phased Transit Curves

TCE 007848068-02 $P=448.713744$ Days $T_0=196.520832$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007848068-02 P=448.713744 Days $T_0=196.520832$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

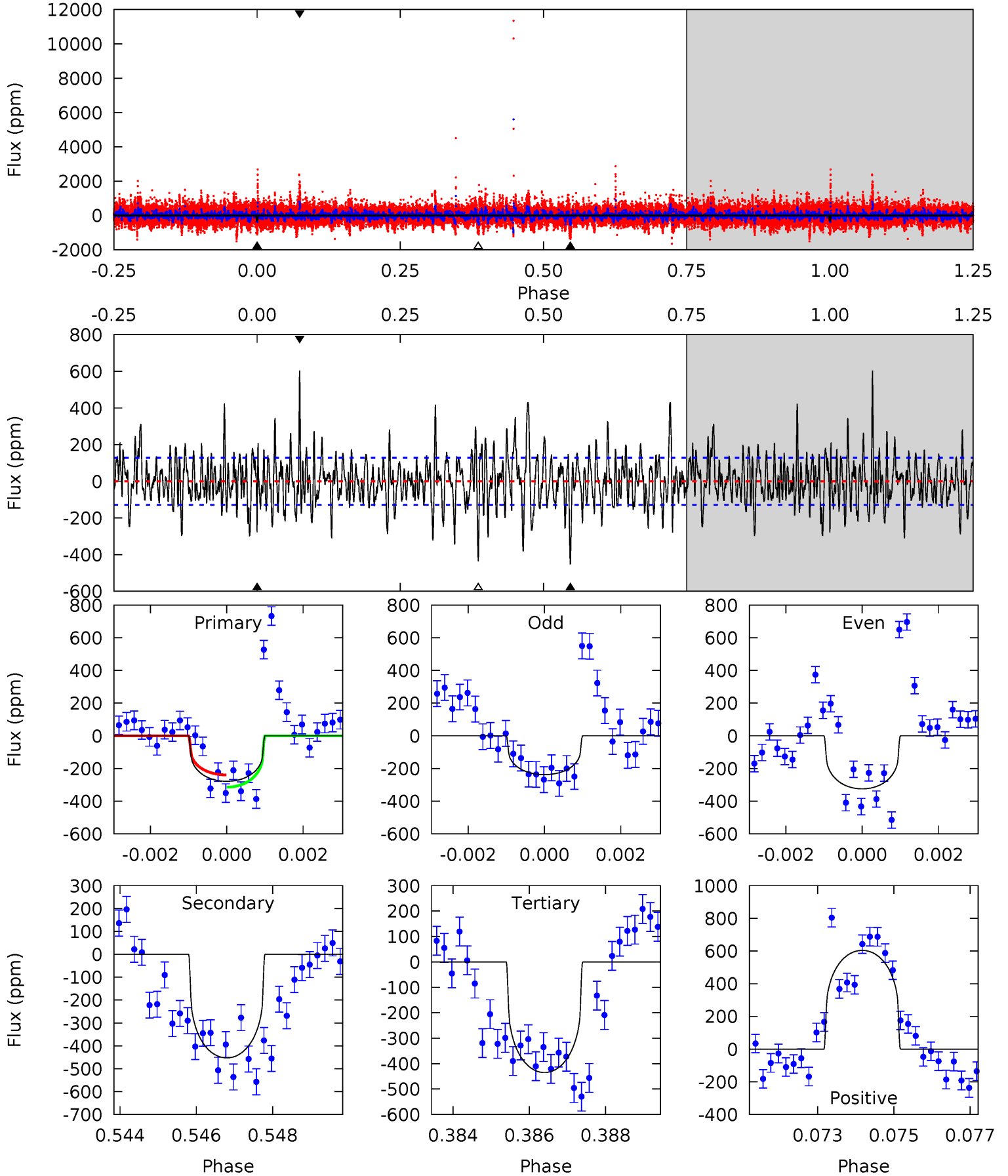
TCE 007848068-02 $P=448.700544$ Days $T_0=196.323930$ (BKJD)



DV Model-Shift Uniqueness Test

007848068-02, P = 448.713744 Days, E = 196.520832 Days

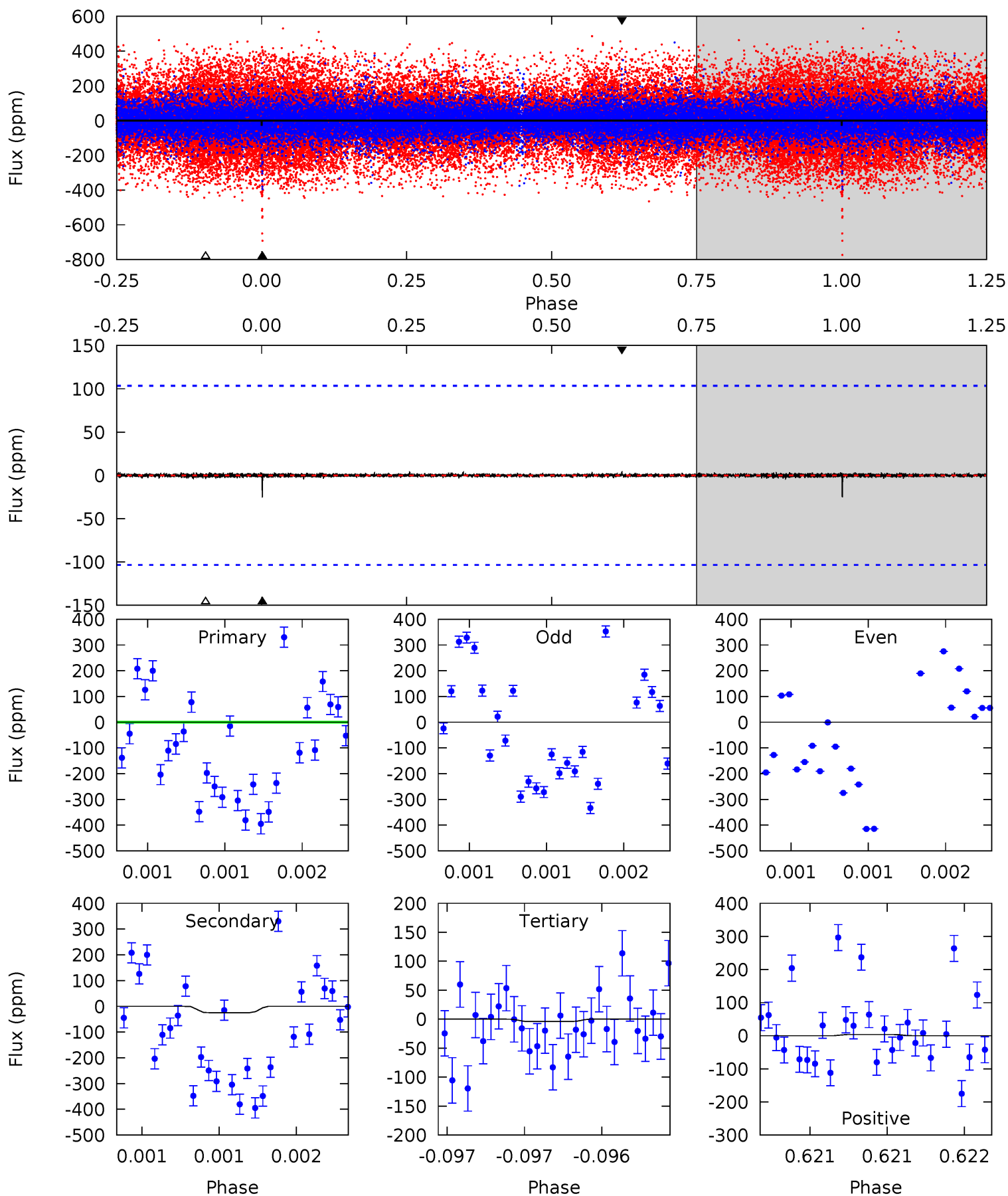
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.5	18.8	18.0	25.0	5.32	3.09	4.96	-6.47	-13.5	0.73	-6.26	1.64	1.27	0.57	1.55



Alt Model-Shift Uniqueness Test

007848068-02, P = 448.700544 Days, E = 196.323930 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.36	1.33	0.22	0.20	5.56	3.46	0.04	1.14	1.16	1.11	1.13	0.62	1.00	0.13	0.11



Stellar Parameters For KIC 007848068

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5189^{+186}_{-207}	$3.503^{+0.856}_{-0.214}$	$0.380^{+0.100}_{-0.300}$	$3.941^{+1.184}_{-2.763}$	$1.805^{+0.214}_{-0.858}$	$0.042^{+1.121}_{-0.022}$
	+4%/-4%	+24%/-6%	+26%/-79%	+30%/-70%	+12%/-48%	+2699%/-53%
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 007848068-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-453 ± 24	$7.24^{+5.56}_{-4.06}$	519^{+69}_{-100}	5337^{+2238}_{-909}	8935^{+35516}_{-5973}
Alt.	-25 ± 19	$3.49^{+3.87}_{-2.42}$	525^{+62}_{-96}	3835^{+2679}_{-939}	1693^{+18362}_{-1497}

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 $A_{obs} \gg 1.0$

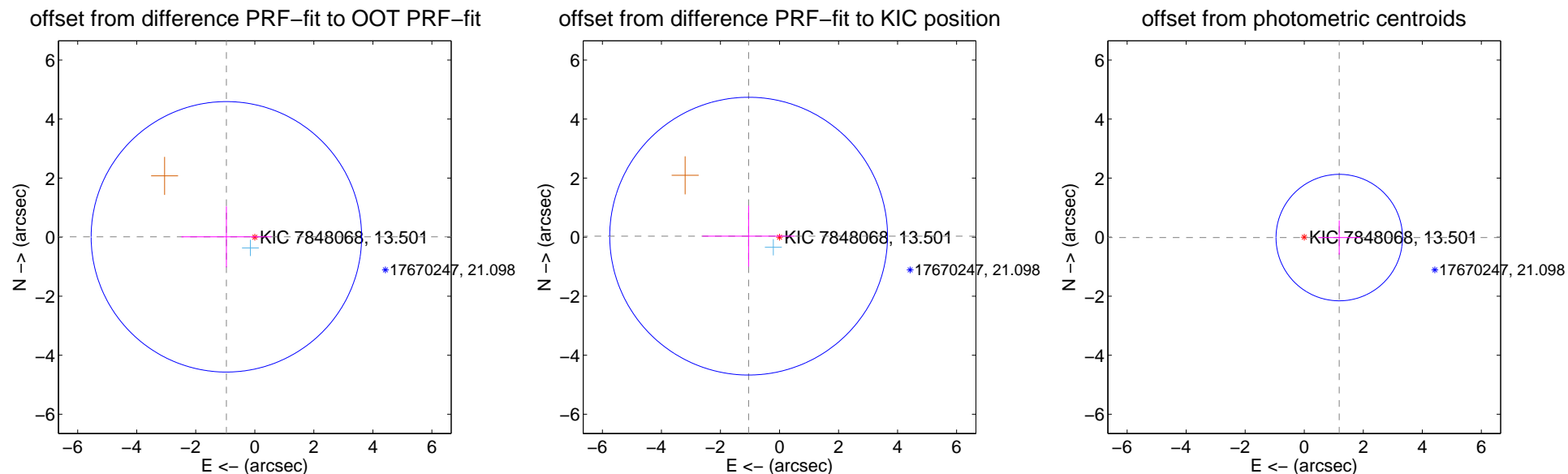
DV Centroid Data

Supplemental centroid analysis for 007848068-02. Kepler magnitude: 13.50. Transit SNR 6.03

There are 1 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	0.963 ± 1.527	0.63	0.963 ± 1.527	0.011 ± 1.033
PRF-fit source offset from KIC position	1.047 ± 1.568	0.67	1.046 ± 1.569	0.033 ± 1.031
photometric centroid source offset	1.19 ± 0.71	1.66	-1.19 ± 0.71	-0.01 ± 0.58



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.

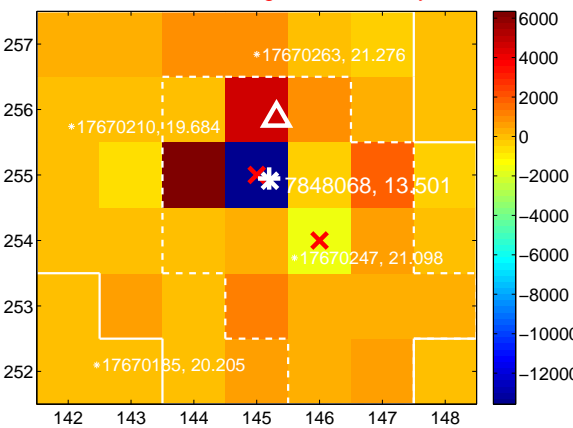
Q1 no difference image



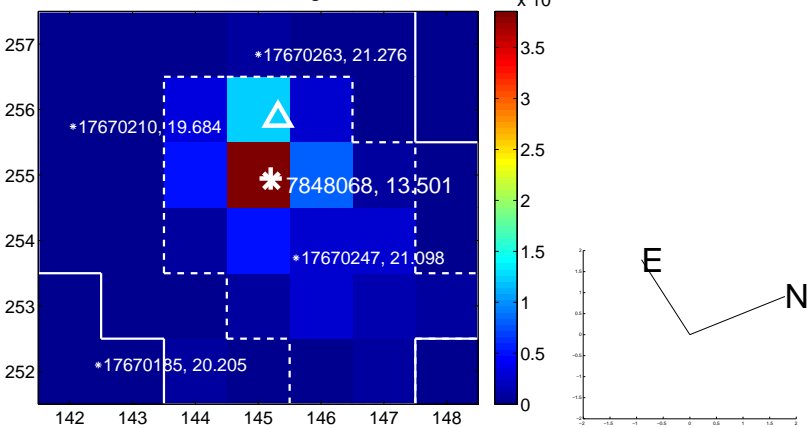
Q1 no OOT image



Q2 difference image. Poor Quality



Q2 OOT image



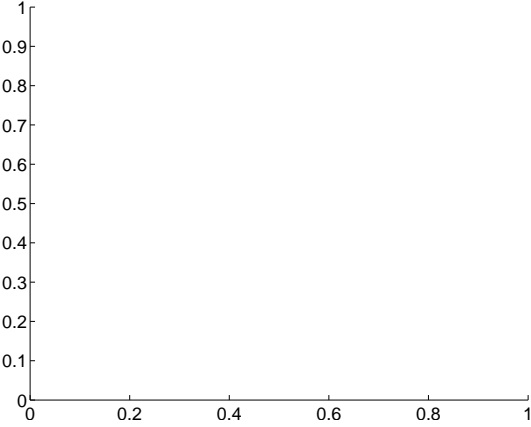
Q3 no difference image



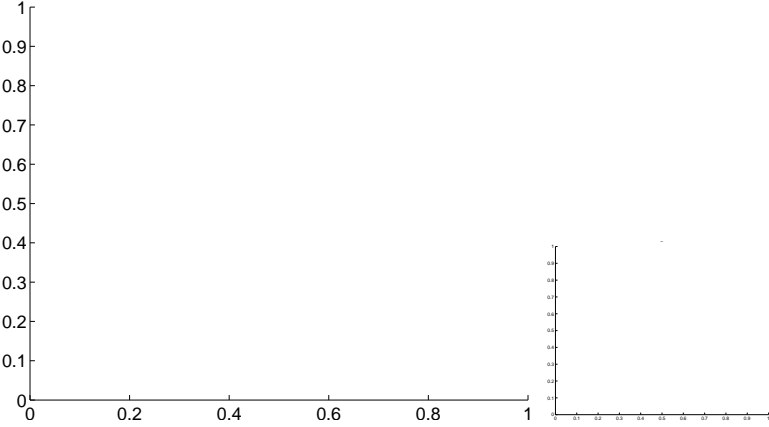
Q3 no OOT image



Q4 no difference image



Q4 no OOT image



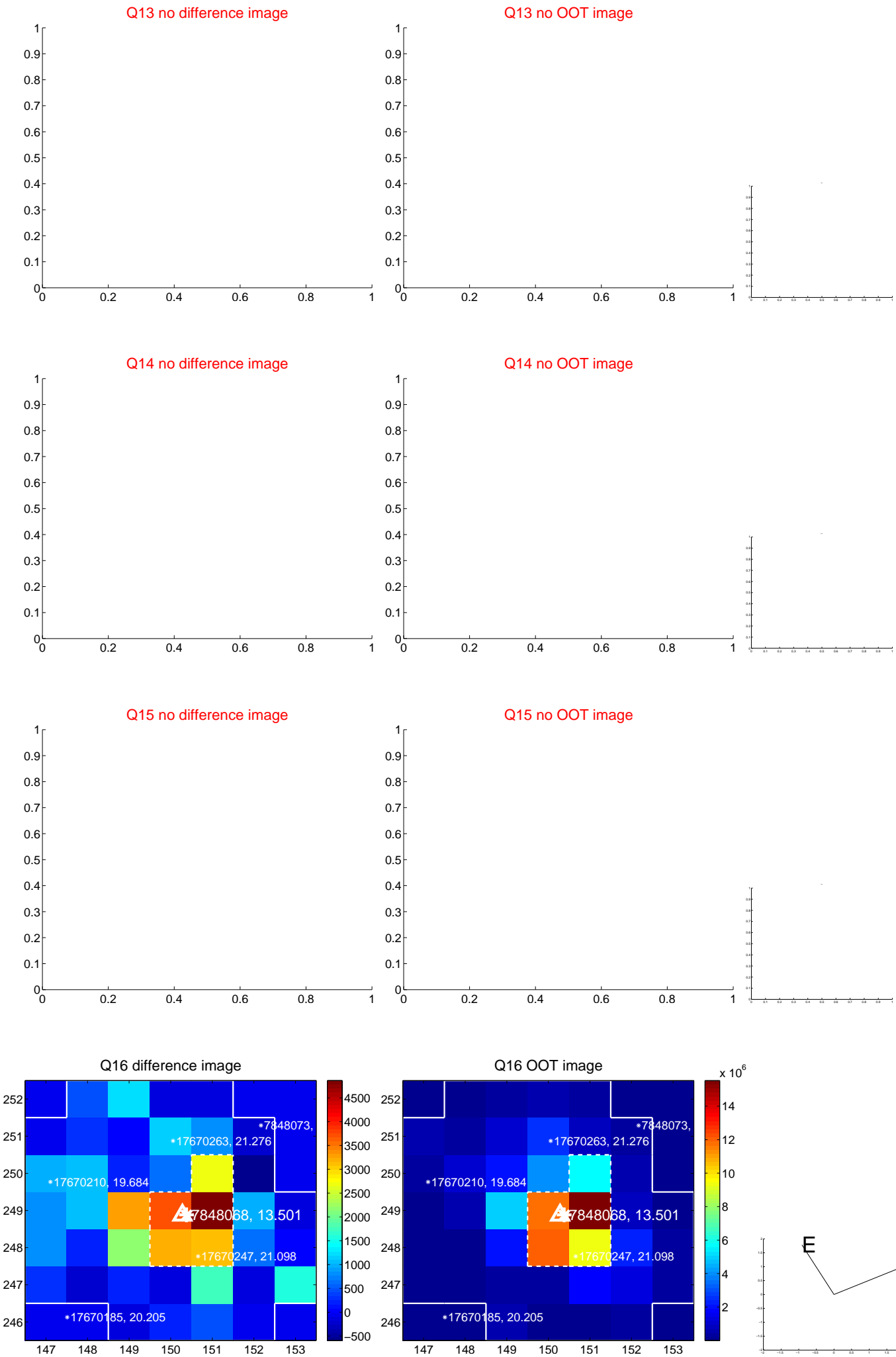
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



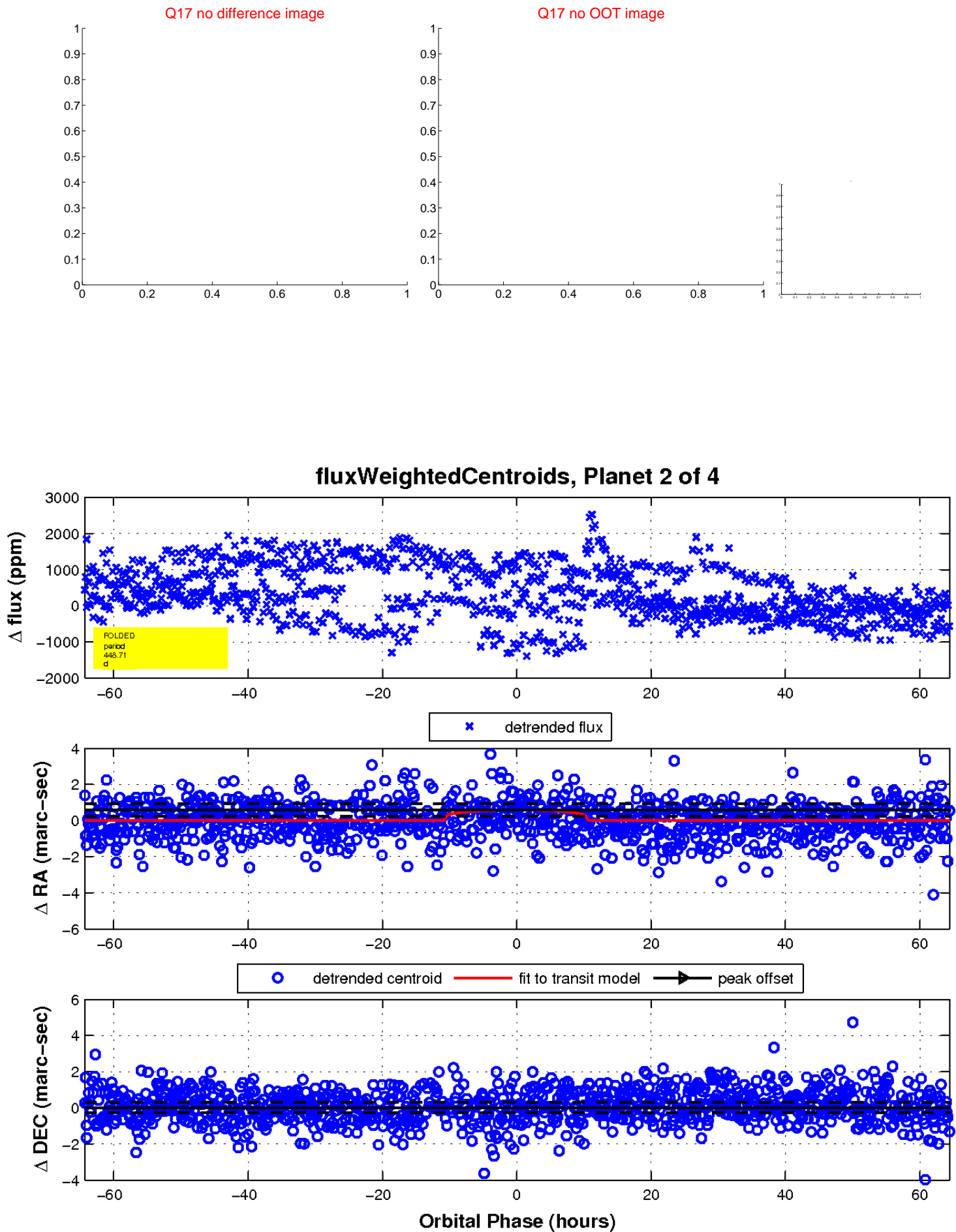
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

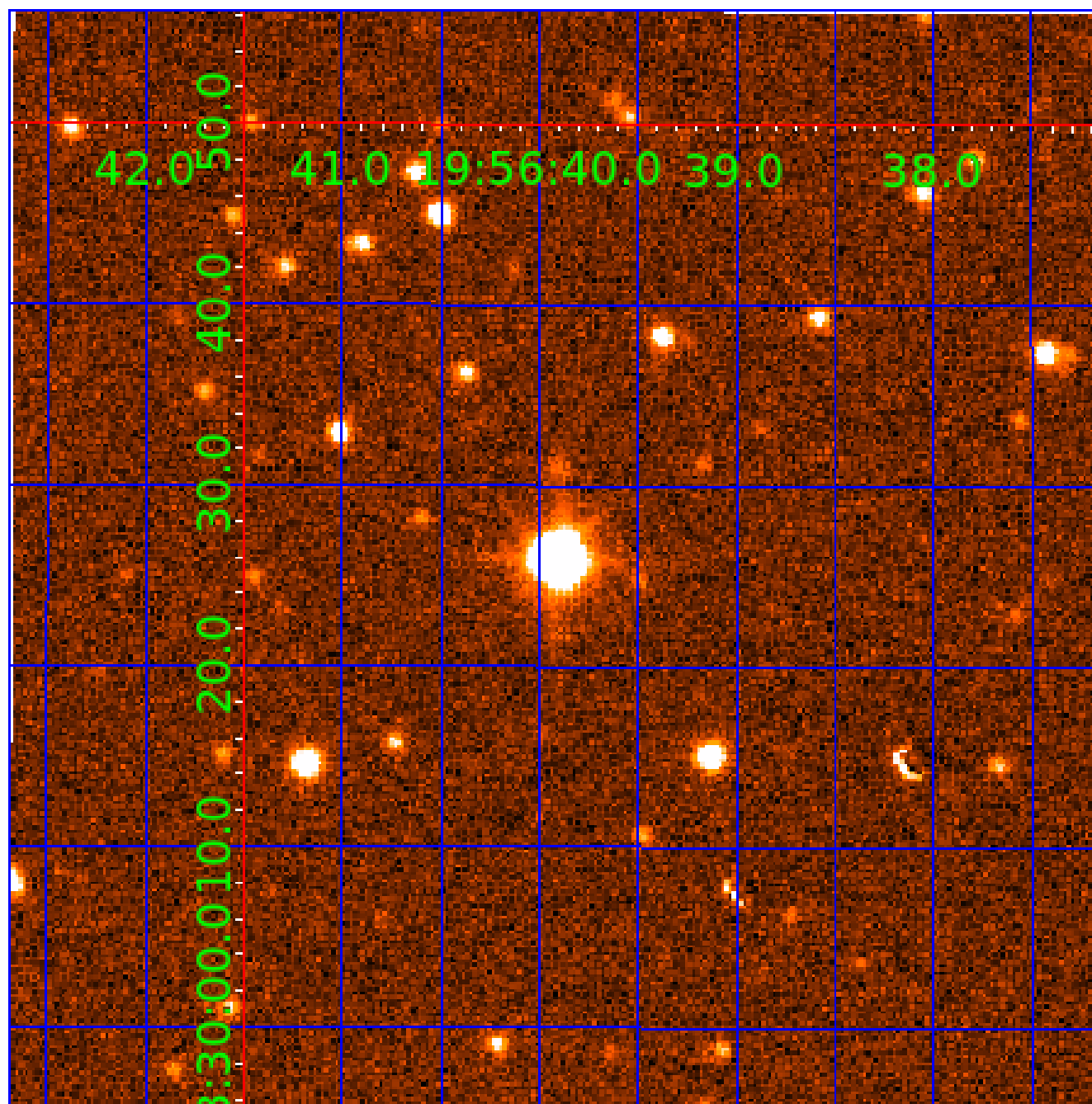


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007848068

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})
007848068-01	OBS	No	575.521187	208.337675	333.1	8.998	14.3	3.9	3.94	5189	7.08	3.71
007848068-02	OBS	No	448.713744	196.520832	454.9	21.491	13.2	6.0	3.94	5189	8.30	5.17
007848068-04	OBS	No	437.787617	373.711139	588.1	7.491	9.5	7.8	3.94	5189	12.15	5.34

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007848068-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007848068-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
007848068-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—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.

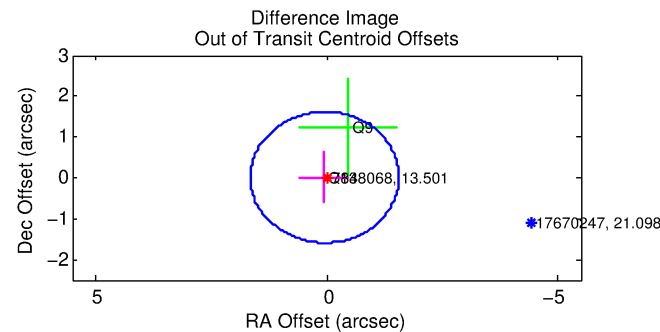
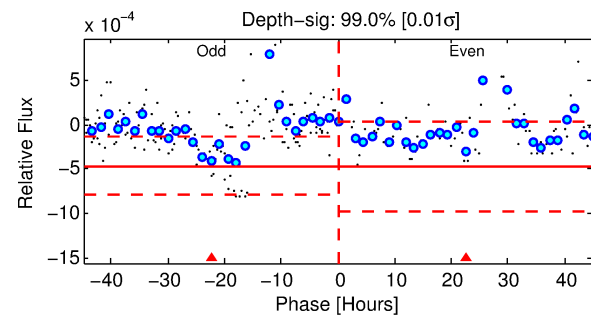
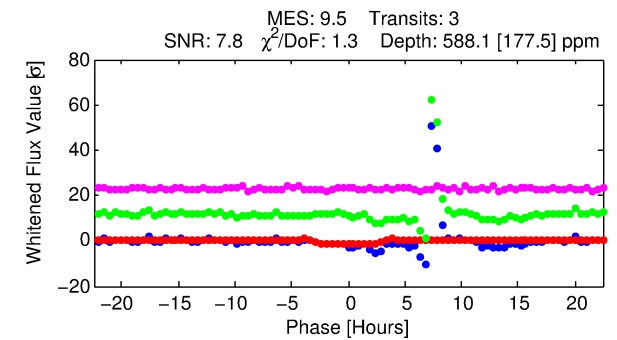
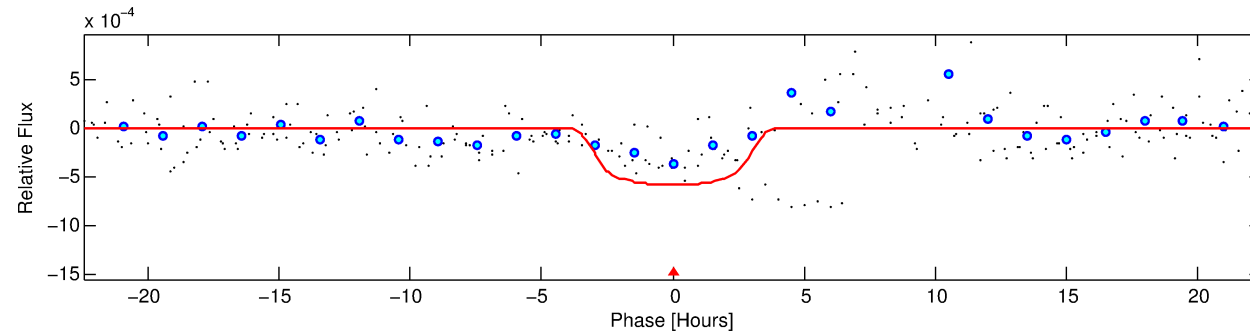
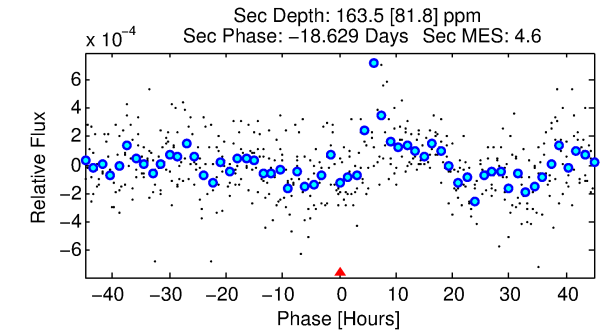
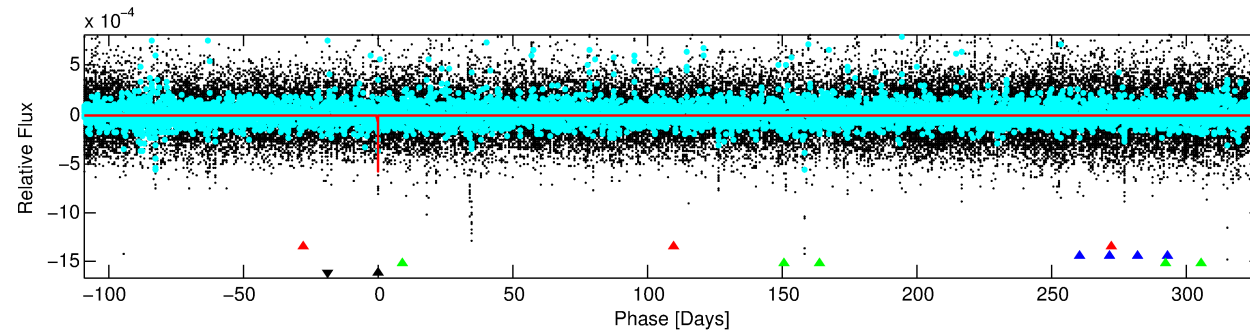
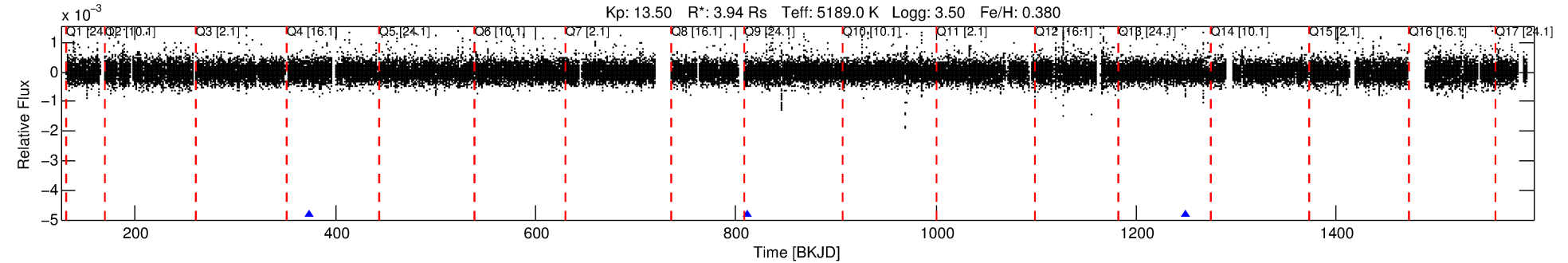
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007848068-04

No Significant Match Found

DV One-Page Summary

KIC: 7848068 Candidate: 4 of 4 Period: 437.788 d



DV Fit Results:

Period = 437.78762 [0.01954] d
Epoch = 373.7111 [0.0256] BKJD
Rp/R* = 0.0283 [0.0061]
a/R* = 193.04 [103.92]
b = 0.93 [0.08]
Seff = 5.35 [7.50]
Teq = 388 [136] K
Rp = 12.15 [8.91] Re
a = 1.3739 [1.1077] AU
Ag = 1150.17 [1774.76] [0.65 σ]
Teffp = 3491 [593] K [5.10 σ]

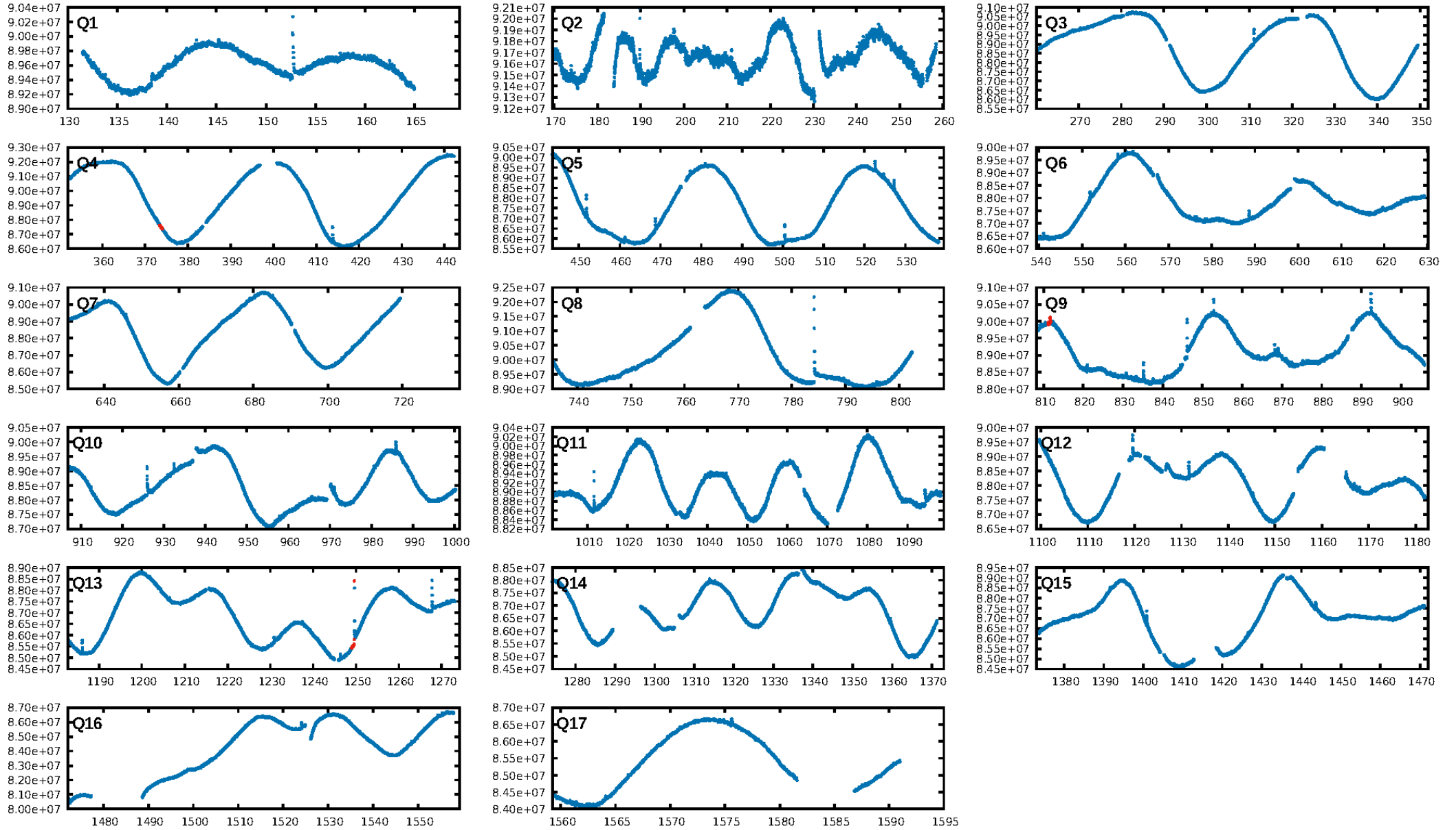
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [382.29 σ]
LongPeriod-sig: 100.0% [11.52 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 76.3%
Bootstrap-pfa: 1.15e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 2.318
Centroid-sig: 6.0%
Centroid-so: 1.634 arcsec [1.97 σ]
OotOffset-rm: 0.046 arcsec [0.09 σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-rm: 0.095 arcsec [0.18 σ]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

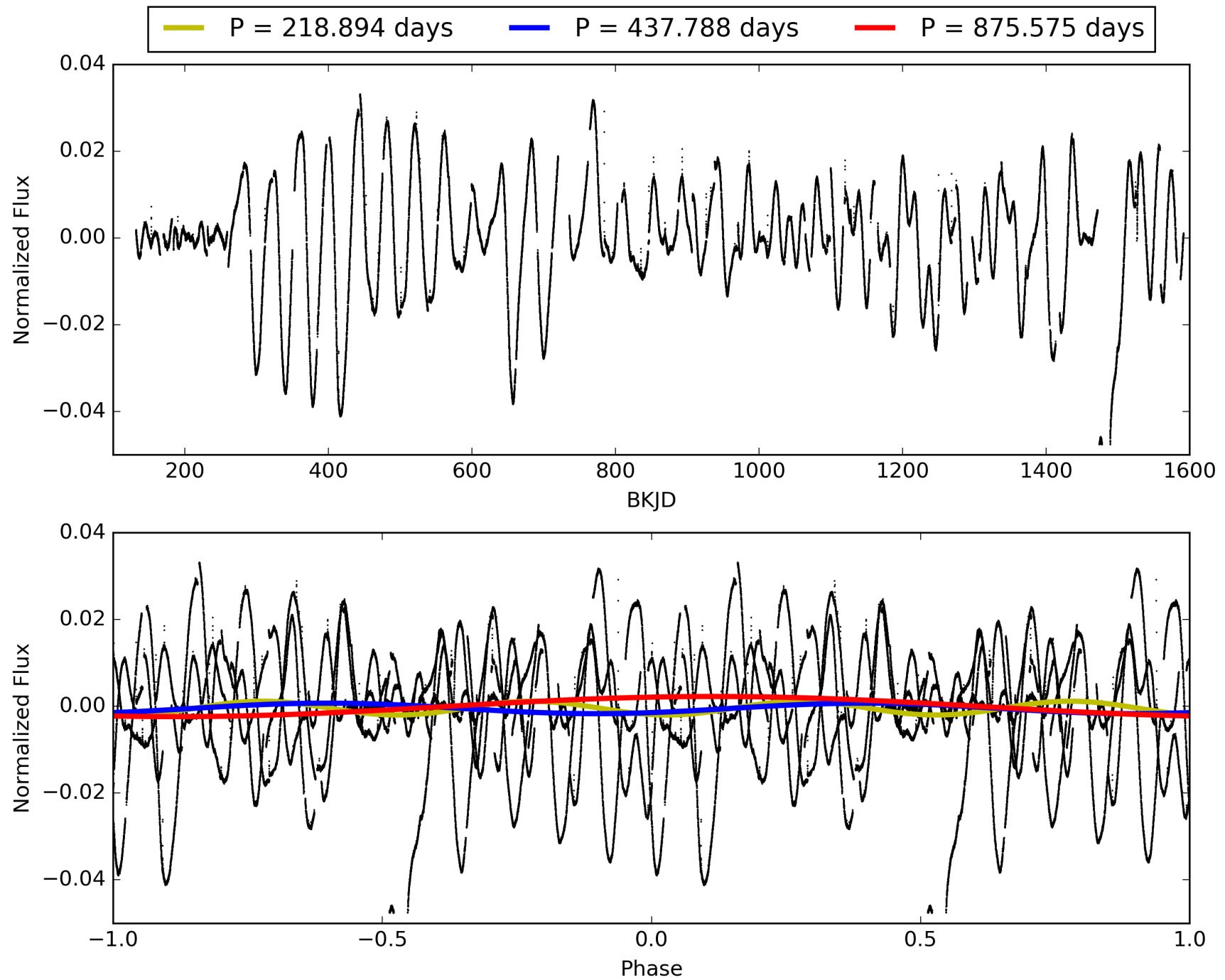
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 09:13:58 Z

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

TCE 007848068-04, PDC Light Curves

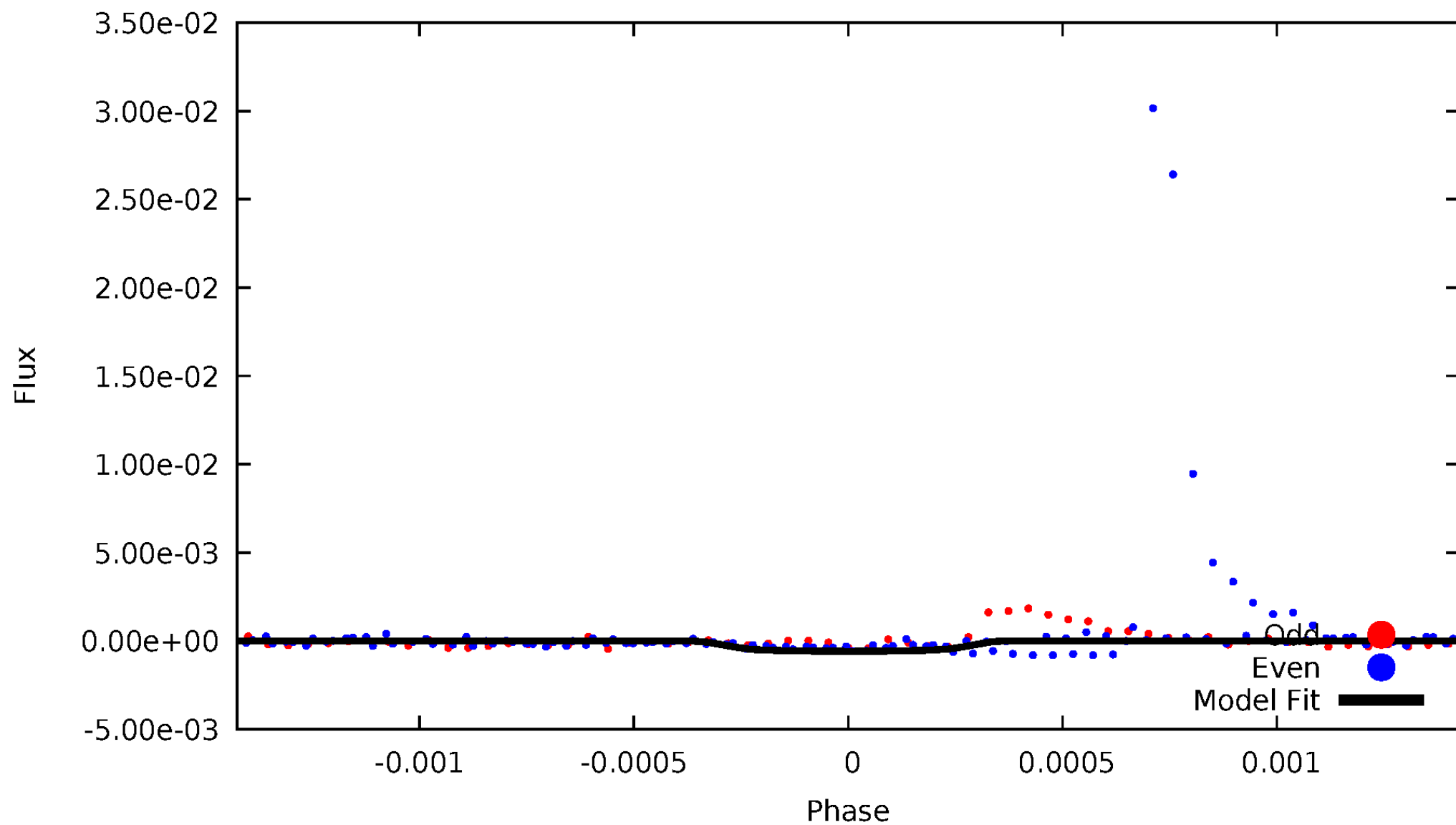


TCE 007848068-04



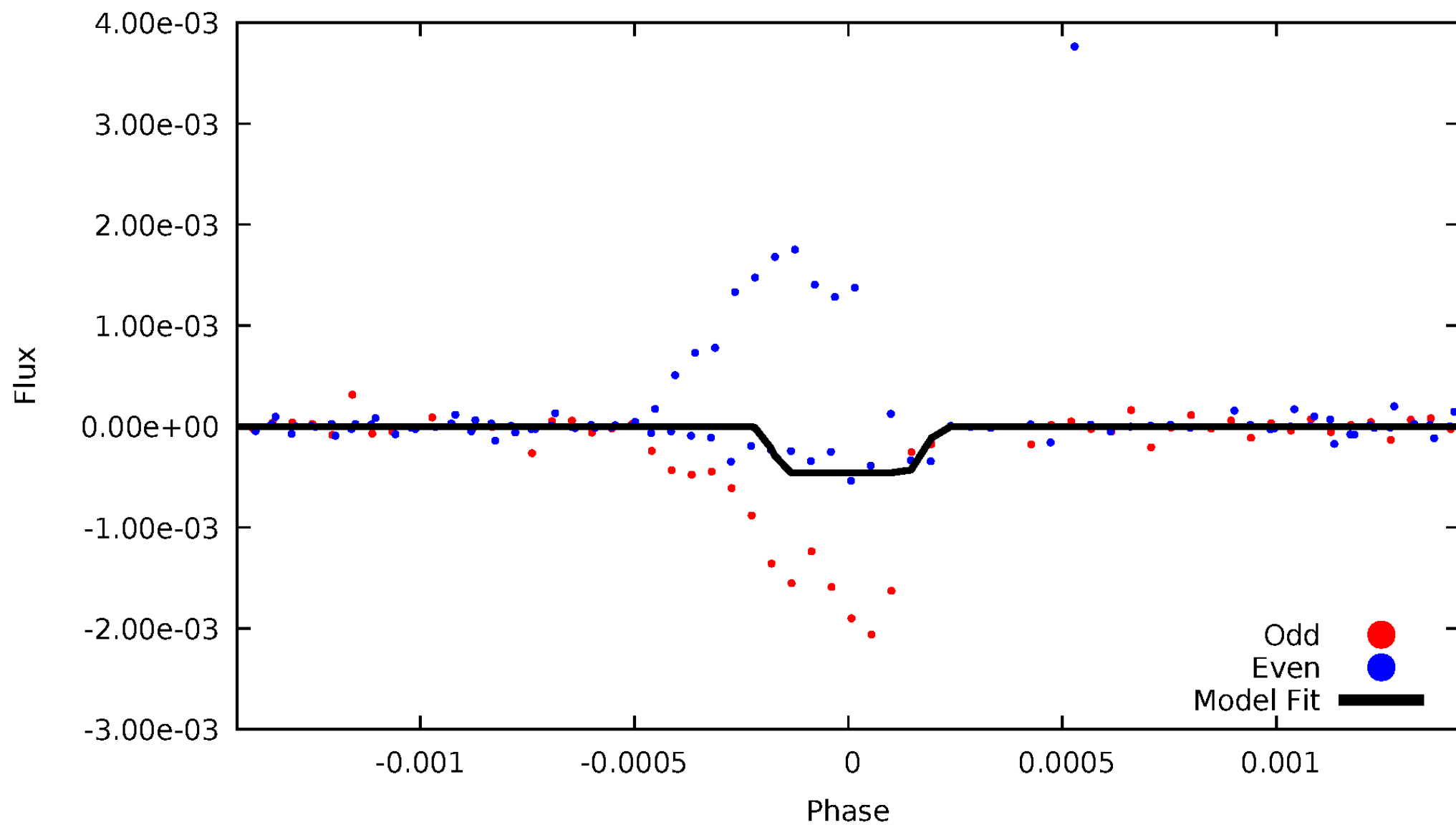
DV Odd/Even

TCE 007848068-04



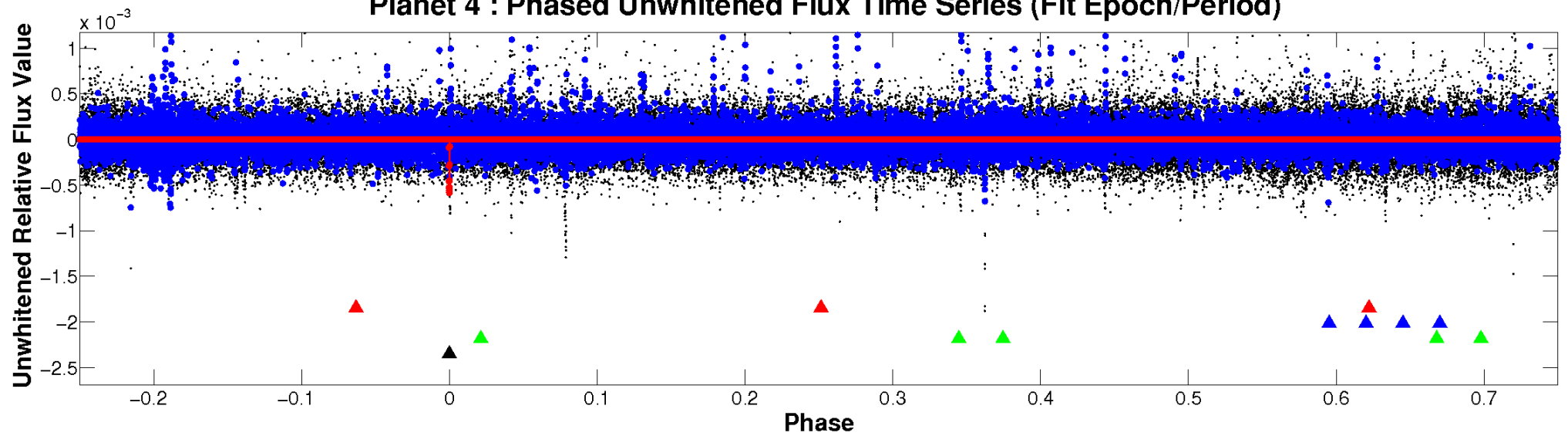
ALT Odd/Even

TCE 007848068-04

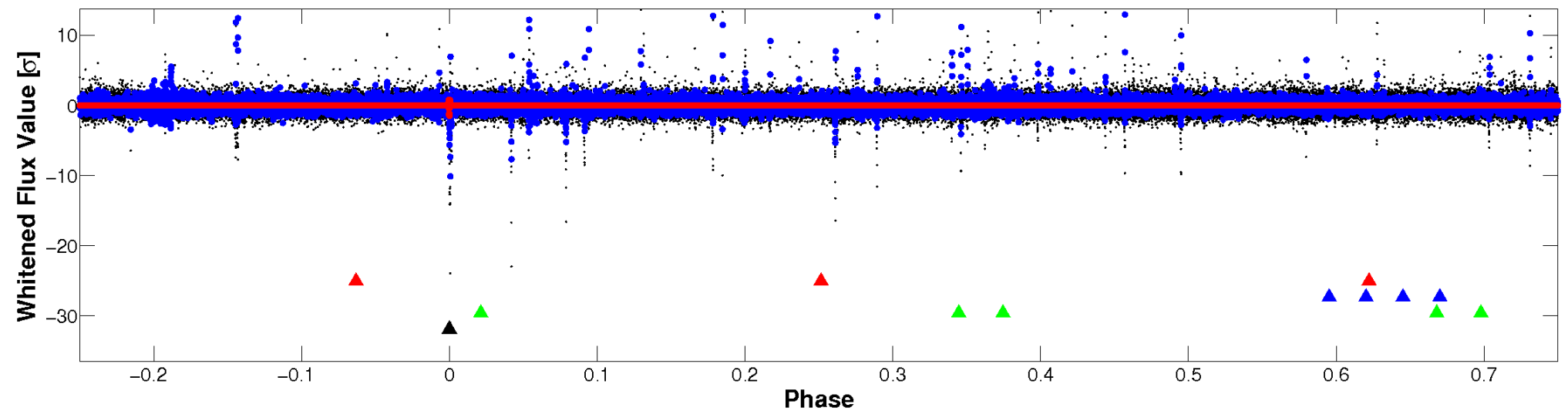


Non-Whitened Vs. Whitened Light Curve

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

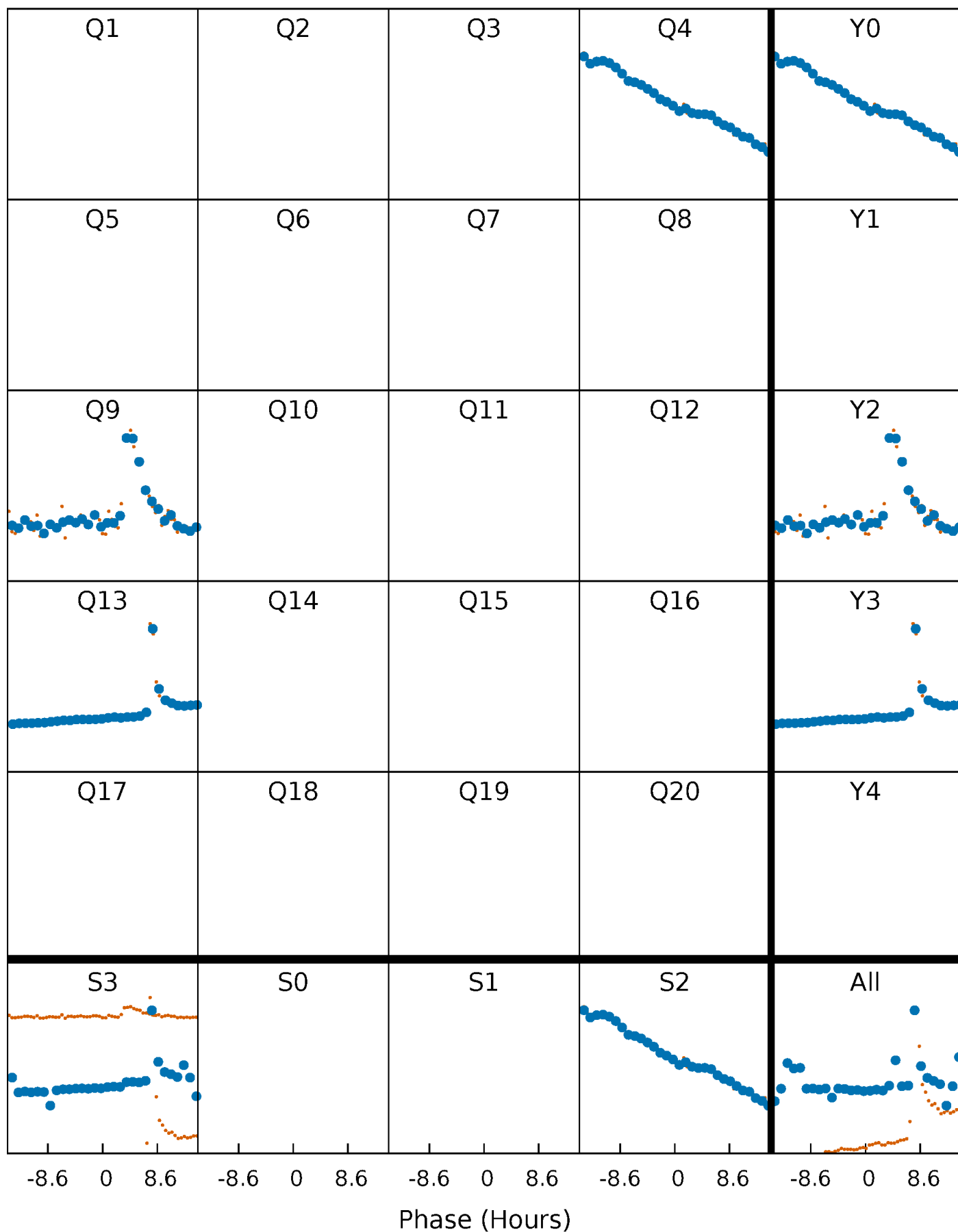


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



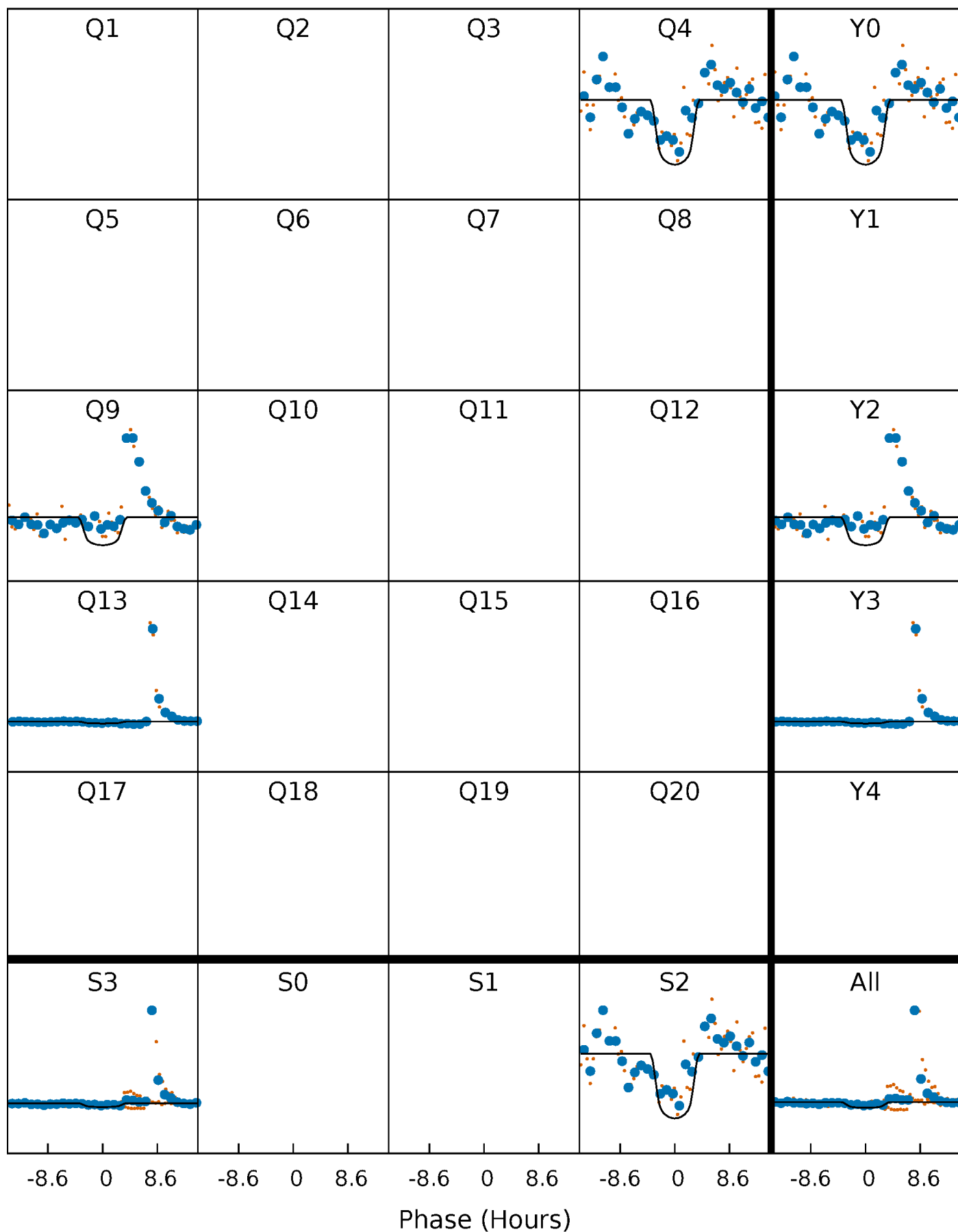
PDC Quarter-Phased Transit Curves

TCE 007848068-04 P=437.787617 Days $T_0=373.711139$ (BKJD)



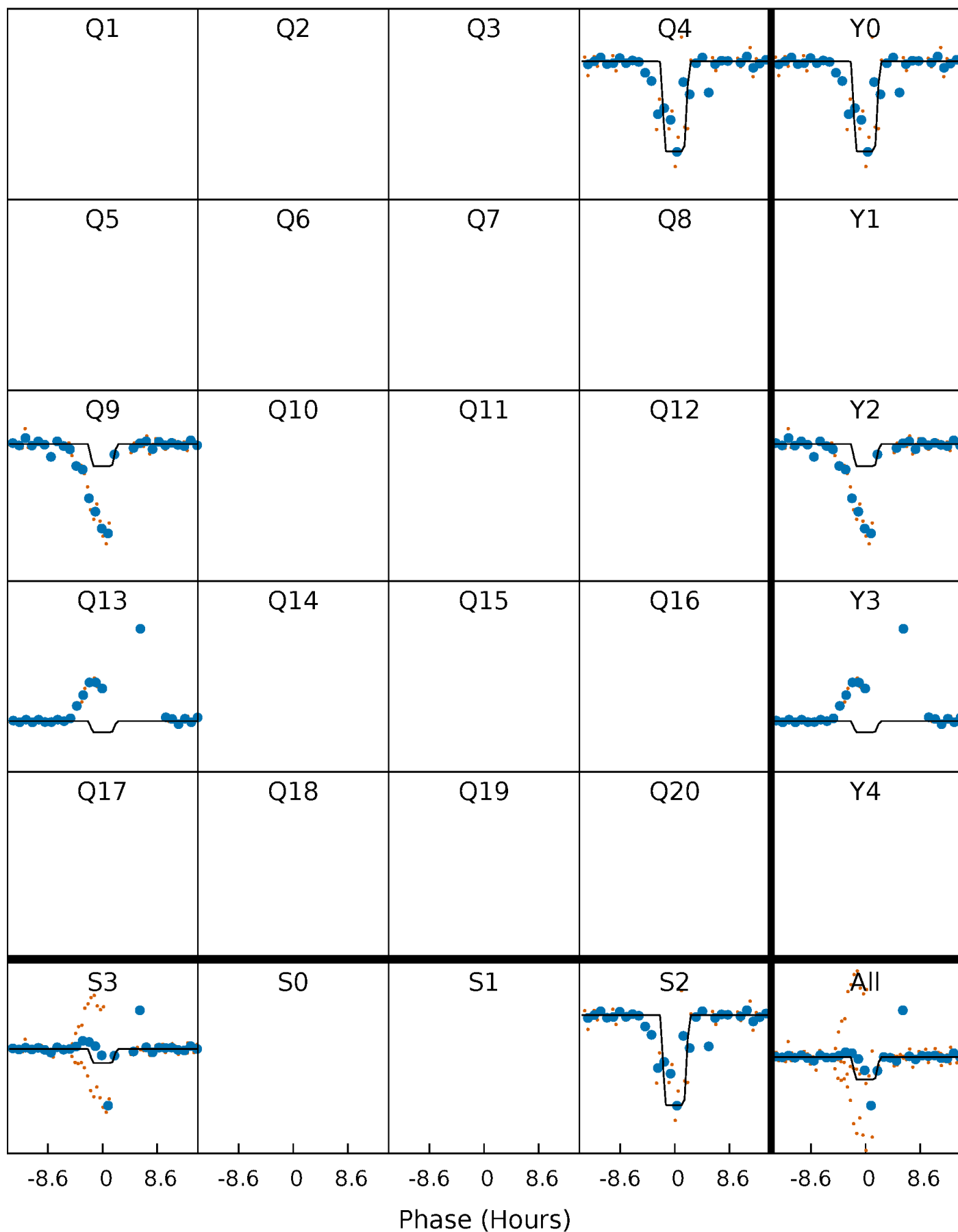
DV Quarter-Phased Transit Curves

TCE 007848068-04 P=437.787617 Days $T_0=373.711139$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

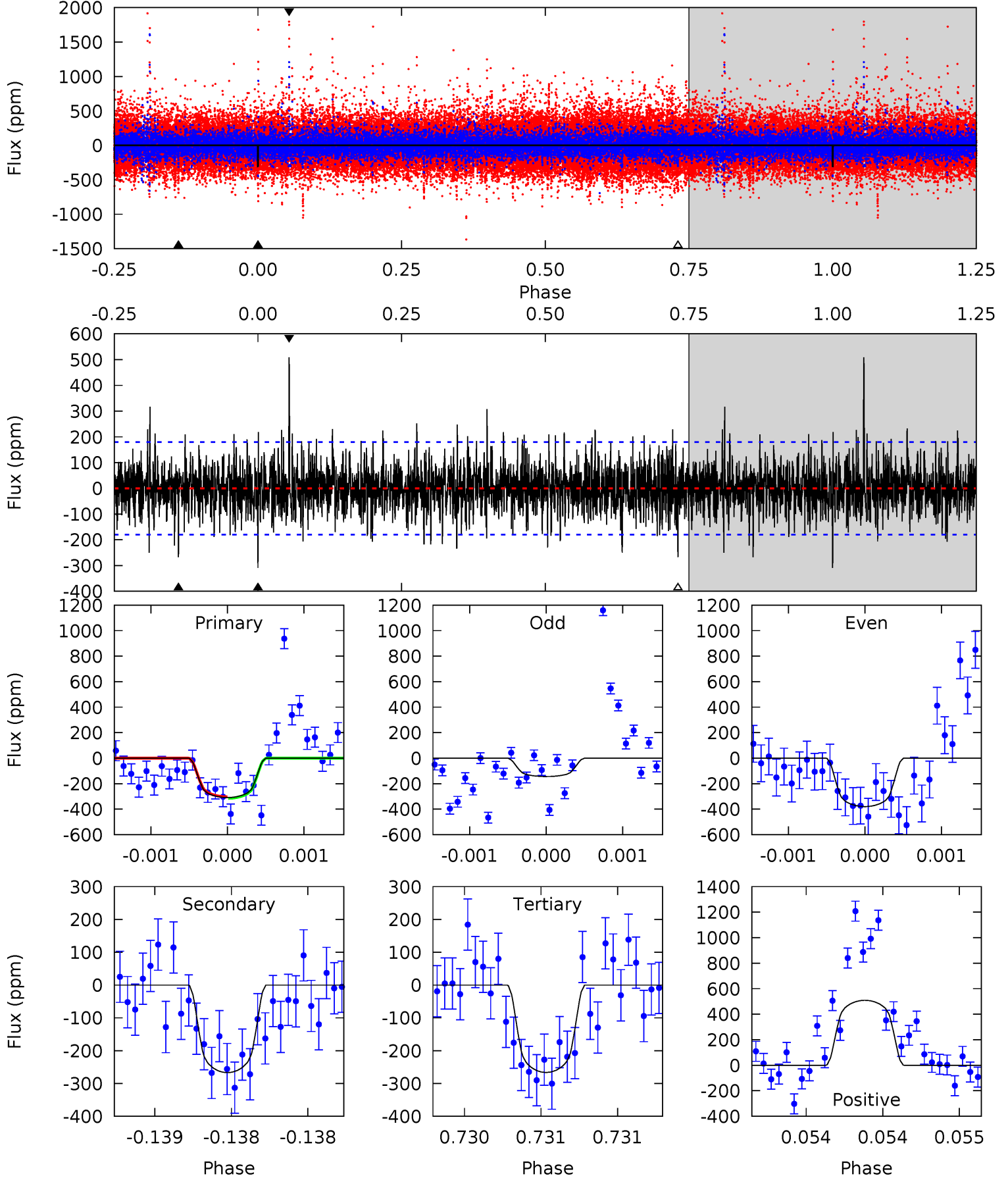
TCE 007848068-04 P=437.850324 Days $T_0=373.726822$ (BKJD)



DV Model-Shift Uniqueness Test

007848068-04, P = 437.787617 Days, E = 373.711139 Days

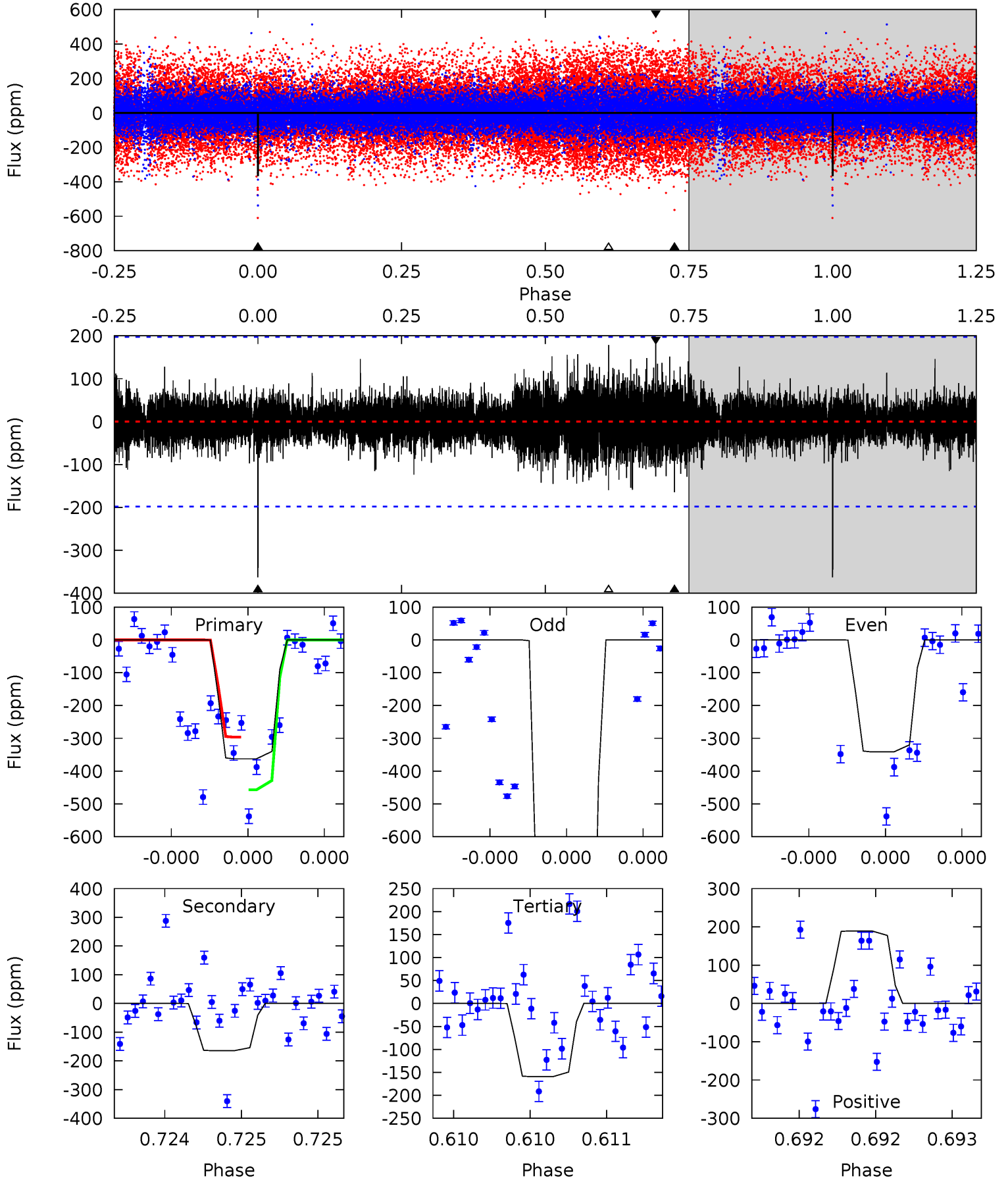
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.46	8.18	8.16	15.6	5.51	3.38	2.14	1.30	-6.13	0.01	-7.42	2.87	0.88	0.62	0.17



Alt Model-Shift Uniqueness Test

007848068-04, P = 437.850324 Days, E = 373.726822 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.2	4.64	4.50	5.35	5.59	3.50	0.87	5.73	4.88	0.14	-0.71	26.0	0.28	0.34	0



Stellar Parameters For KIC 007848068

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5189^{+186}_{-207}	$3.503^{+0.856}_{-0.214}$	$0.380^{+0.100}_{-0.300}$	$3.941^{+1.184}_{-2.763}$	$1.805^{+0.214}_{-0.858}$	$0.042^{+1.121}_{-0.022}$
	+4%/-4%	+24%/-6%	+26%/-79%	+30%/-70%	+12%/-48%	+2699%/-53%
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 007848068-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-267 ± 33	$10.82^{+4.45}_{-4.23}$	525^{+59}_{-103}	4147^{+420}_{-303}	2281^{+3514}_{-1091}
Alt.	-164 ± 35	$8.03^{+3.57}_{-3.46}$	524^{+64}_{-105}	4201^{+588}_{-391}	2551^{+4832}_{-1360}

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

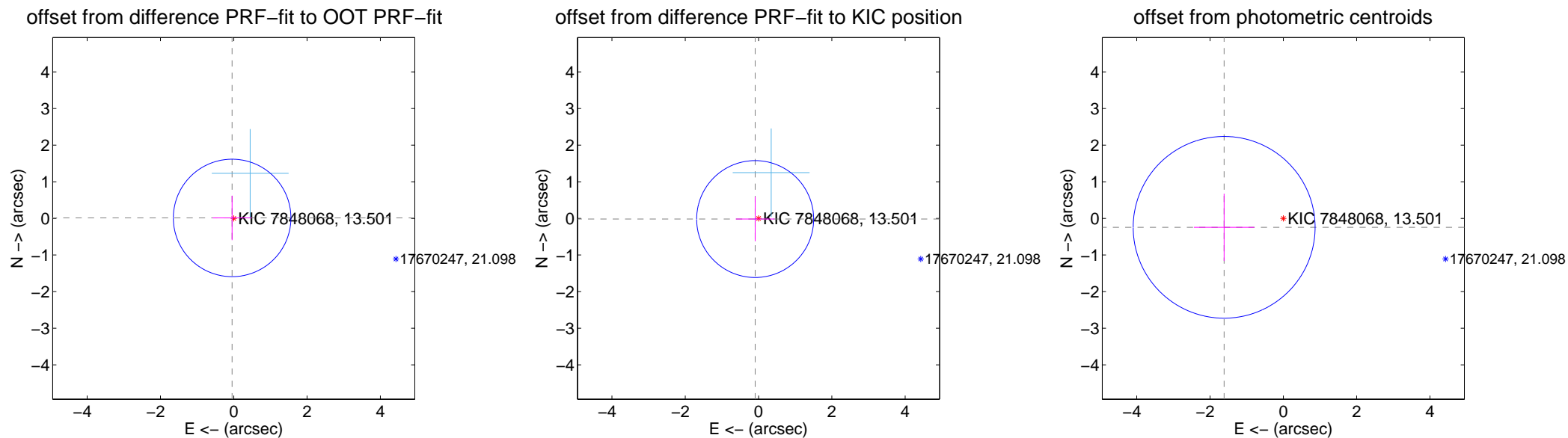
DV Centroid Data

Supplemental centroid analysis for 007848068-04. Kepler magnitude: 13.50. Transit SNR 7.80

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.046 ± 0.535	0.09	0.045 ± 0.529	0.012 ± 0.608
PRF-fit source offset from KIC position	0.095 ± 0.532	0.18	0.093 ± 0.529	-0.018 ± 0.608
photometric centroid source offset	1.63 ± 0.83	1.97	1.62 ± 0.82	-0.24 ± 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.

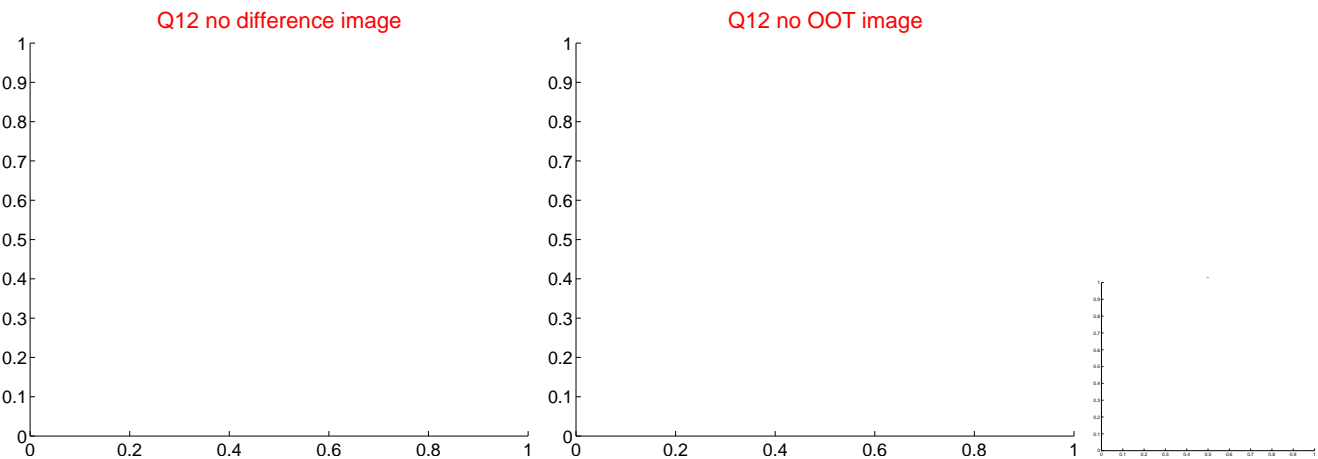
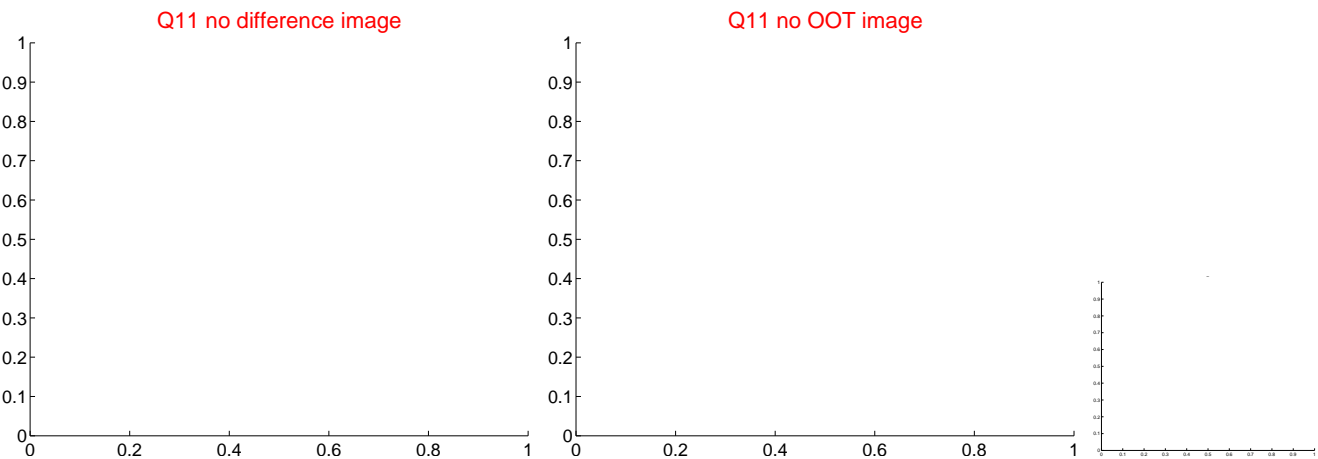
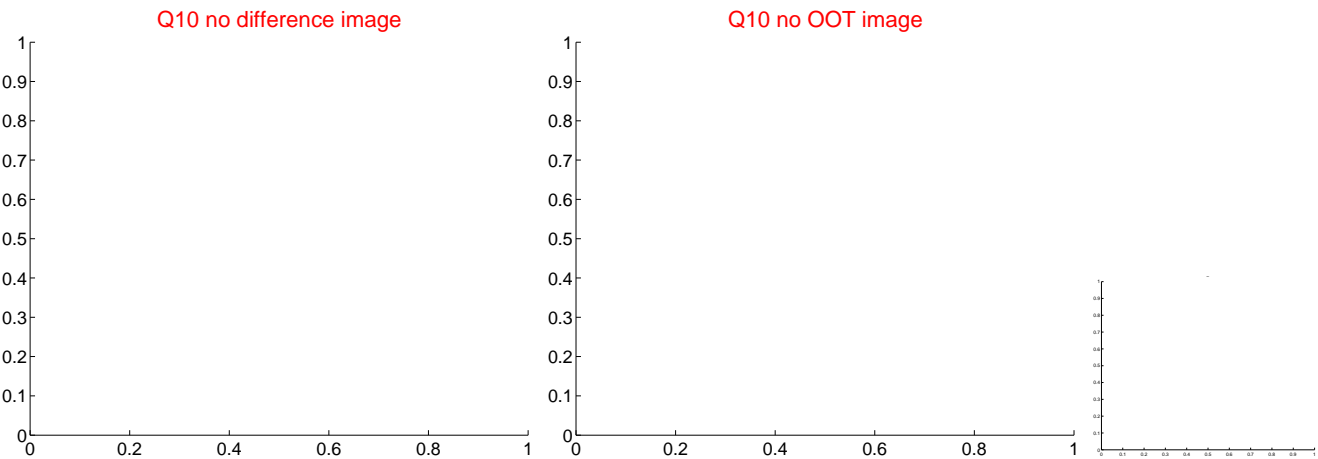
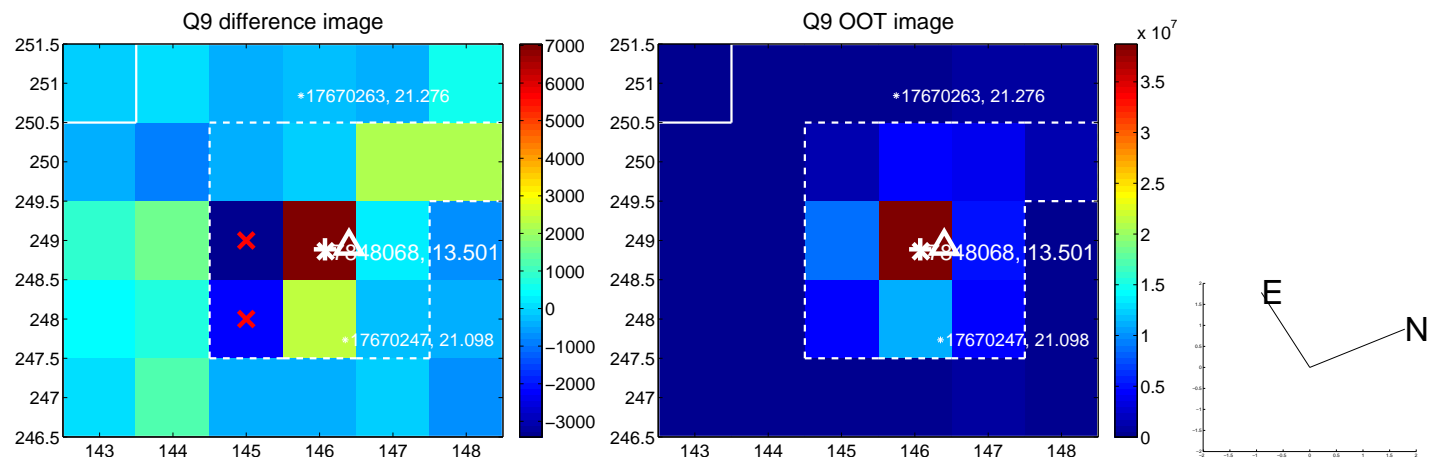
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



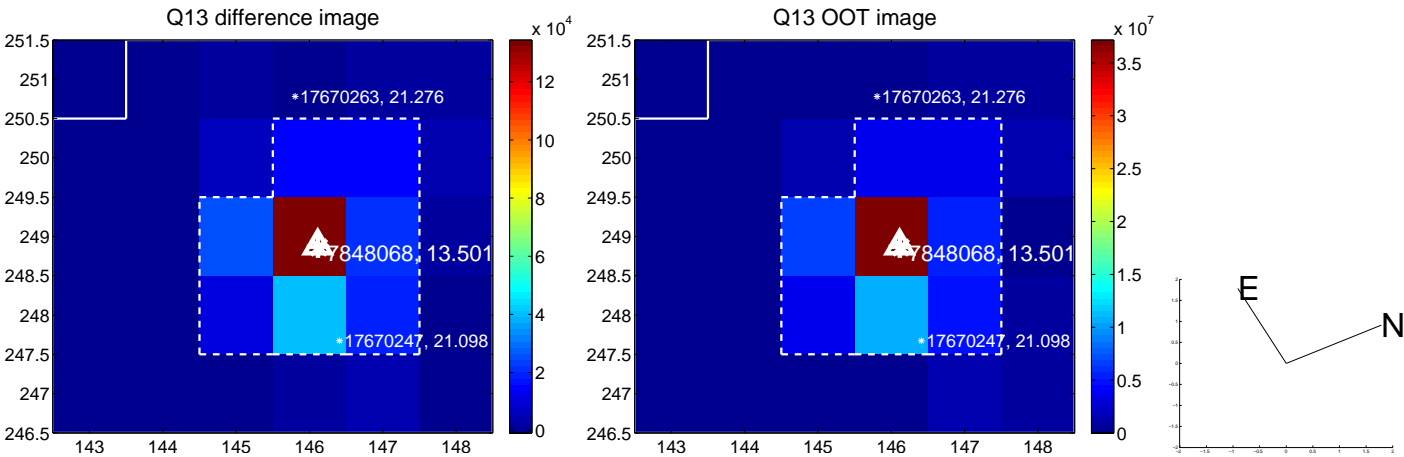
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



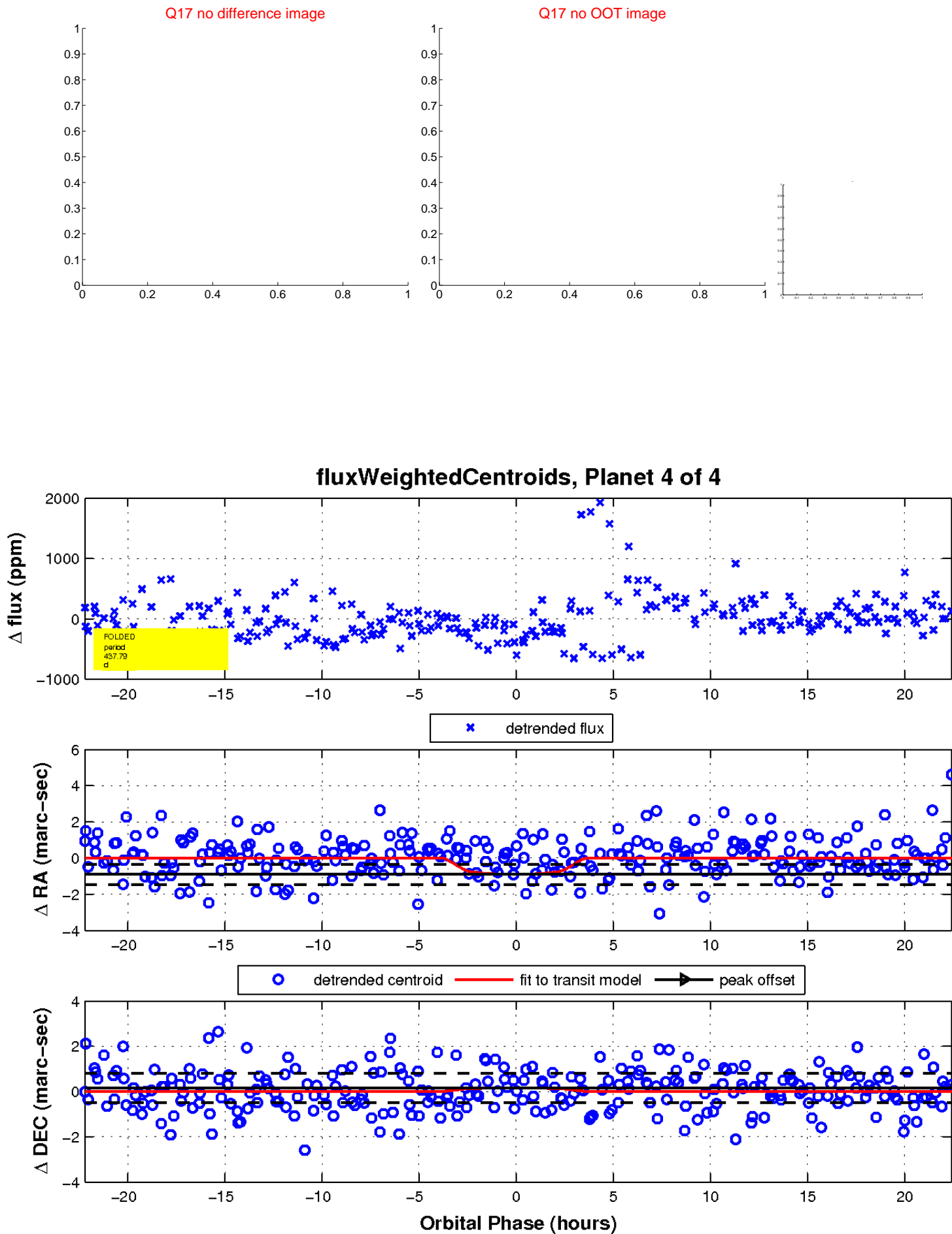
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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



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



UKIRT Image

Declination

