

KIC 007832787

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})
007832787-01	OBS	8270.01	338.007584	262.397686	594.3	16.713	8.4	10.5	0.90	5741	2.27	0.91
007832787-02	OBS	No	443.360505	465.740223	806.8	30.886	10.3	13.4	0.90	5741	2.72	0.63
007832787-03	OBS	No	369.003880	233.648417	872.3	35.689	8.5	10.1	0.90	5741	5.09	0.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007832787-01	OBS	PC	0.58	0	0	0	0	CENT_FEW_DIFFS
007832787-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007832787-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—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.

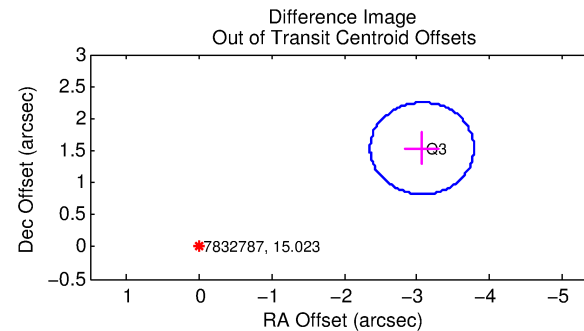
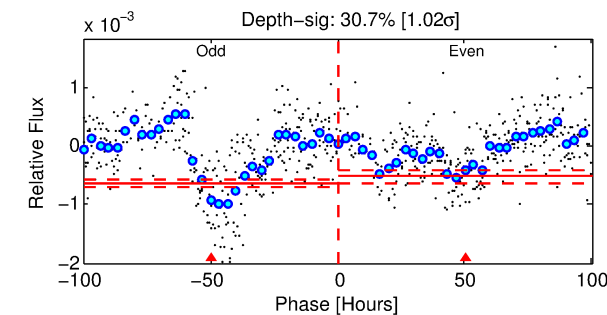
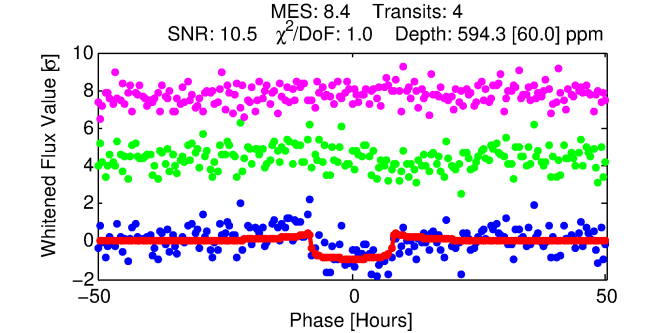
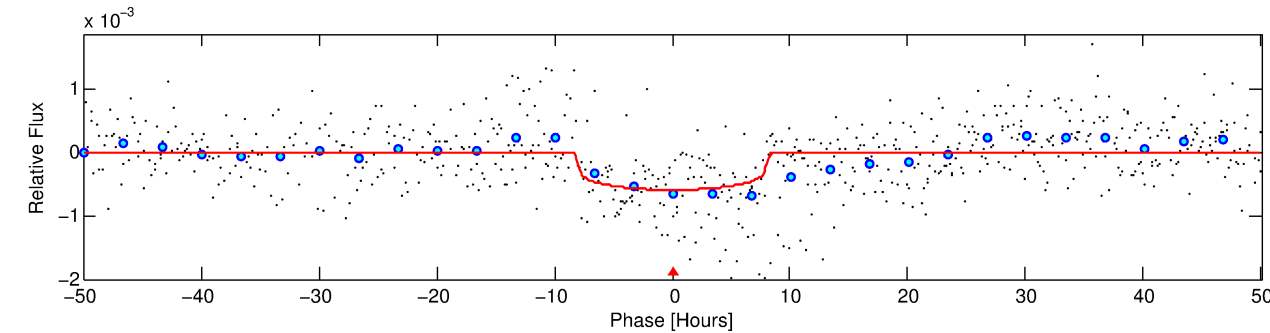
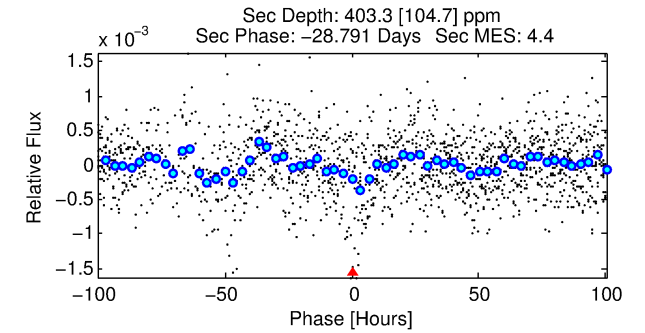
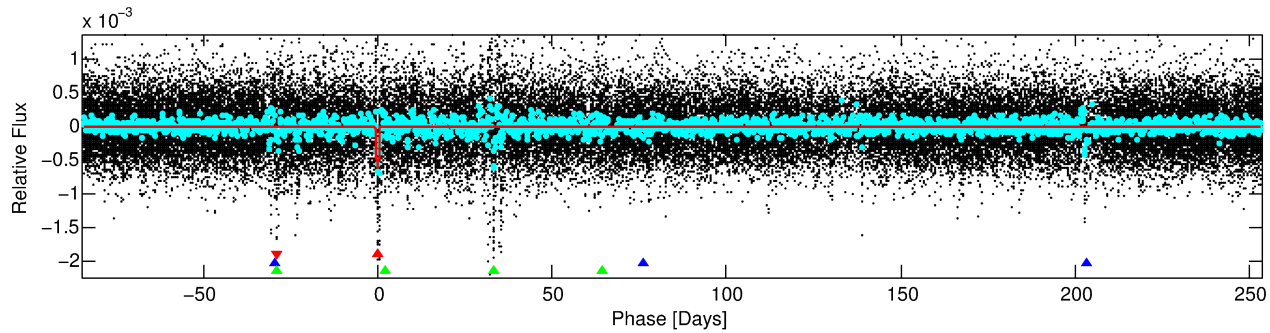
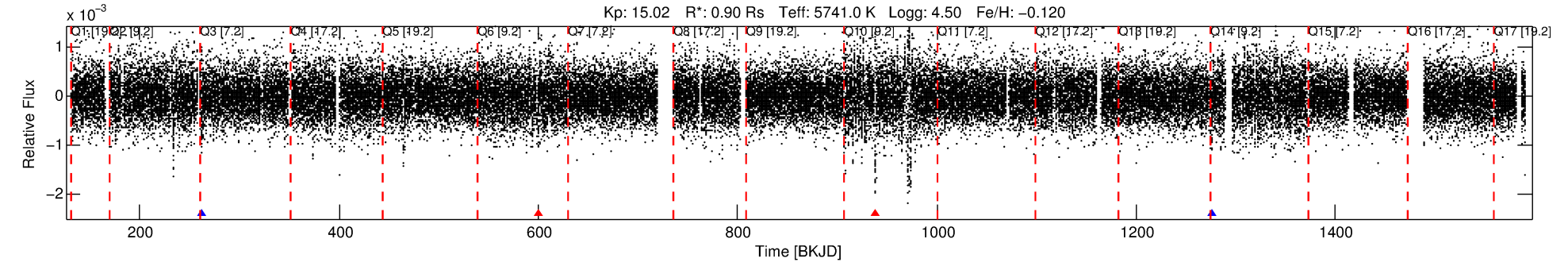
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007832787-01

No Significant Match Found

DV One-Page Summary

KIC: 7832787 Candidate: 1 of 3 Period: 338.008 d



DV Fit Results:

Period = 338.00758 [0.00937] d
Epoch = 262.3977 [0.0153] BKJD
Rp/R* = 0.0232 [0.0075]
a/R* = 129.52 [182.85]
b = 0.59 [1.59]
Seff = 0.91 [0.33]
Teq = 249 [23] K
Rp = 2.27 [0.99] Re
a = 0.9286 [0.2238] AU
Ag = 37084.71 [28959.38] [1.28σ]
Teffp = 5344 [948] K [5.37σ]

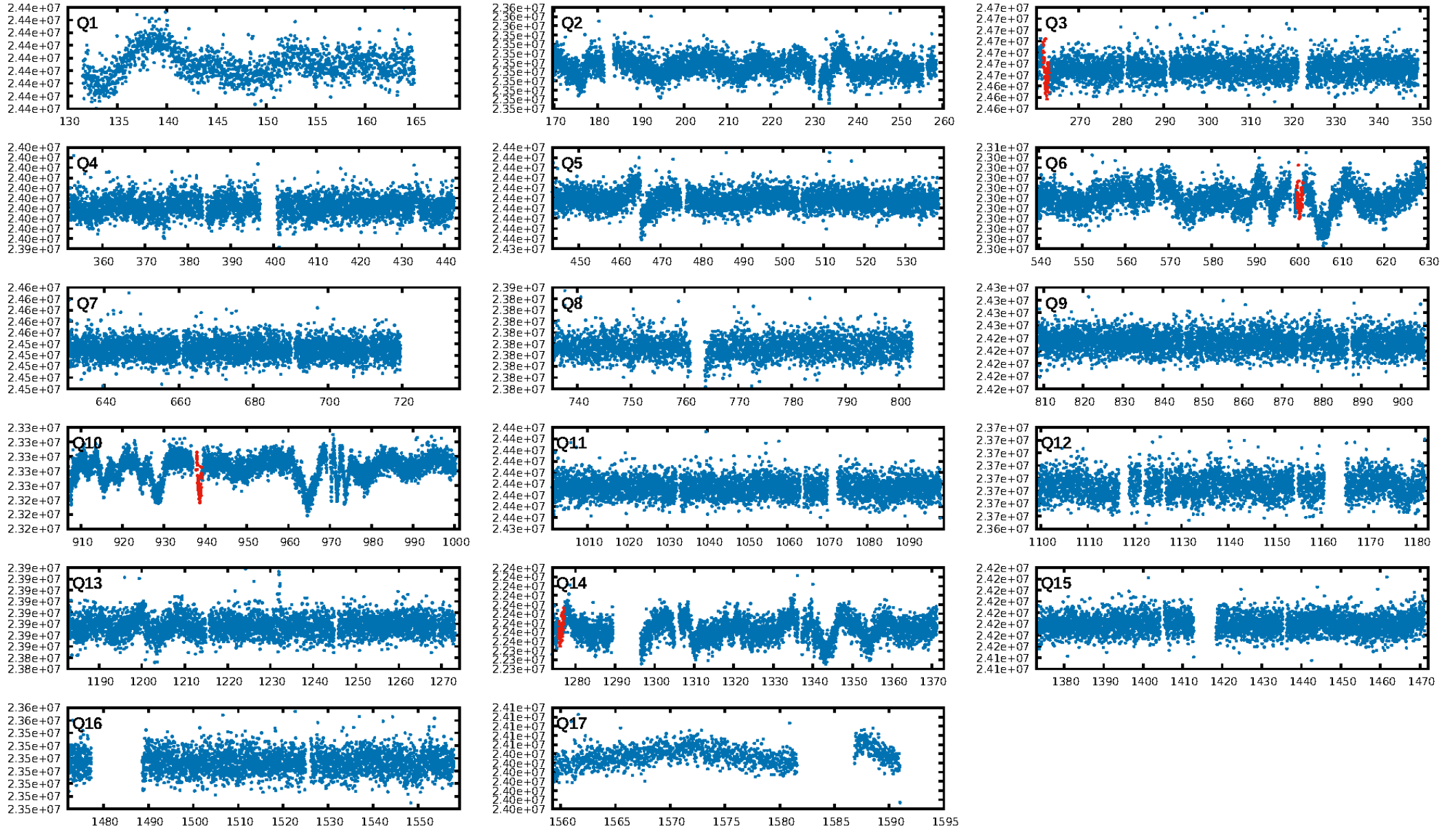
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [18.88σ]
ModelChiSquare2-sig: 13.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 9.35e-11
RollingBand-fgt: 0.50 [2/4]
GhostDiagnostic-chr: -3.331
Centroid-sig: 0.1%
Centroid-so: 3.579 arcsec [2.26σ]
OotOffset-rm: 3.433 arcsec [14.42σ]
KicOffset-rm: 3.473 arcsec [14.59σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [2/2]

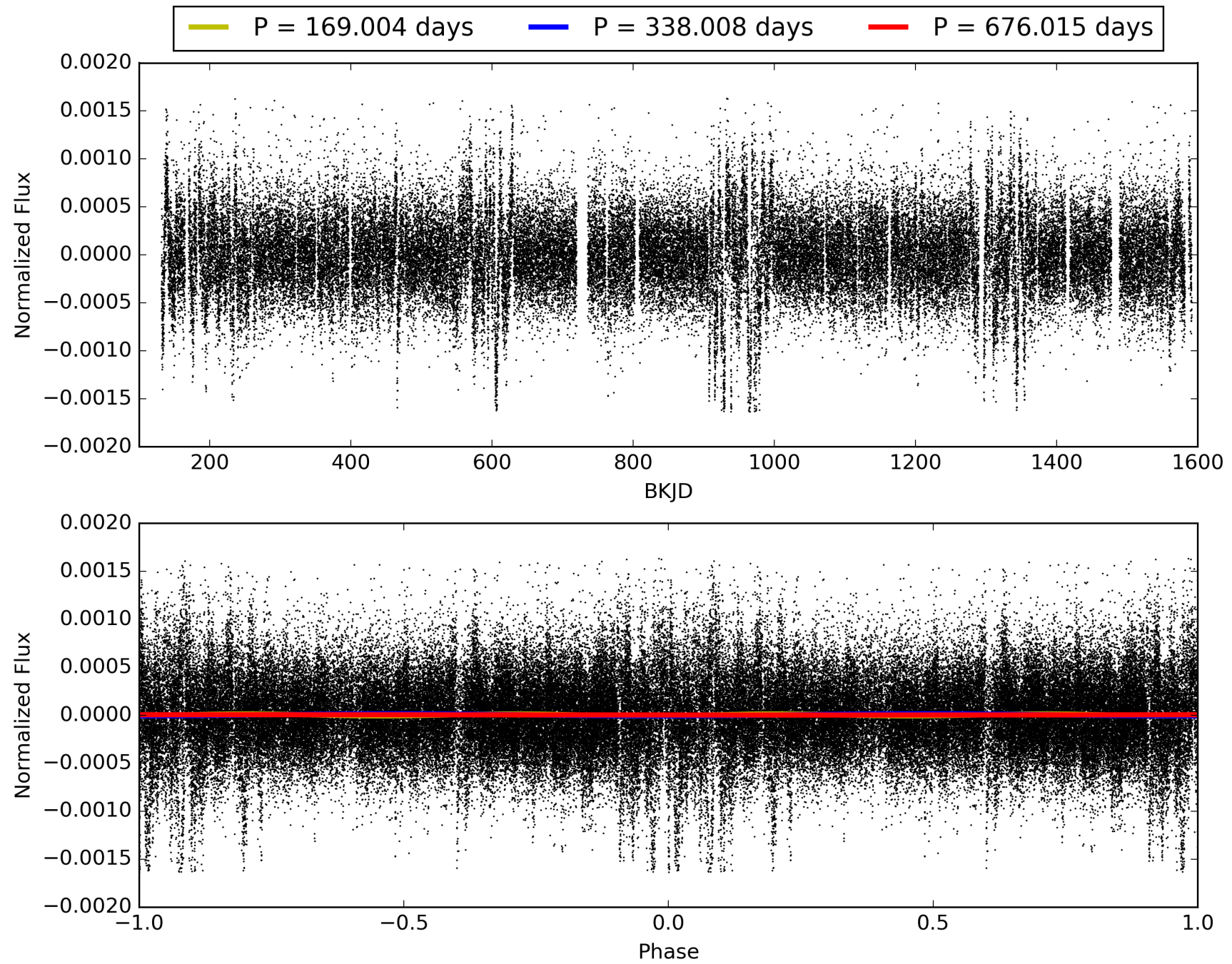
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 11:08:39 Z

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

TCE 007832787-01, PDC Light Curves

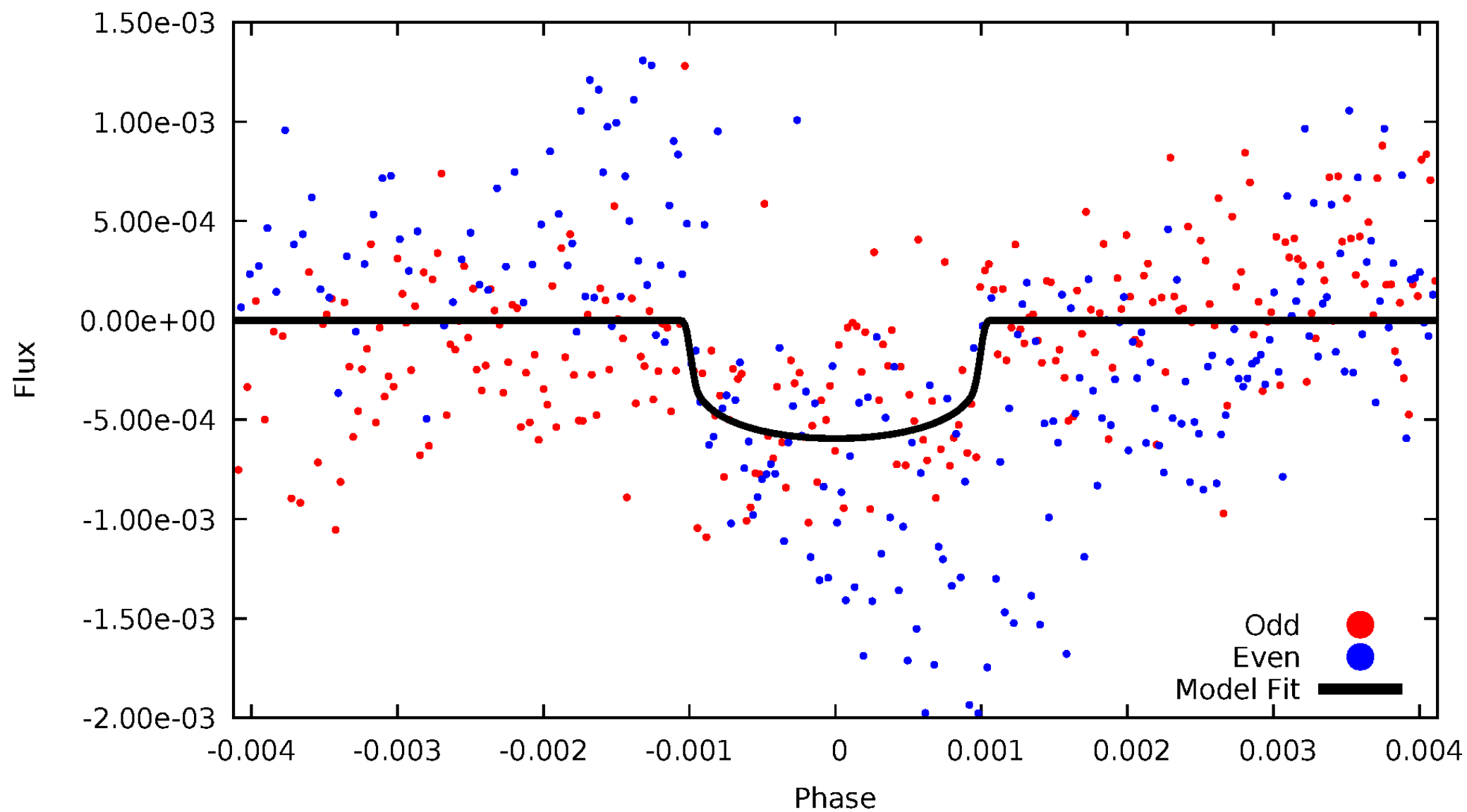


TCE 007832787-01



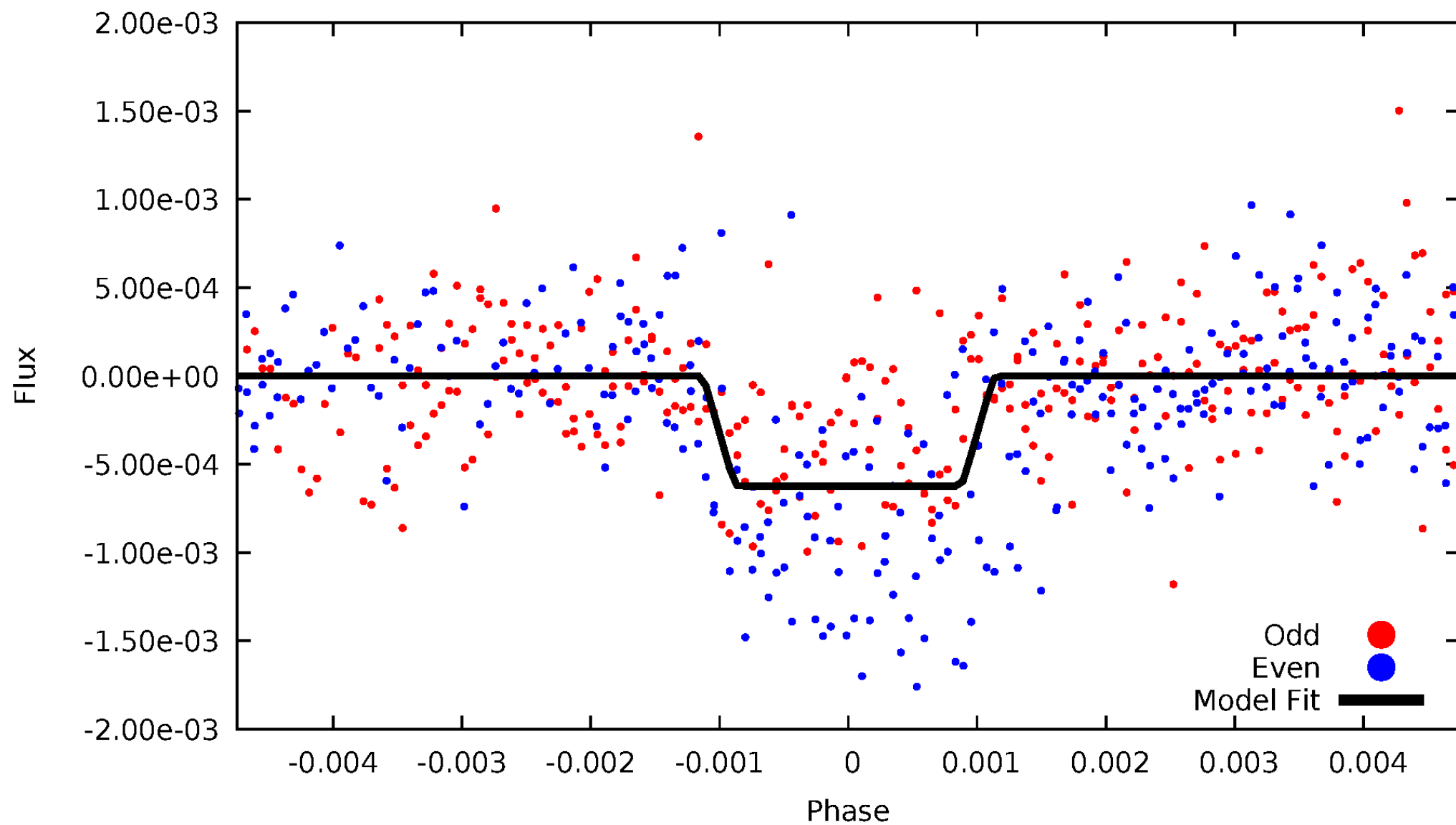
DV Odd/Even

TCE 007832787-01



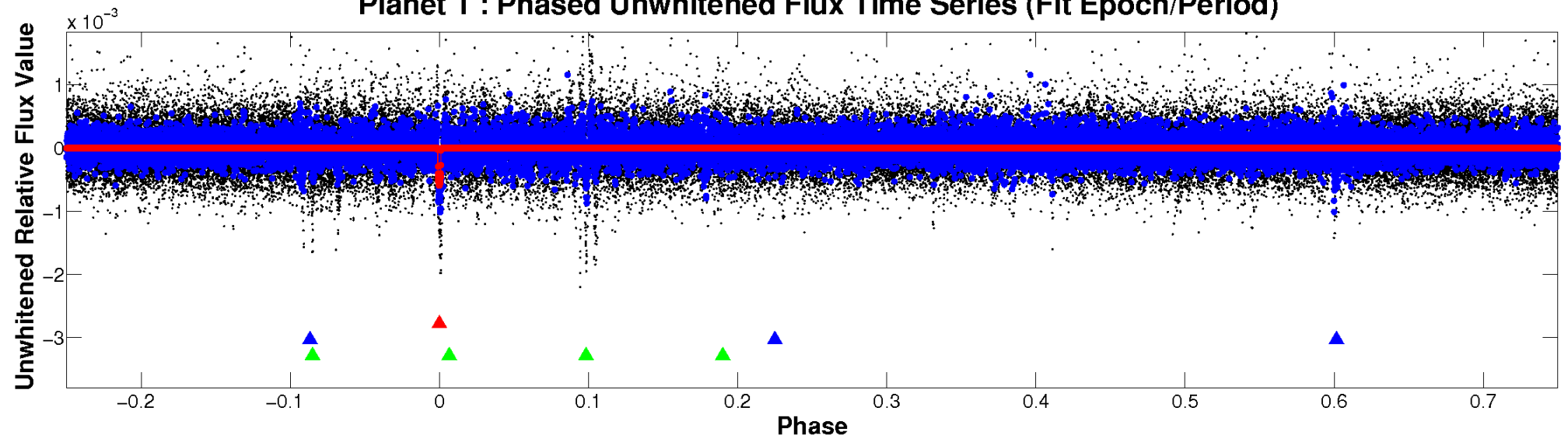
ALT Odd/Even

TCE 007832787-01

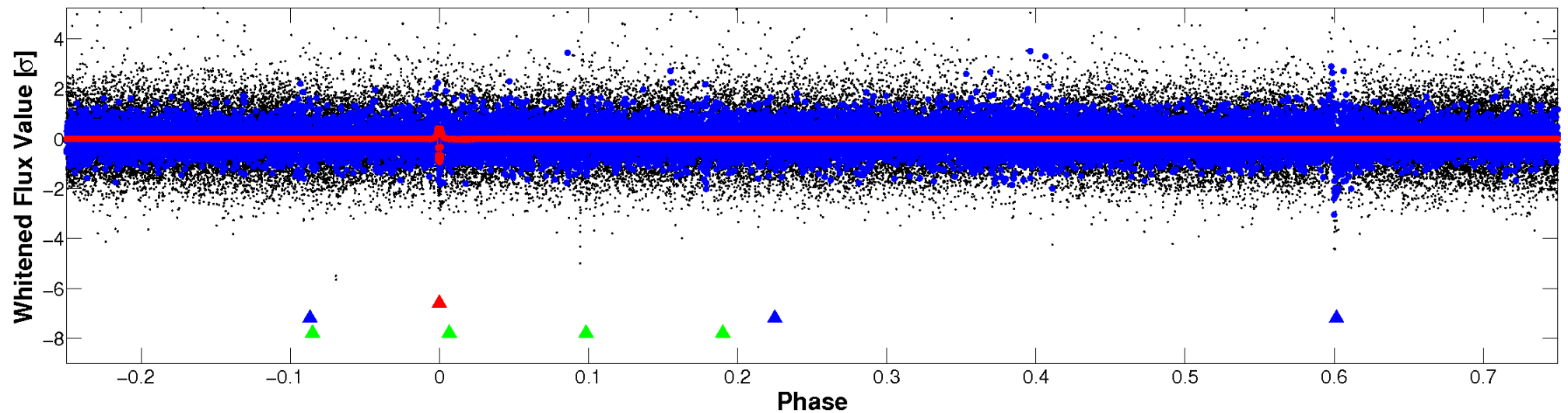


Non-Whitened Vs. Whitened Light Curve

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 007832787-01 P=338.007584 Days $T_0=262.397686$ (BKJD)



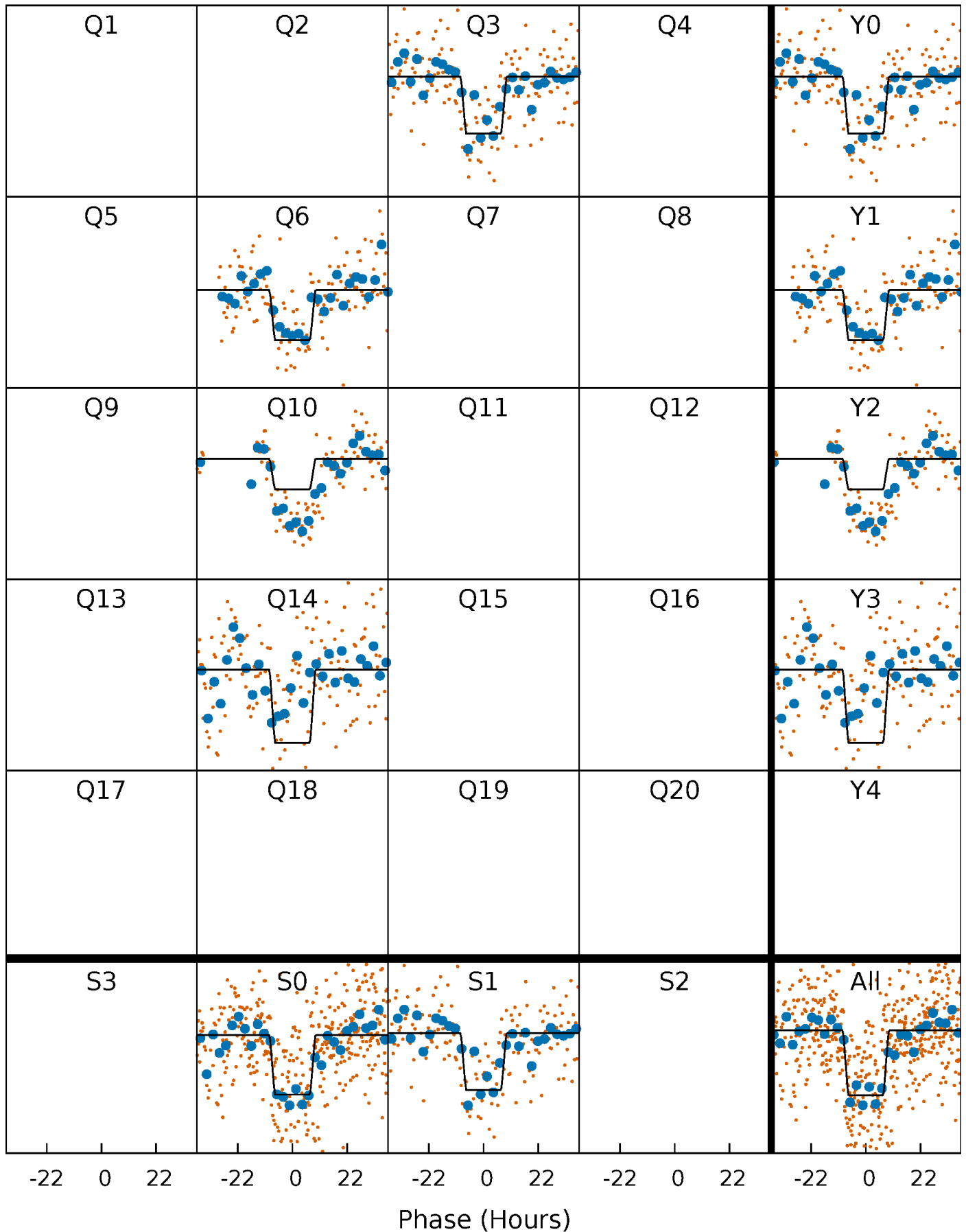
DV Quarter-Phased Transit Curves

TCE 007832787-01 $P=338.007584$ Days $T_0=262.397686$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

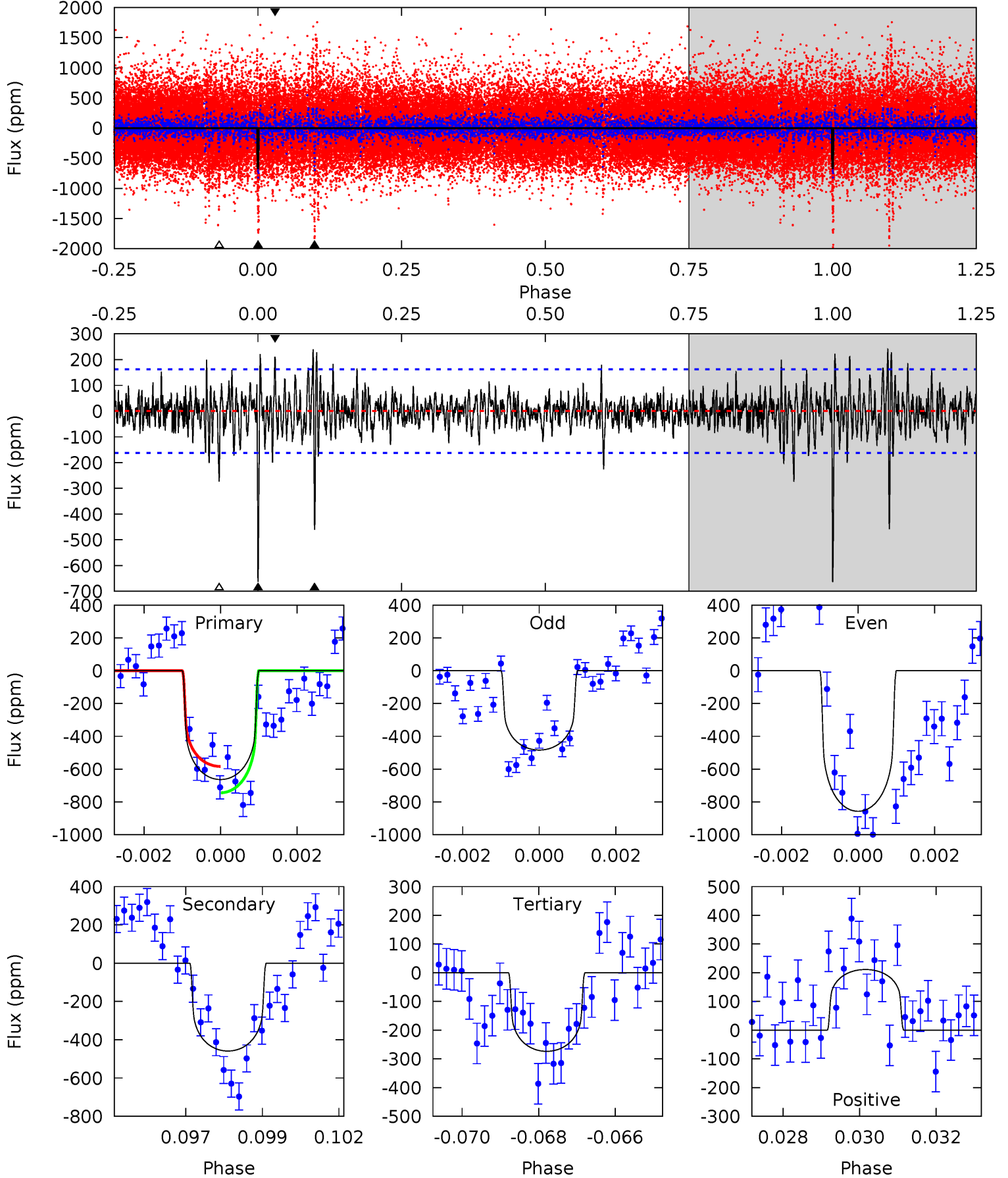
TCE 007832787-01 P=337.991516 Days $T_0=262.458812$ (BKJD)



DV Model-Shift Uniqueness Test

007832787-01, P = 338.007584 Days, E = 262.397686 Days

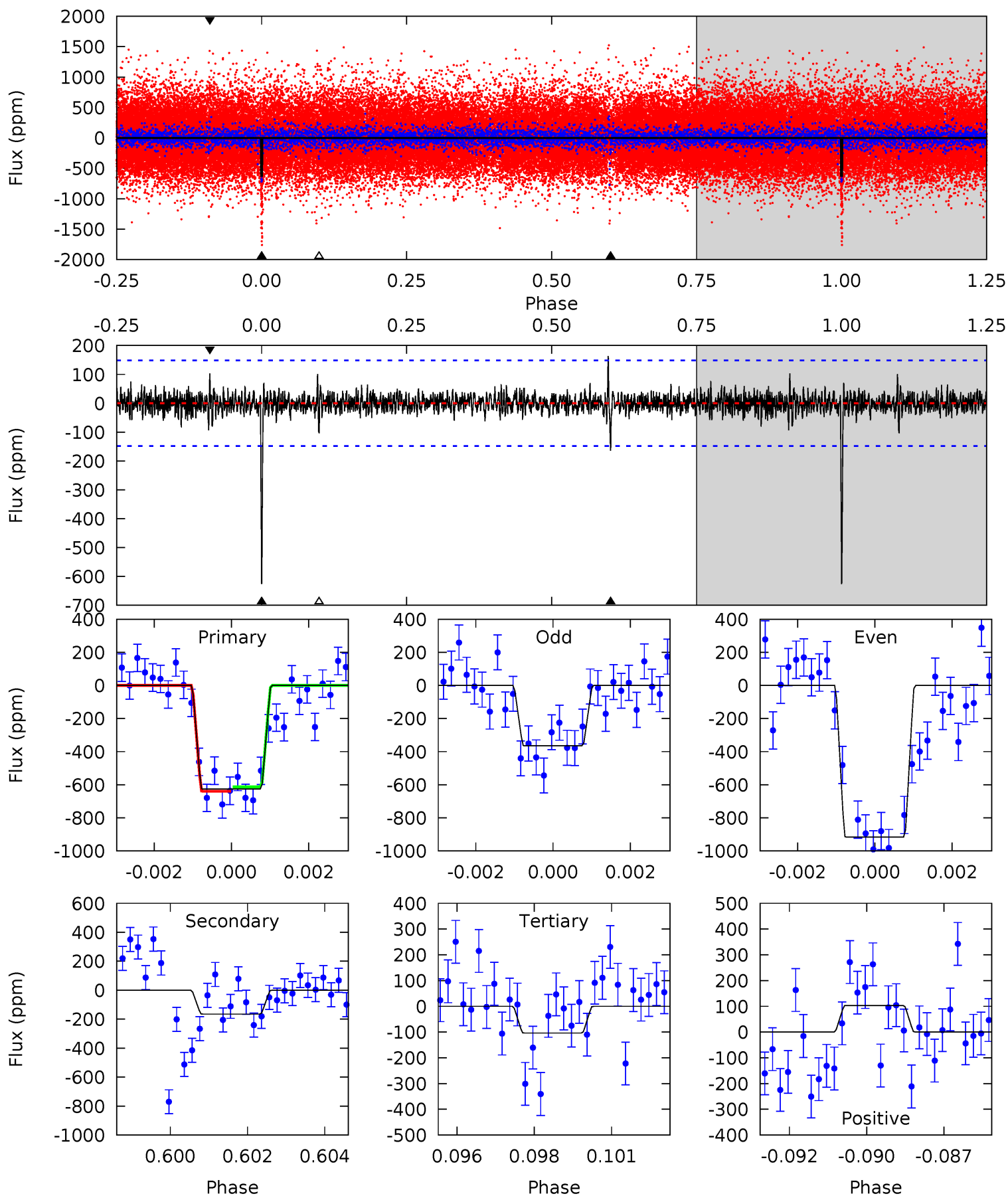
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.7	15.0	8.95	6.91	5.32	3.07	1.75	12.8	14.8	6.06	8.10	6.17	1.25	0.27	2.62



Alt Model-Shift Uniqueness Test

007832787-01, P = 337.991516 Days, E = 262.458812 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.4	5.90	3.71	3.69	5.31	3.06	0.83	18.7	18.8	2.18	2.21	9.87	1.24	0.21	0.47



Stellar Parameters For KIC 007832787

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5741^{+153}_{-170}	$4.502^{+0.062}_{-0.188}$	$-0.120^{+0.300}_{-0.300}$	$0.898^{+0.260}_{-0.087}$	$0.934^{+0.116}_{-0.095}$	$1.818^{+0.475}_{-0.864}$
	+3%/-3%	+1%/-4%	+250%/-250%	+29%/-10%	+12%/-10%	+26%/-47%
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 007832787-01 / KOI 8270.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-459 ± 31	$2.43^{+0.80}_{-0.84}$	354^{+22}_{-18}	5463^{+1305}_{-625}	36813^{+48005}_{-15925}
Alt.	-165 ± 28	$2.56^{+0.86}_{-0.84}$	353^{+25}_{-17}	4318^{+736}_{-425}	11893^{+14937}_{-5408}

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

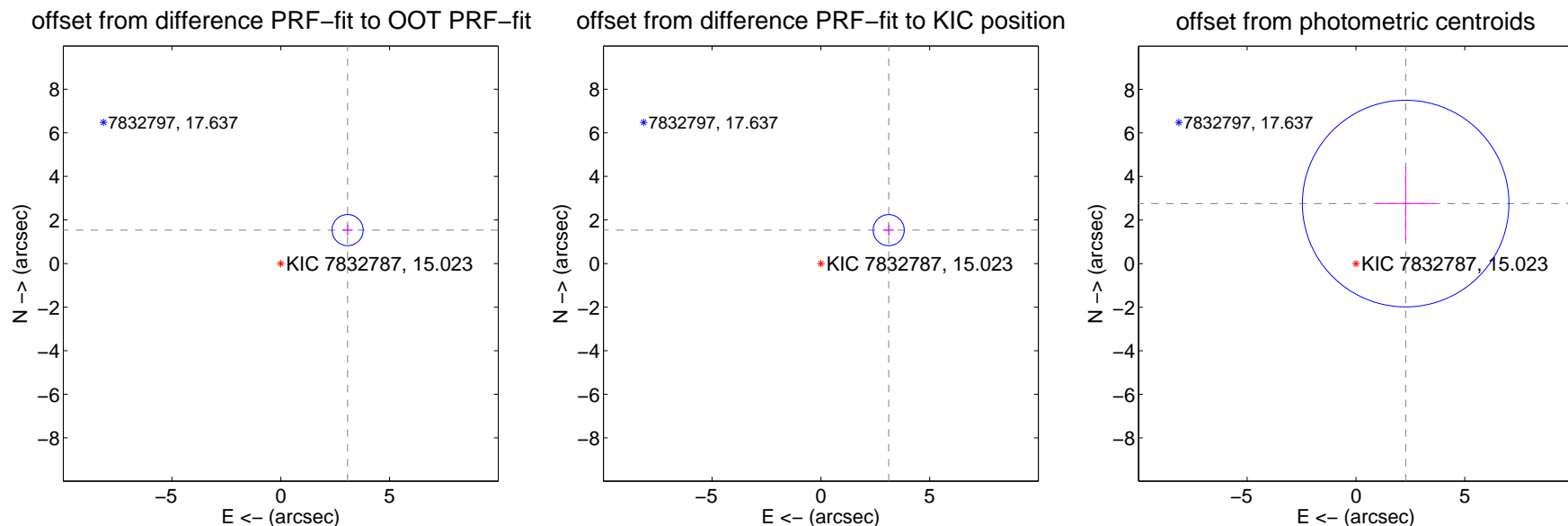
DV Centroid Data

Supplemental centroid analysis for 007832787-01. Kepler magnitude: 15.02. Transit SNR 10.50

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.433 ± 0.238	14.42	-3.071 ± 0.233	1.535 ± 0.256
PRF-fit source offset from KIC position	3.473 ± 0.238	14.59	-3.116 ± 0.233	1.532 ± 0.256
photometric centroid source offset	3.58 ± 1.58	2.26	-2.28 ± 1.39	2.76 ± 1.70



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



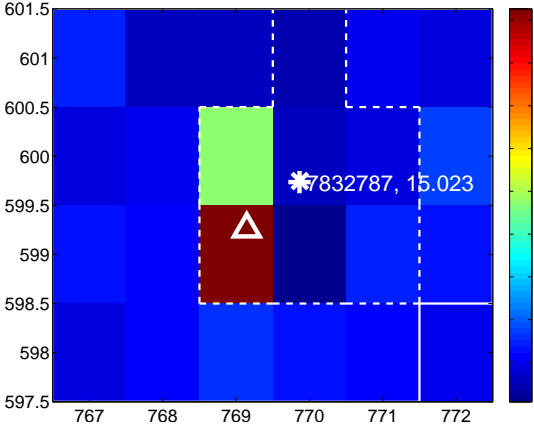
Q2 no difference image



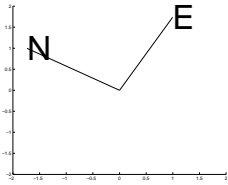
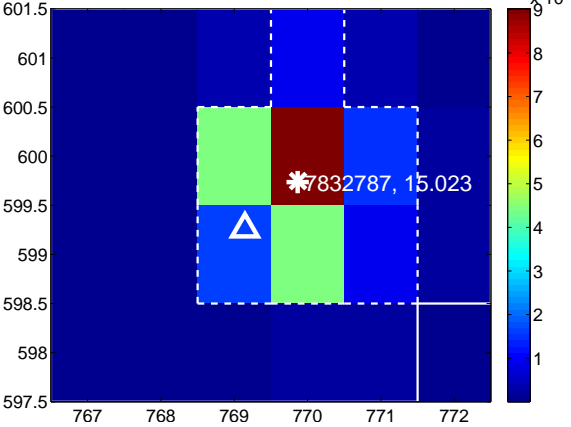
Q2 no OOT image



Q3 difference image



Q3 OOT image



Q4 no difference image



Q4 no OOT image



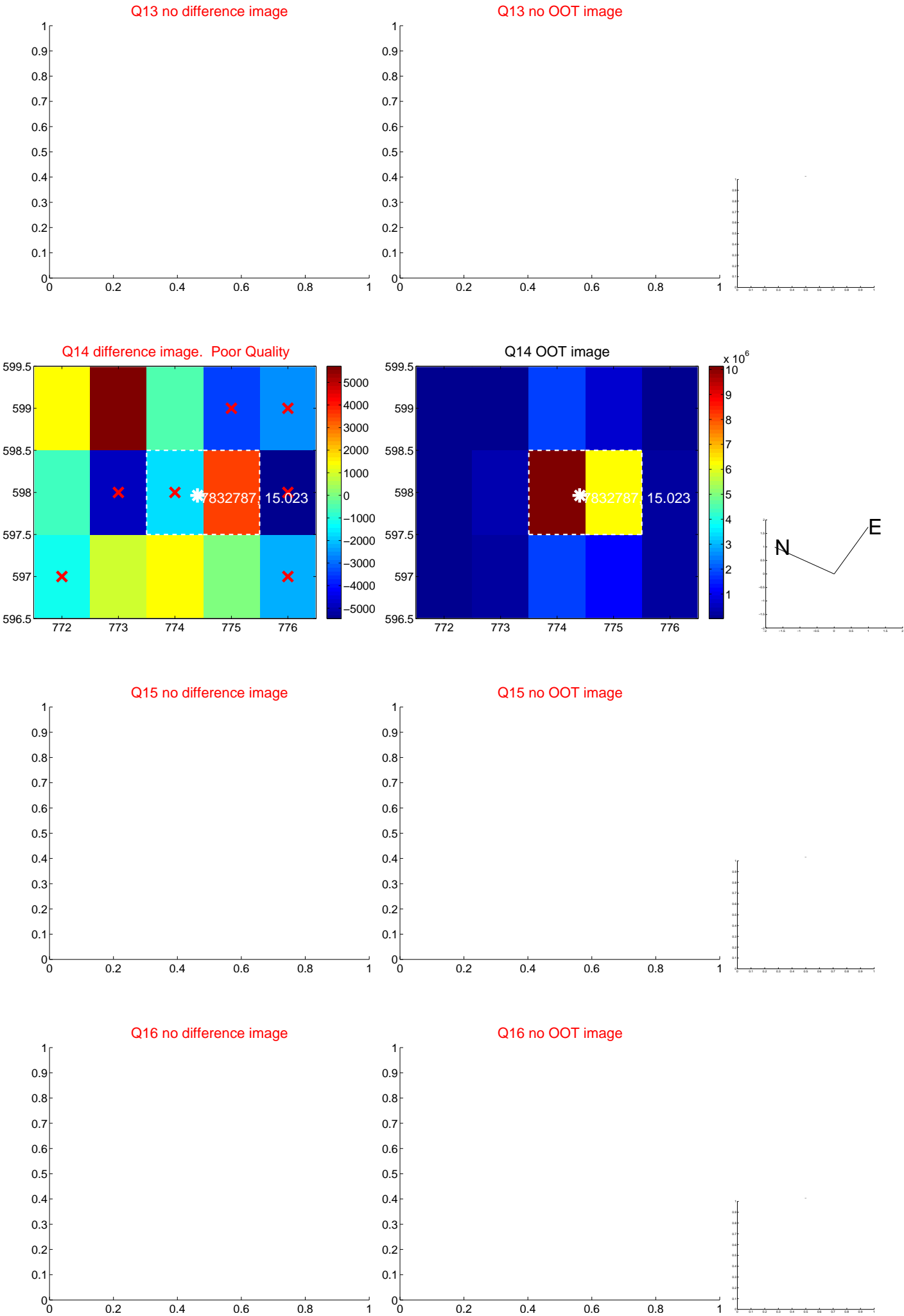
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



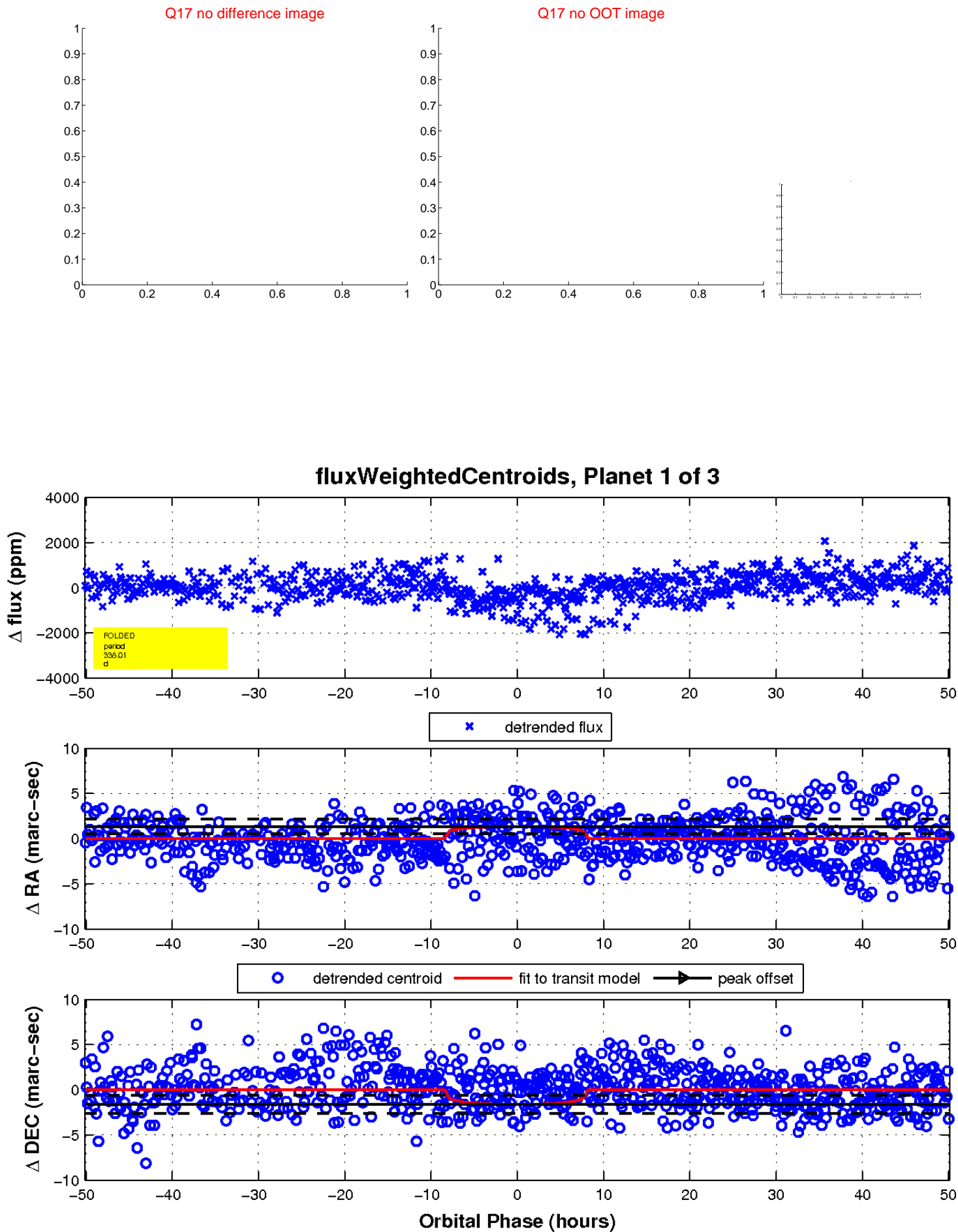
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

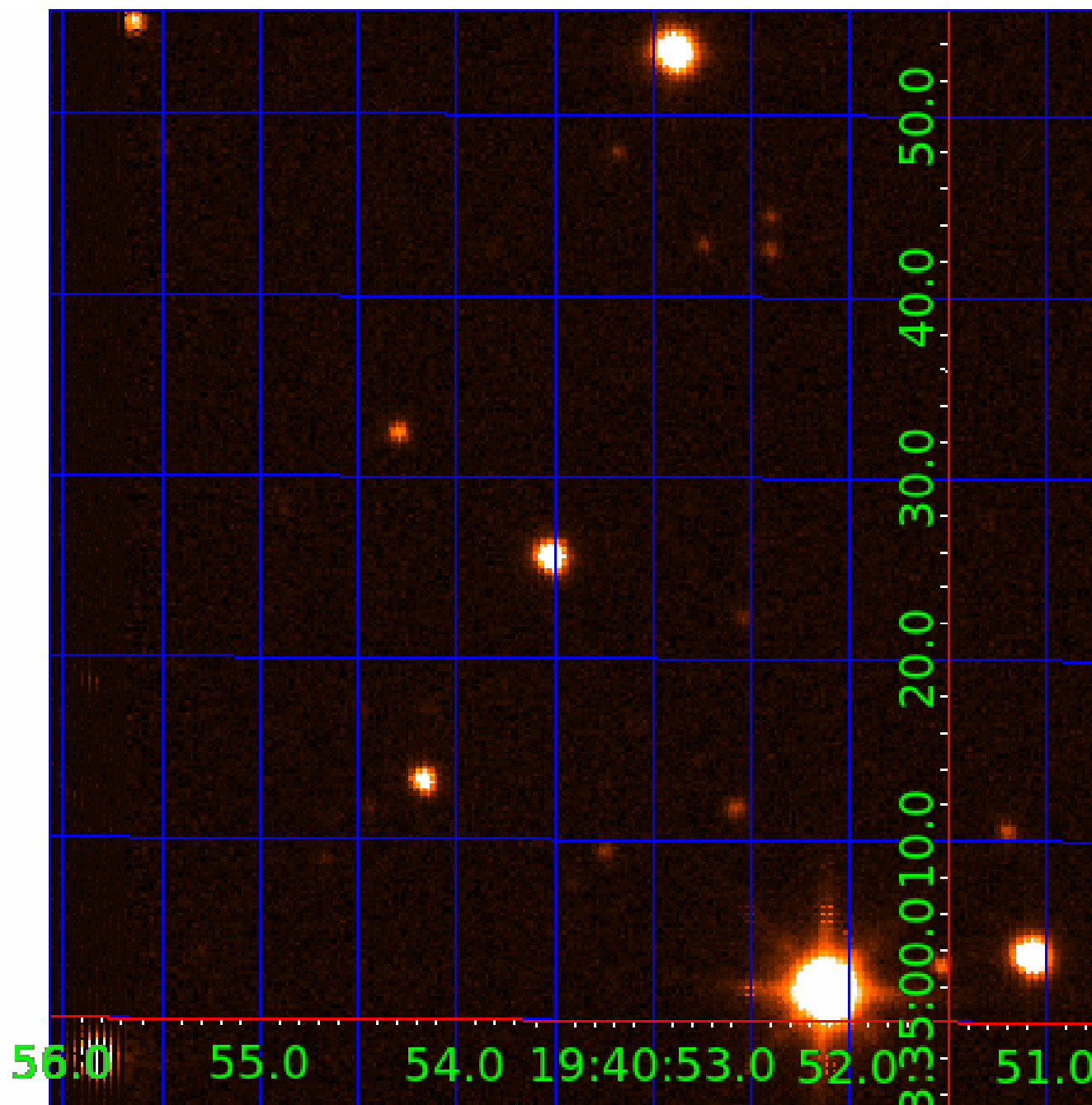


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007832787

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})
007832787-01	OBS	8270.01	338.007584	262.397686	594.3	16.713	8.4	10.5	0.90	5741	2.27	0.91
007832787-02	OBS	No	443.360505	465.740223	806.8	30.886	10.3	13.4	0.90	5741	2.72	0.63
007832787-03	OBS	No	369.003880	233.648417	872.3	35.689	8.5	10.1	0.90	5741	5.09	0.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007832787-01	OBS	PC	0.58	0	0	0	0	CENT_FEW_DIFFS
007832787-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007832787-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—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.

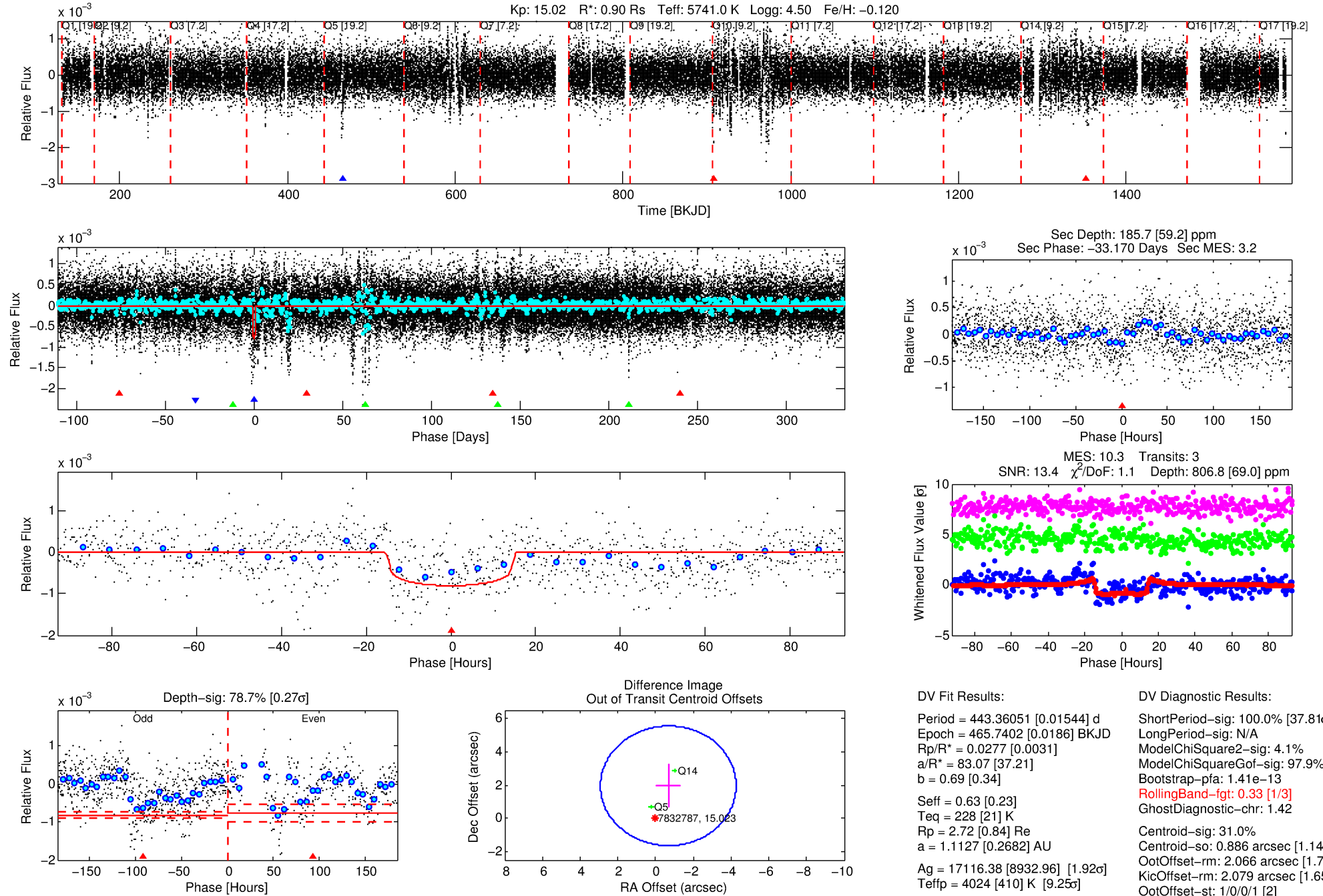
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007832787-02

No Significant Match Found

DV One-Page Summary

KIC: 7832787 Candidate: 2 of 3 Period: 443.361 d



DV Fit Results:

Period = 443.36051 [0.01544] d
Epoch = 465.7402 [0.0186] BKJD
Rp/R* = 0.0277 [0.0031]
a/R* = 83.07 [37.21]
b = 0.69 [0.34]
Seff = 0.63 [0.23]
Teff = 228 [21] K
Rp = 2.72 [0.84] Re
a = 1.1127 [0.2682] AU
Ag = 17116.38 [8932.96] [1.92 σ]
Teffp = 4024 [410] K [9.25 σ]

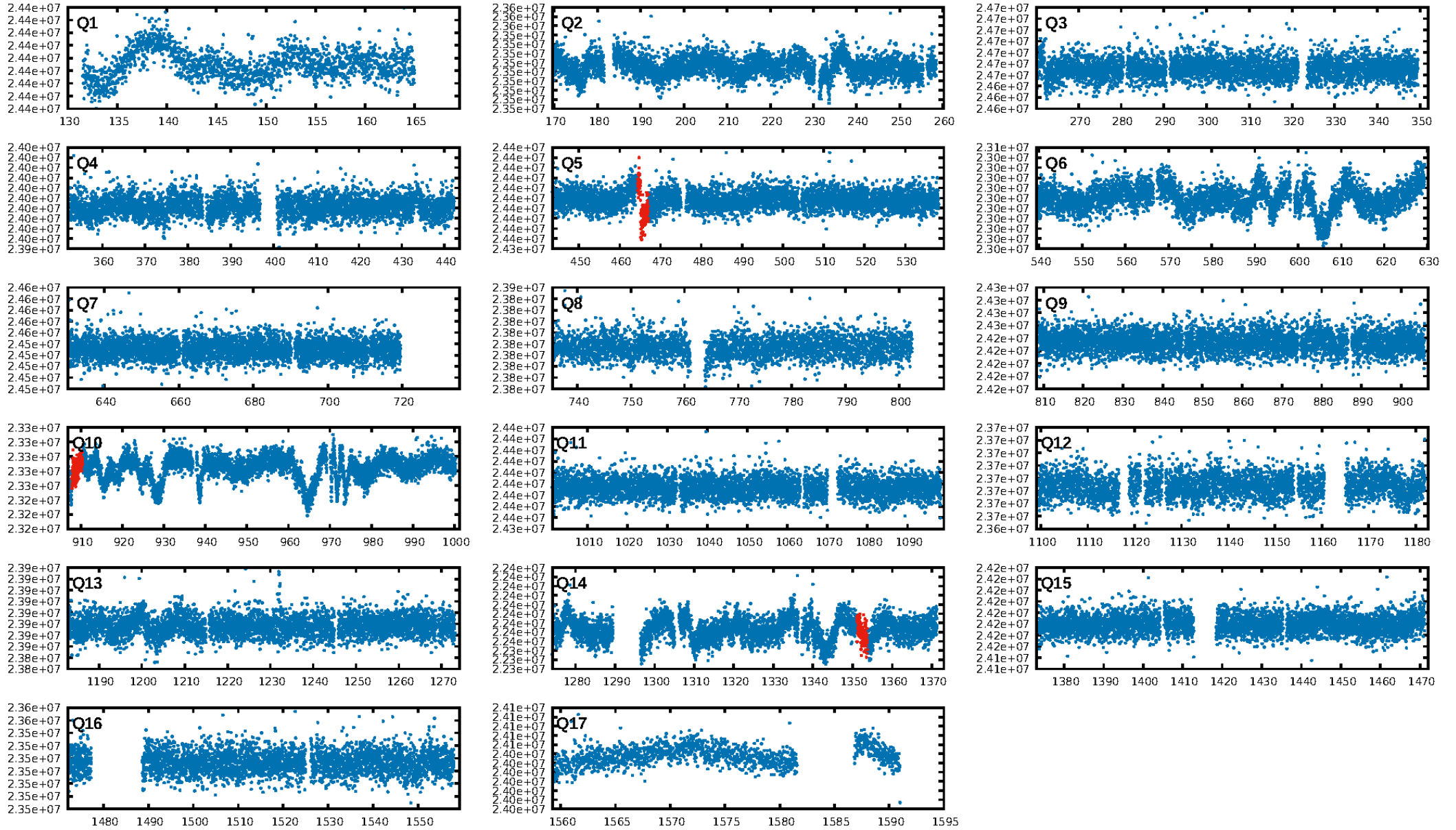
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [37.81 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 4.1%
ModelChiSquareGof-sig: 97.9%
Bootstrap-pfa: 1.41e-13
RollingBand-fgt: 0.33 [1/3]
GhostDiagnostic-chr: 1.42
Centroid-sig: 31.0%
Centroid-so: 0.886 arcsec [1.14 σ]
OotOffset-rm: 2.066 arcsec [1.72 σ]
KicOffset-rm: 2.079 arcsec [1.65 σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

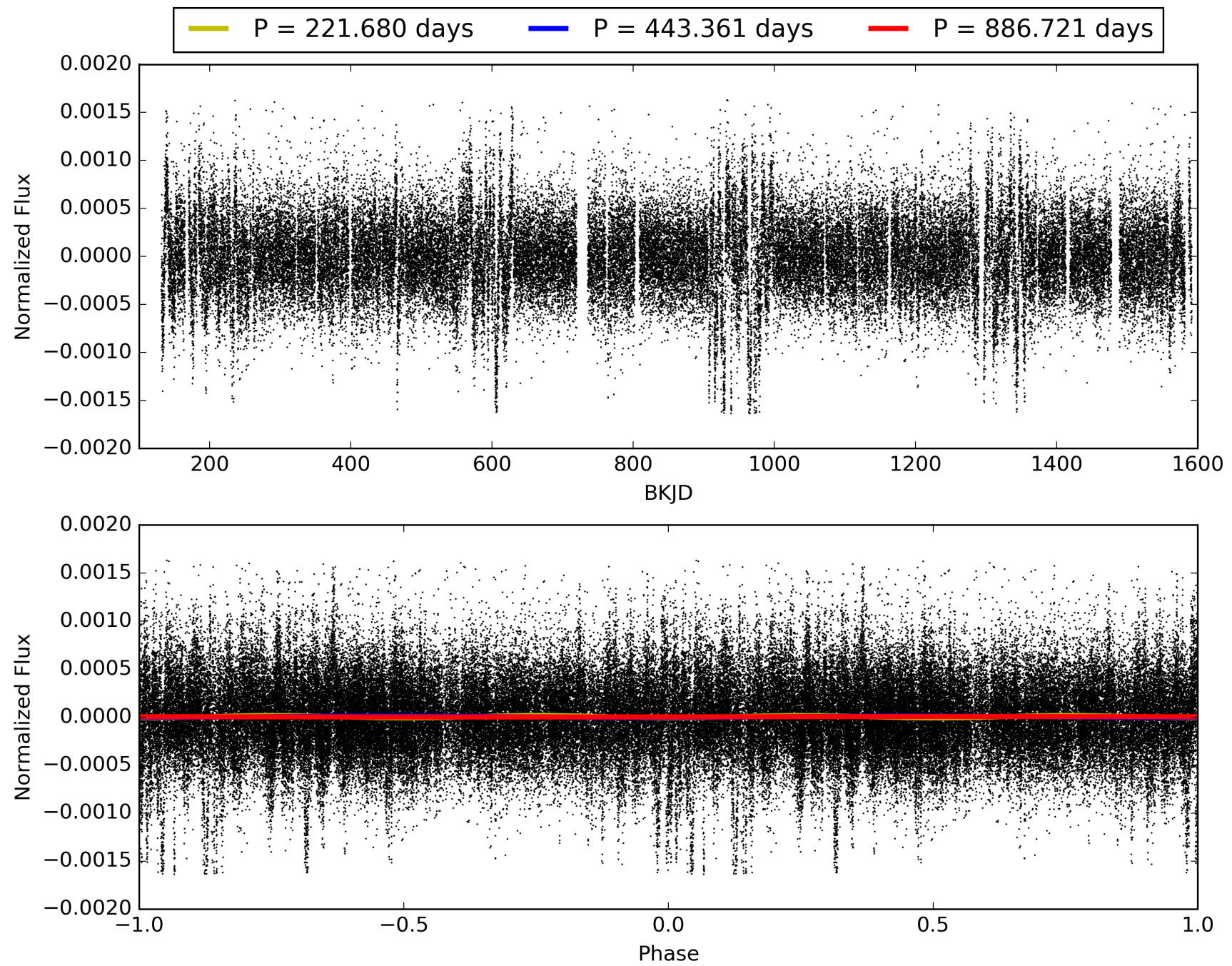
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 11:08:47 Z

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

TCE 007832787-02, PDC Light Curves

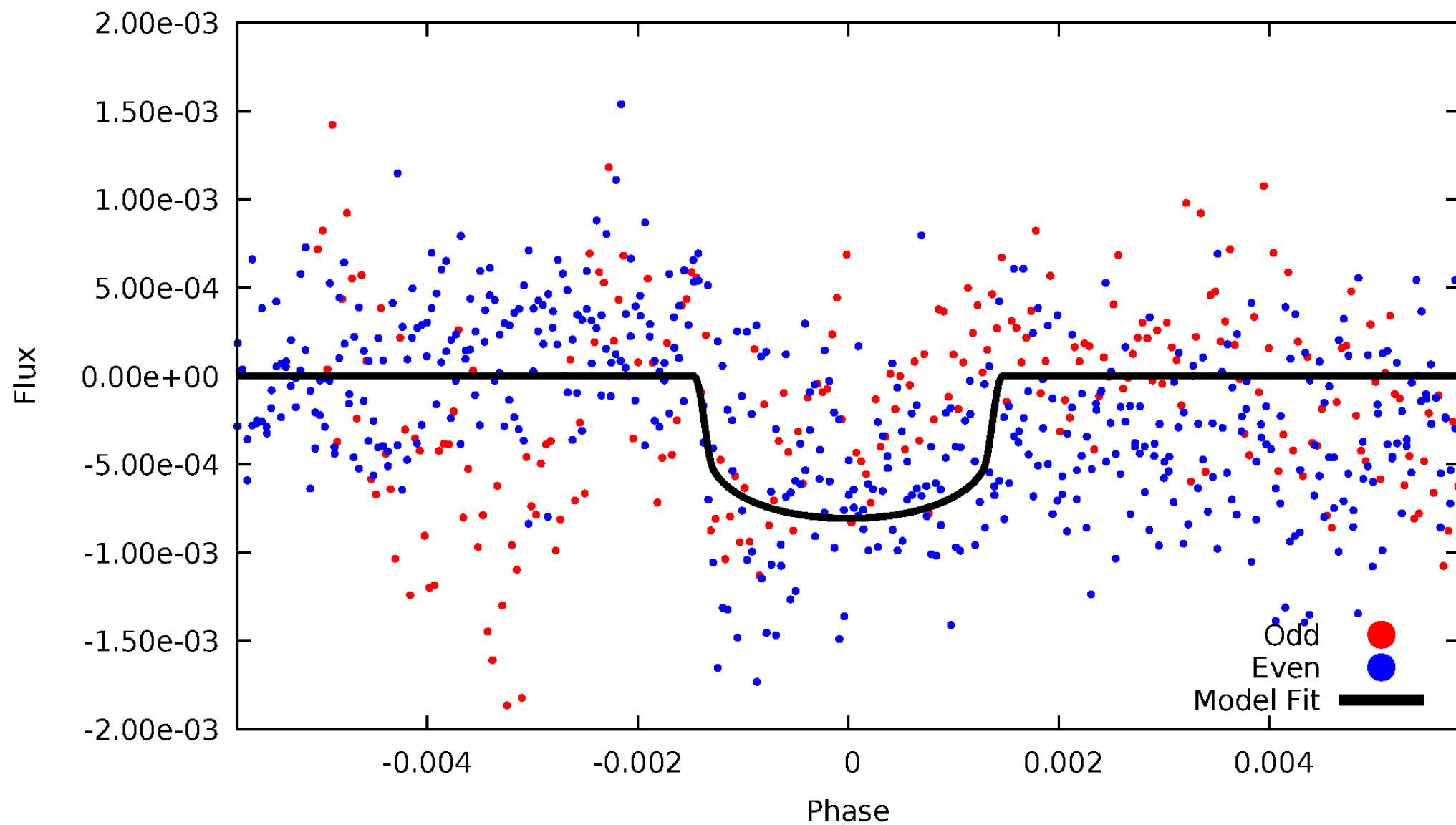


TCE 007832787-02



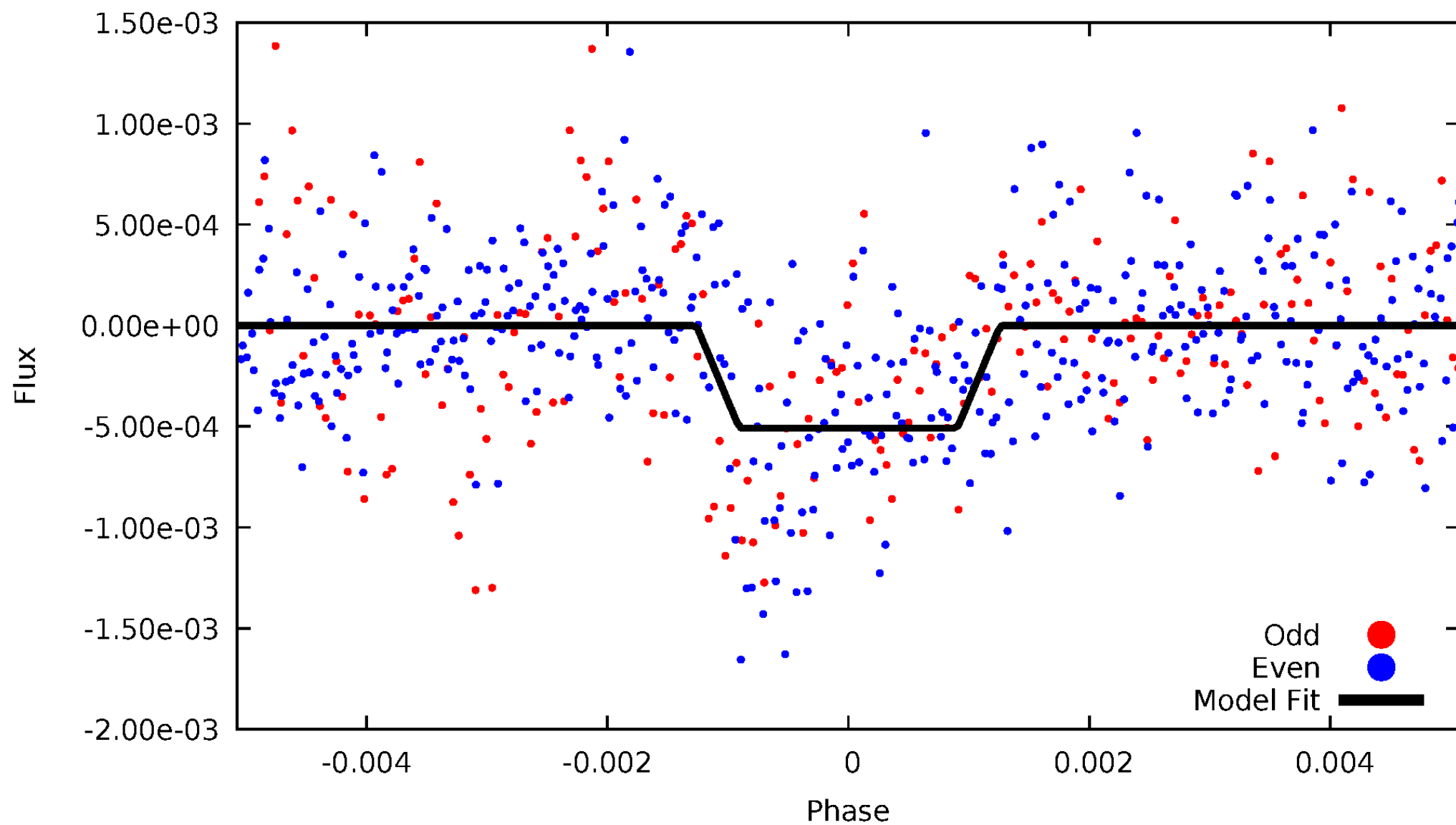
DV Odd/Even

TCE 007832787-02



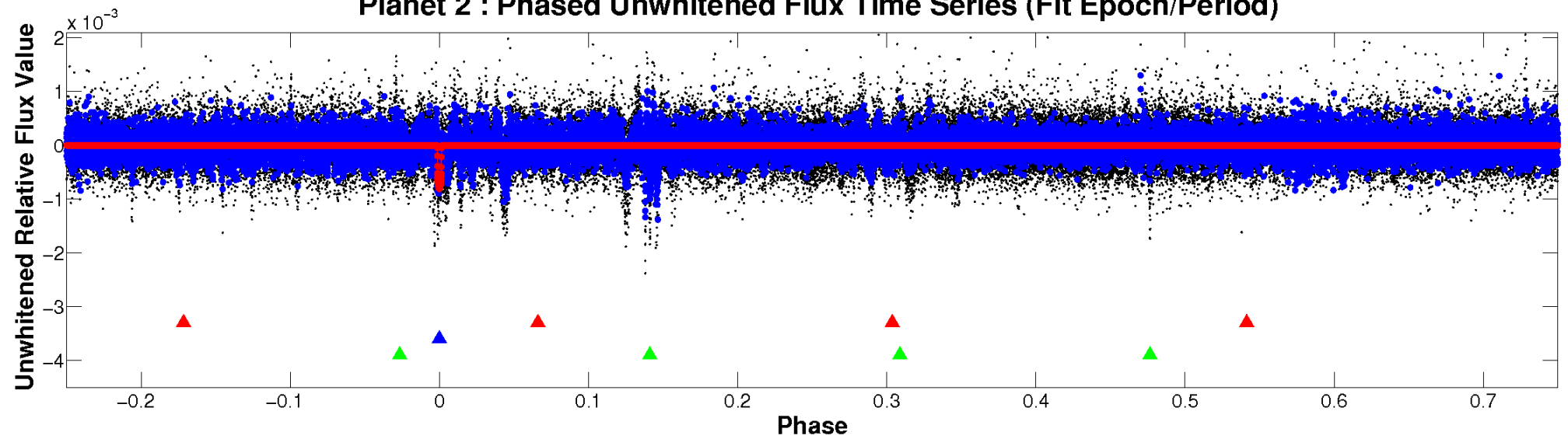
ALT Odd/Even

TCE 007832787-02

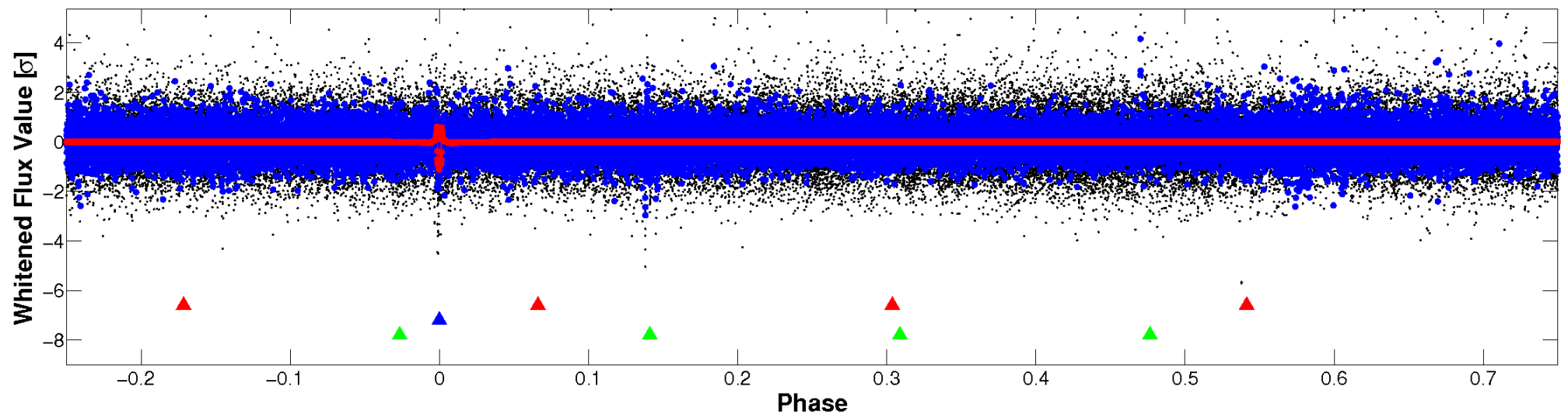


Non-Whitened Vs. Whitened Light Curve

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

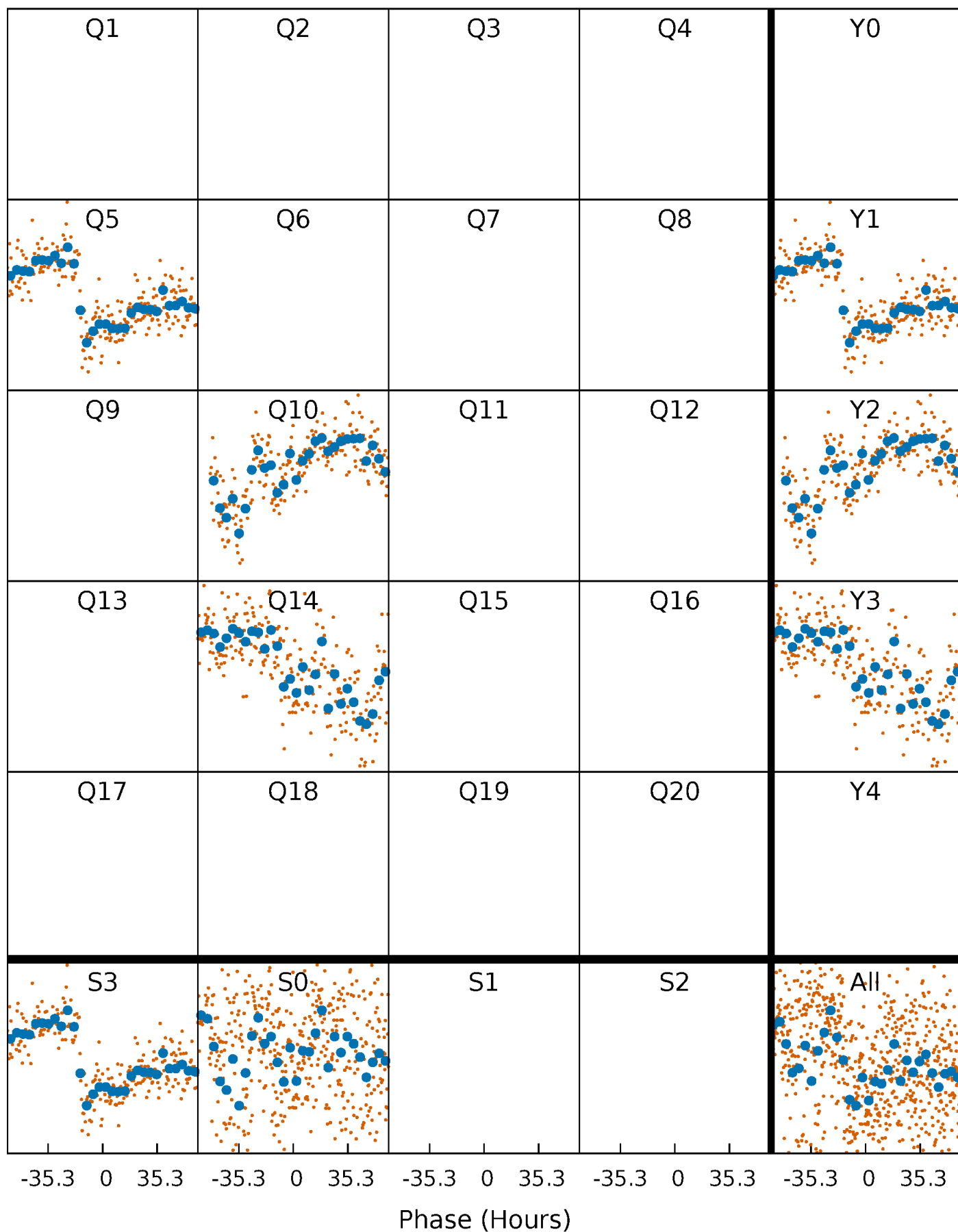


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



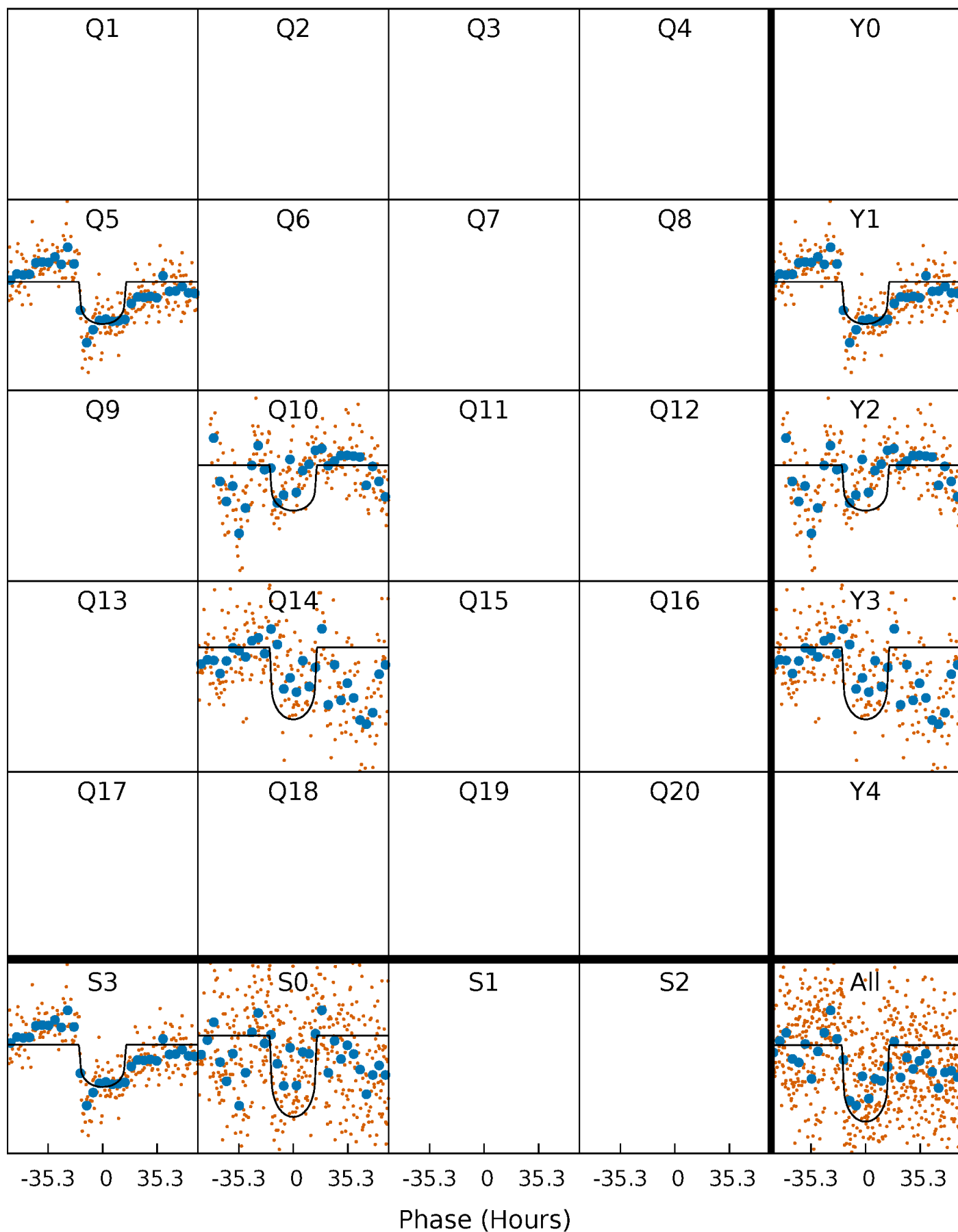
PDC Quarter-Phased Transit Curves

TCE 007832787-02 $P=443.360505$ Days $T_0=465.740223$ (BKJD)



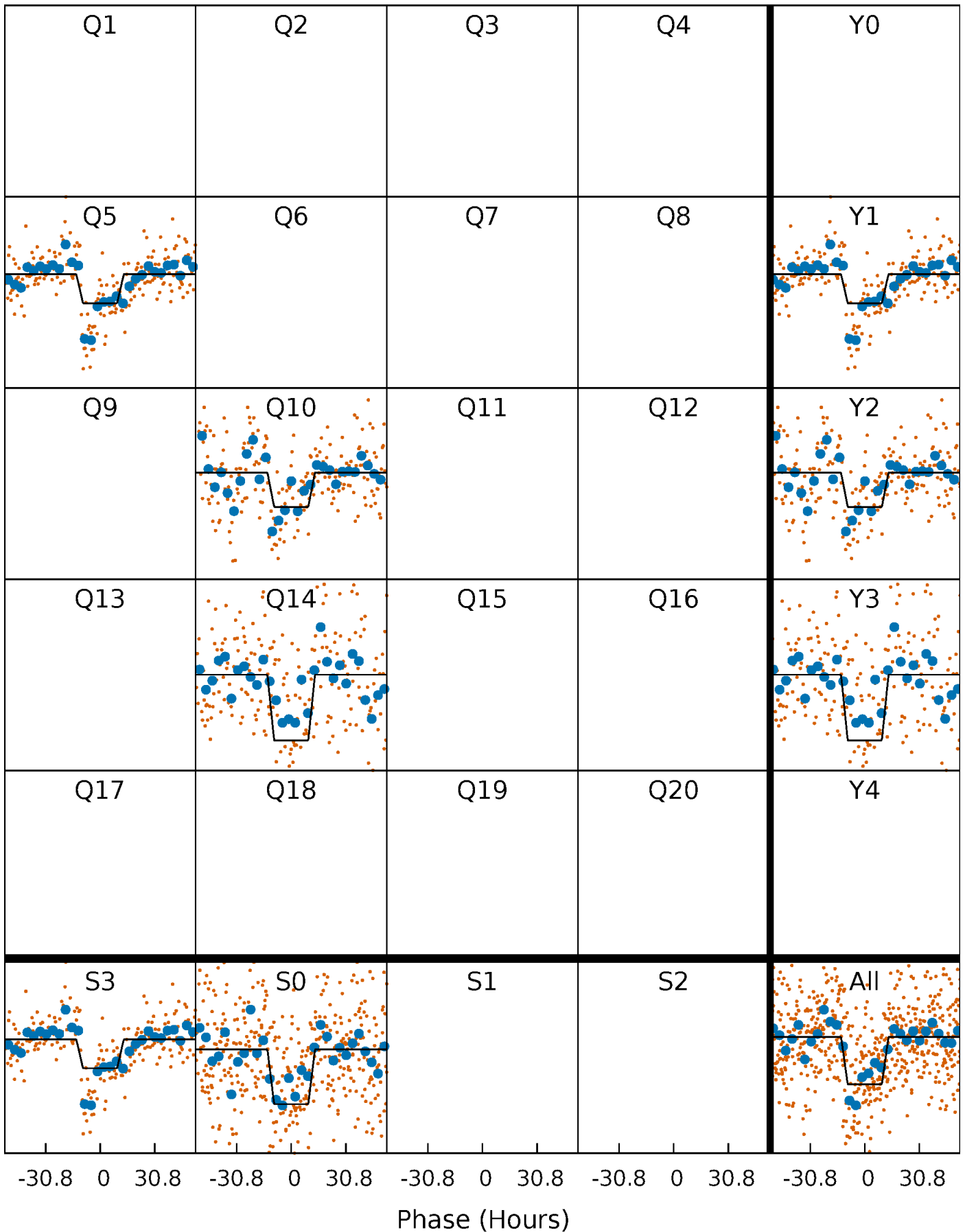
DV Quarter-Phased Transit Curves

TCE 007832787-02 $P=443.360505$ Days $T_0=465.740223$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

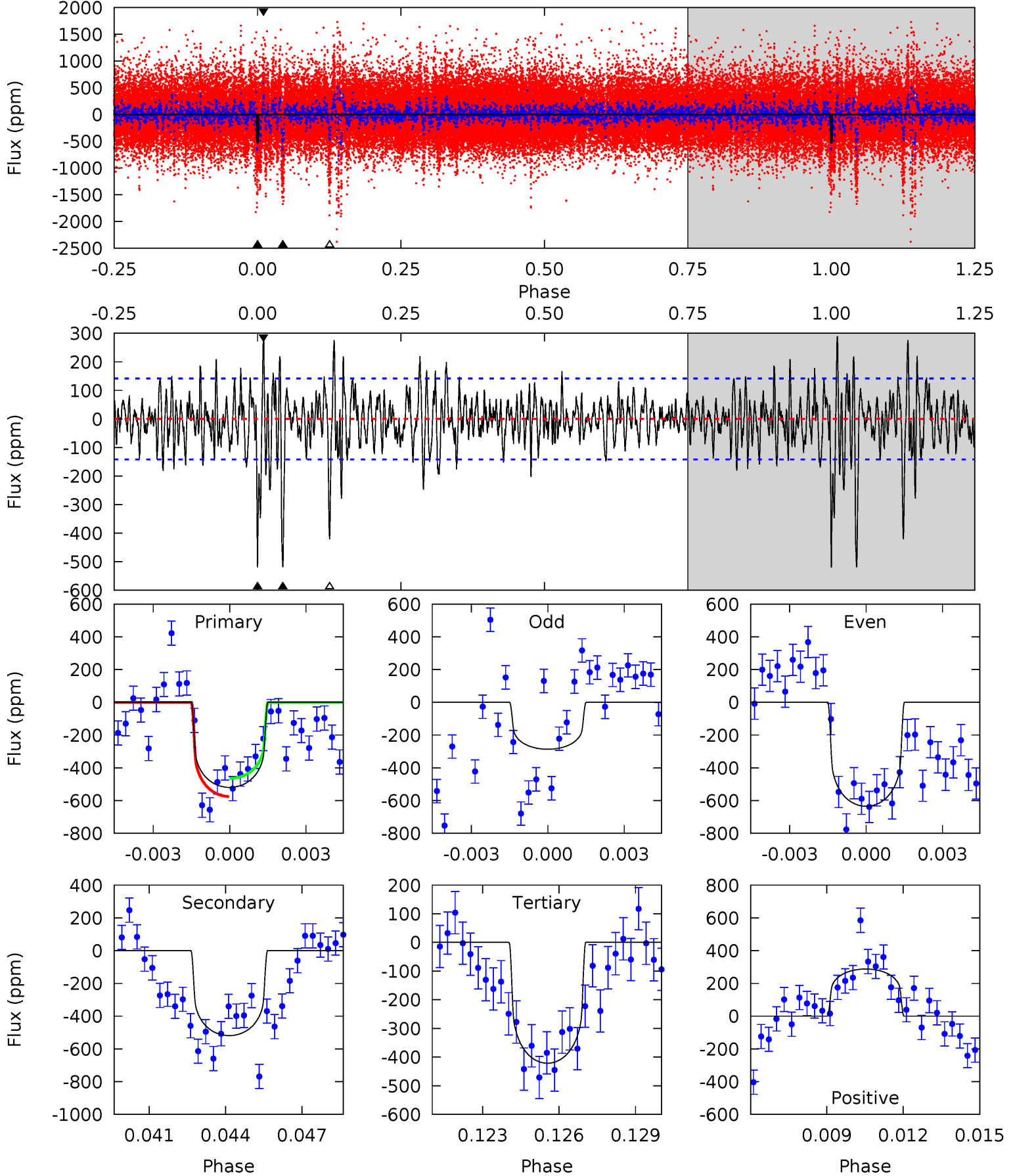
TCE 007832787-02 $P=443.449119$ Days $T_0=465.586406$ (BKJD)



DV Model-Shift Uniqueness Test

007832787-02, $P = 443.360505$ Days, $E = 22.379718$ Days

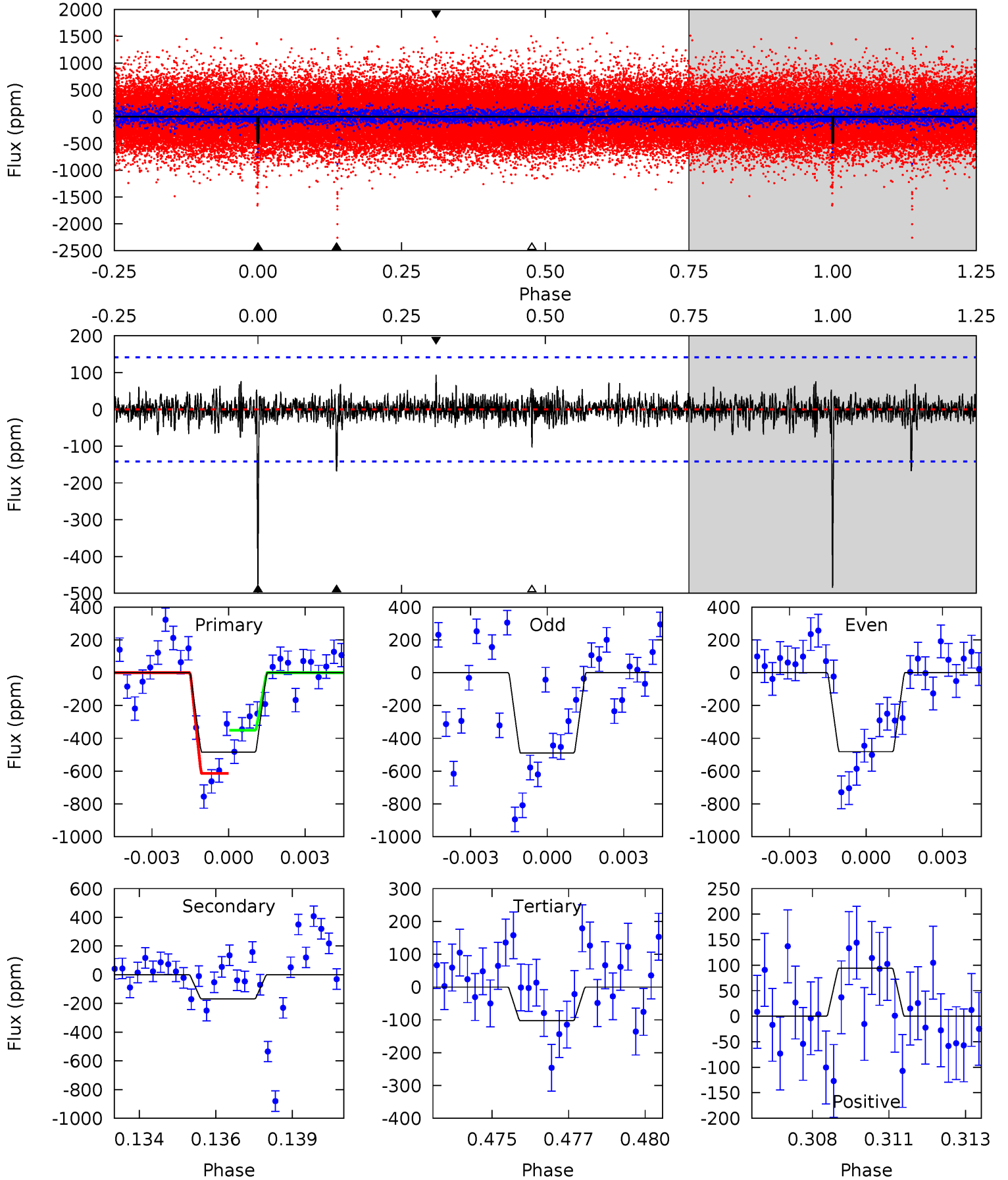
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.3	19.3	15.7	10.7	5.26	2.97	2.84	3.65	8.62	3.62	8.59	6.02	1.57	0.36	2.07



Alt Model-Shift Uniqueness Test

007832787-02, $P = 443.449119$ Days, $E = 22.137287$ 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	6.25	3.81	3.51	5.28	3.02	0.75	14.3	14.6	2.44	2.74	0.13	0.99	0.16	4.91



Stellar Parameters For KIC 007832787

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5741^{+153}_{-170}	$4.502^{+0.062}_{-0.188}$	$-0.120^{+0.300}_{-0.300}$	$0.898^{+0.260}_{-0.087}$	$0.934^{+0.116}_{-0.095}$	$1.818^{+0.475}_{-0.864}$
	+3%/-3%	+1%/-4%	+250%/-250%	+29%/-10%	+12%/-10%	+26%/-47%
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 007832787-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-519 ± 27	$2.81^{+0.51}_{-0.39}$	323^{+23}_{-15}	5243^{+338}_{-279}	44118^{+15225}_{-11987}
Alt.	-168 ± 27	$2.26^{+0.46}_{-0.34}$	321^{+21}_{-14}	4516^{+320}_{-268}	21652^{+9815}_{-6760}

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

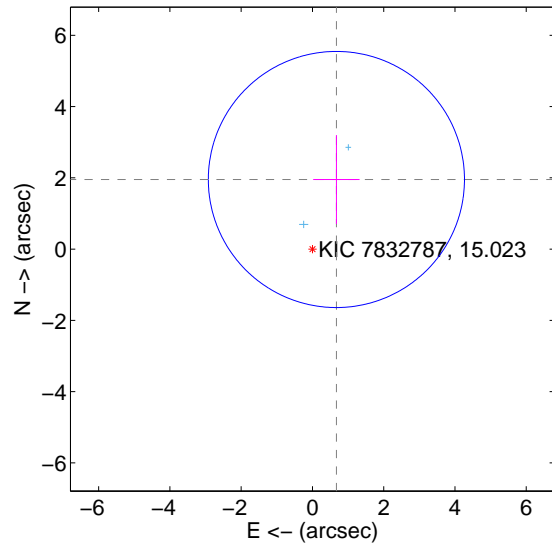
Supplemental centroid analysis for 007832787-02. Kepler magnitude: 15.02. Transit SNR 13.35

There are 2 quarters with good PRF difference image offsets

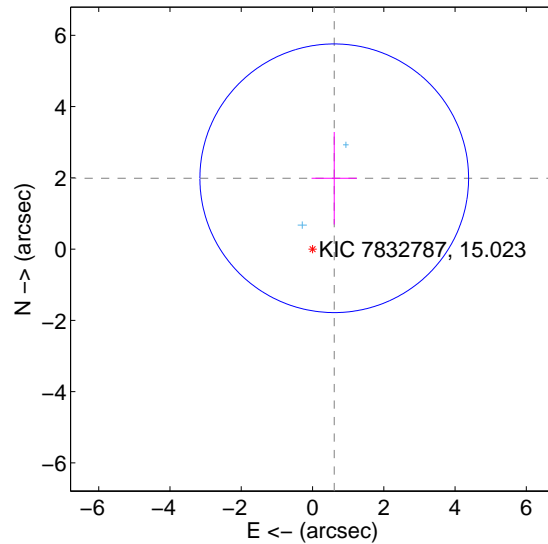
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.066 ± 1.198	1.72	-0.672 ± 0.651	1.953 ± 1.247
PRF-fit source offset from KIC position	2.079 ± 1.257	1.65	-0.610 ± 0.636	1.988 ± 1.300
photometric centroid source offset	0.89 ± 0.78	1.14	-0.88 ± 0.77	0.13 ± 0.85

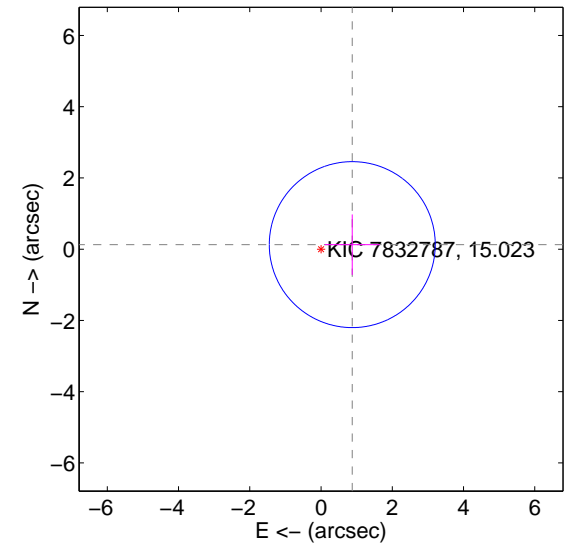
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

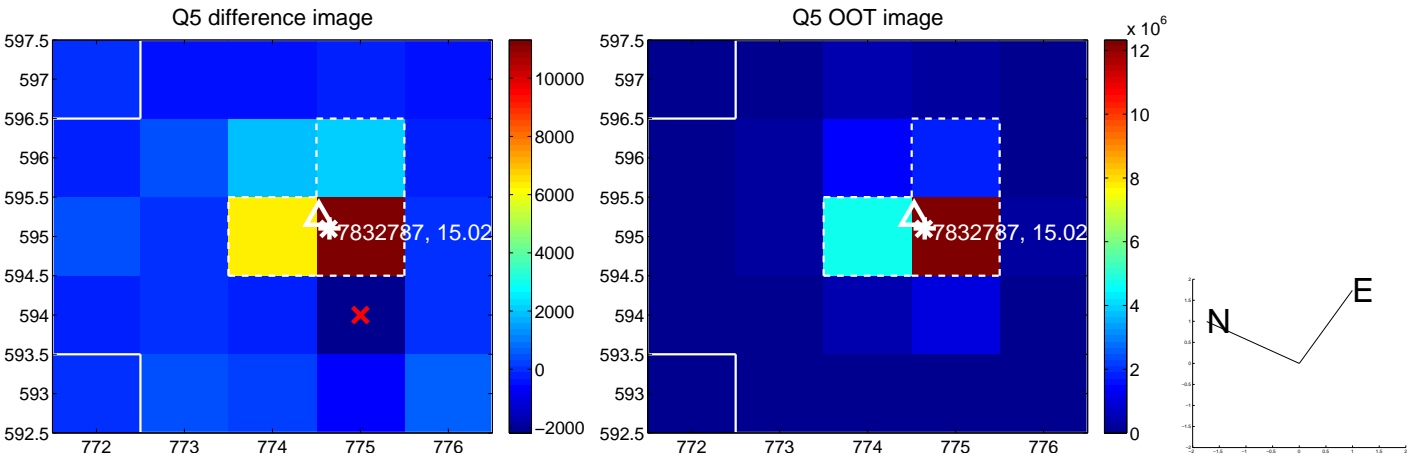


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

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



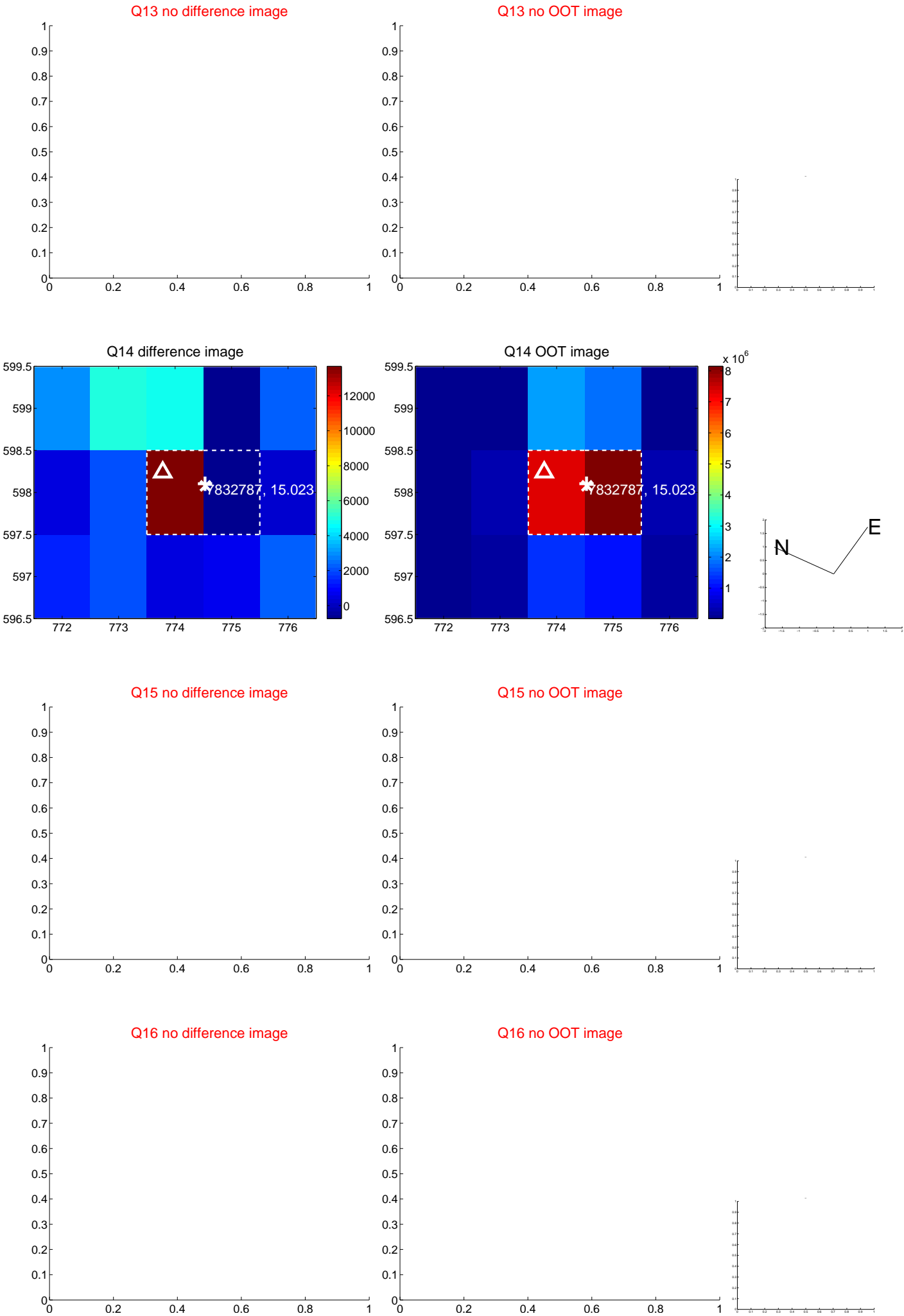
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



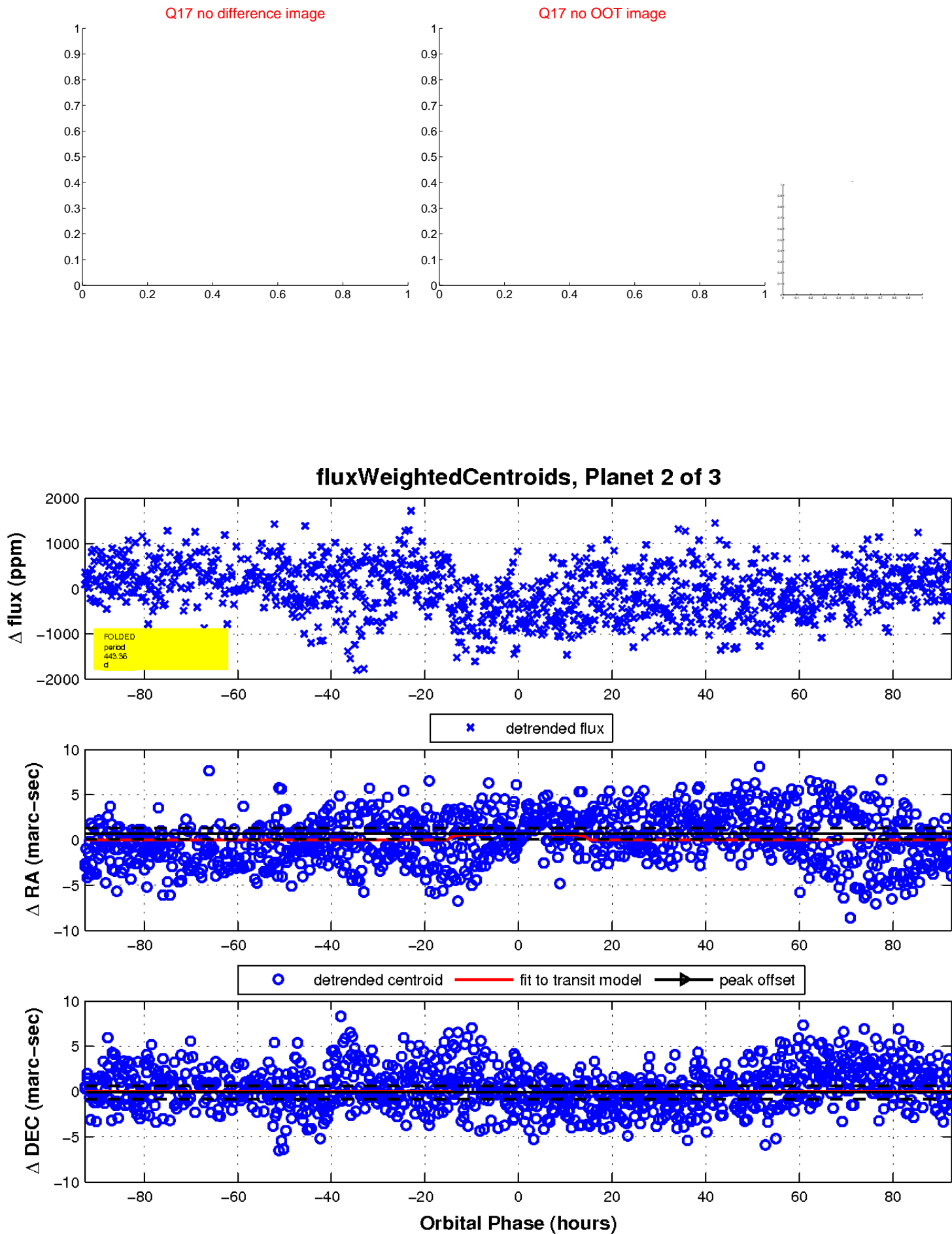
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

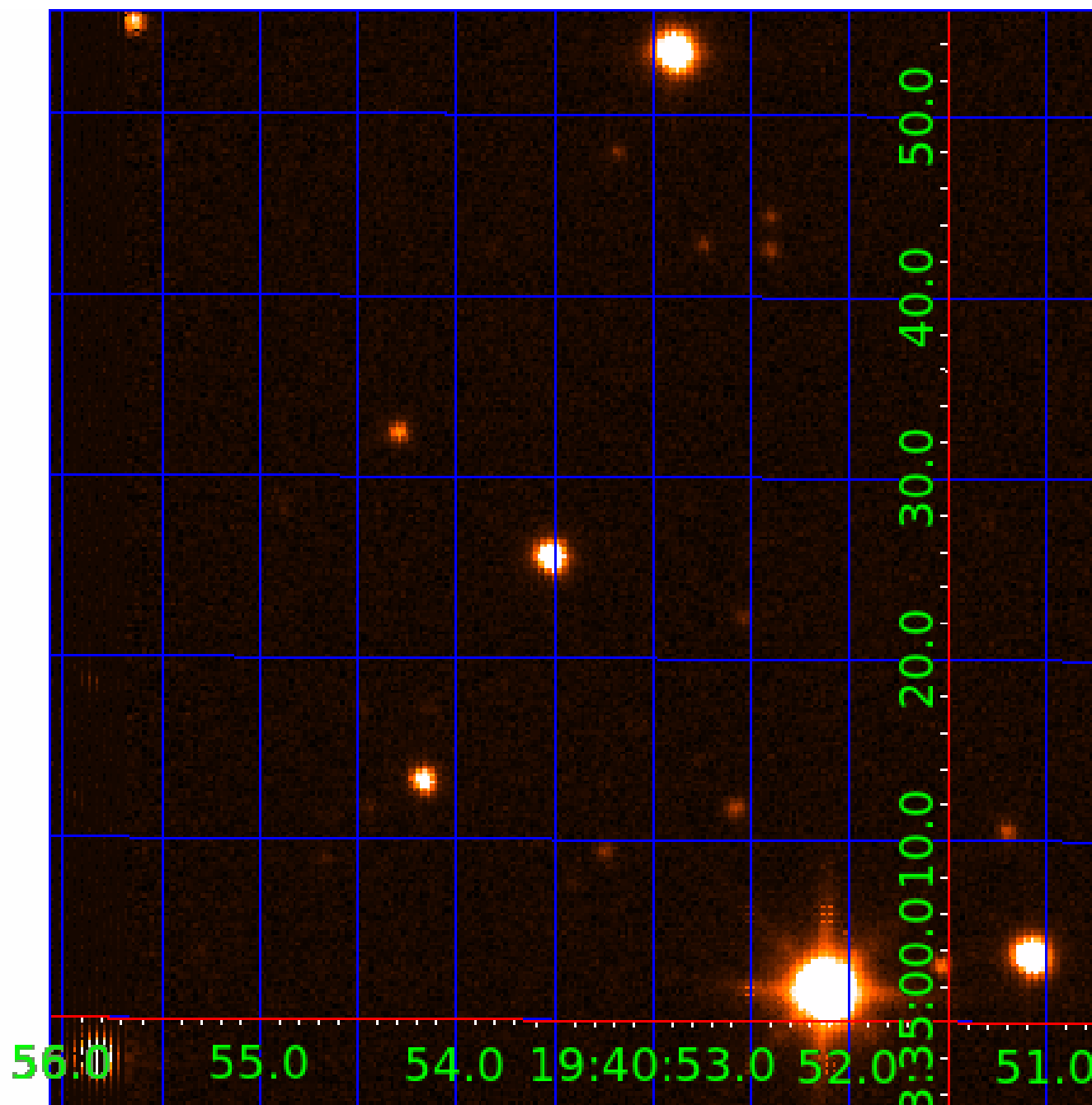


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007832787

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})
007832787-01	OBS	8270.01	338.007584	262.397686	594.3	16.713	8.4	10.5	0.90	5741	2.27	0.91
007832787-02	OBS	No	443.360505	465.740223	806.8	30.886	10.3	13.4	0.90	5741	2.72	0.63
007832787-03	OBS	No	369.003880	233.648417	872.3	35.689	8.5	10.1	0.90	5741	5.09	0.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007832787-01	OBS	PC	0.58	0	0	0	0	CENT_FEW_DIFFS
007832787-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007832787-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—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.

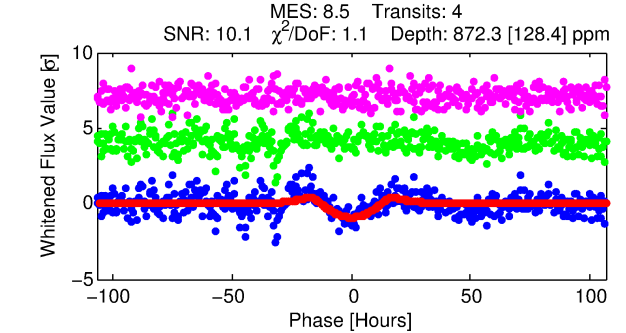
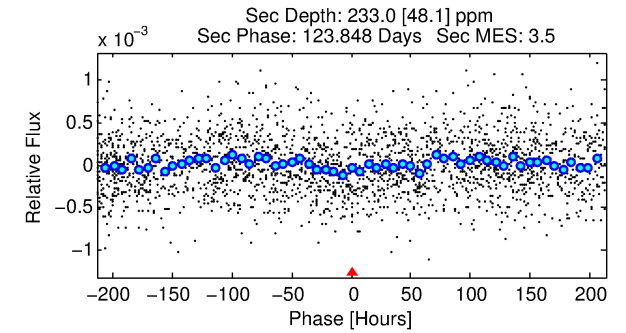
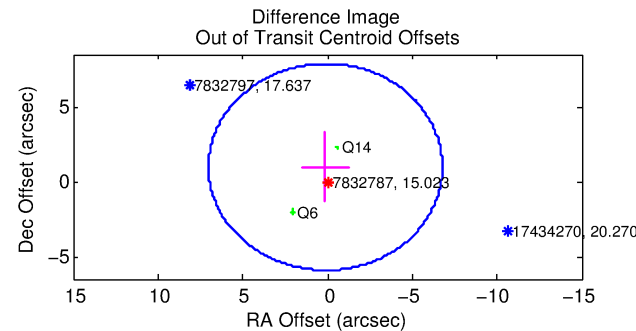
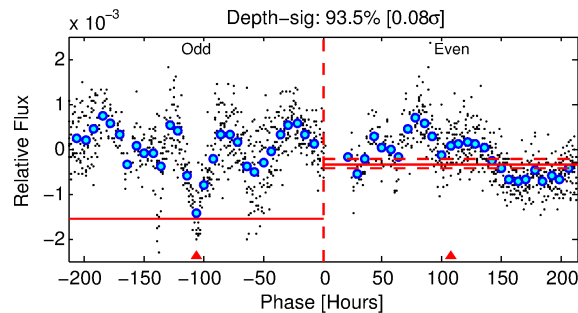
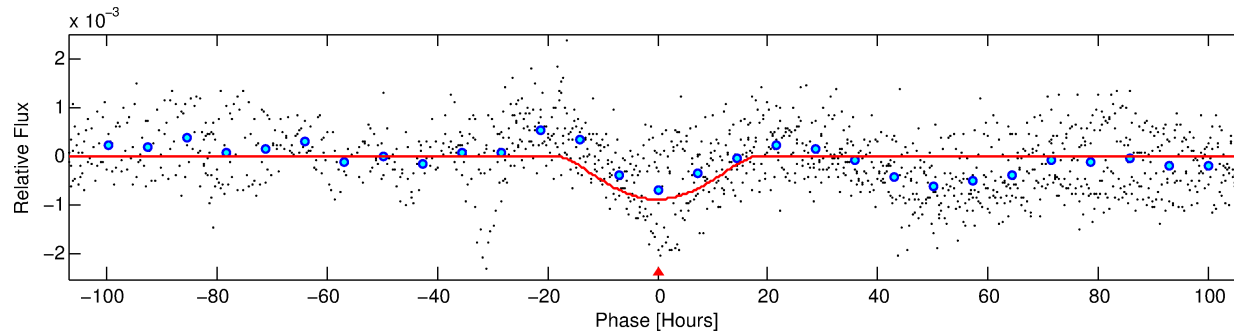
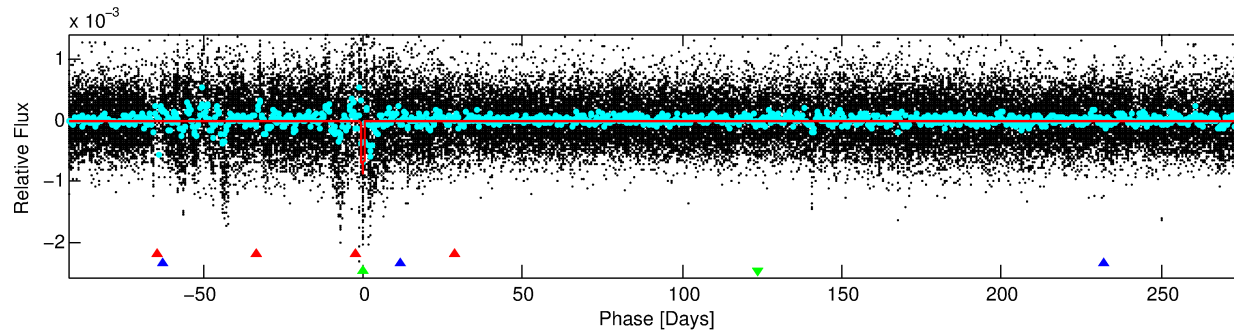
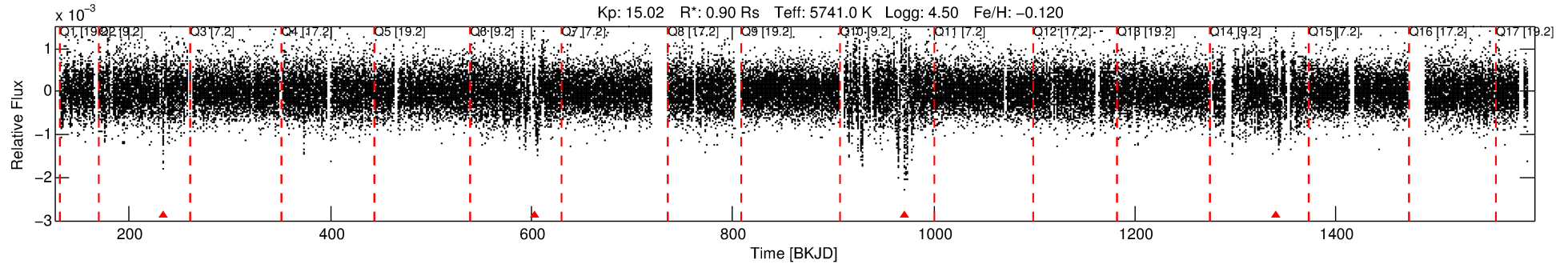
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007832787-03

No Significant Match Found

DV One-Page Summary

KIC: 7832787 Candidate: 3 of 3 Period: 369.004 d



DV Fit Results:

Period = 369.00388 [0.02885] d
Epoch = 233.6484 [0.0492] BKJD
Rp/R* = 0.0520 [0.1010]
a/R* = 26.17 [12.42]
b = 1.00 [0.15]
Seff = 0.81 [0.30]
Teq = 242 [22] K
Rp = 5.09 [10.01] Re
a = 0.9845 [0.2373] AU
Ag = 4788.10 [18709.99] [0.26 σ]
Teffp = 3111 [3028] K [0.95 σ]

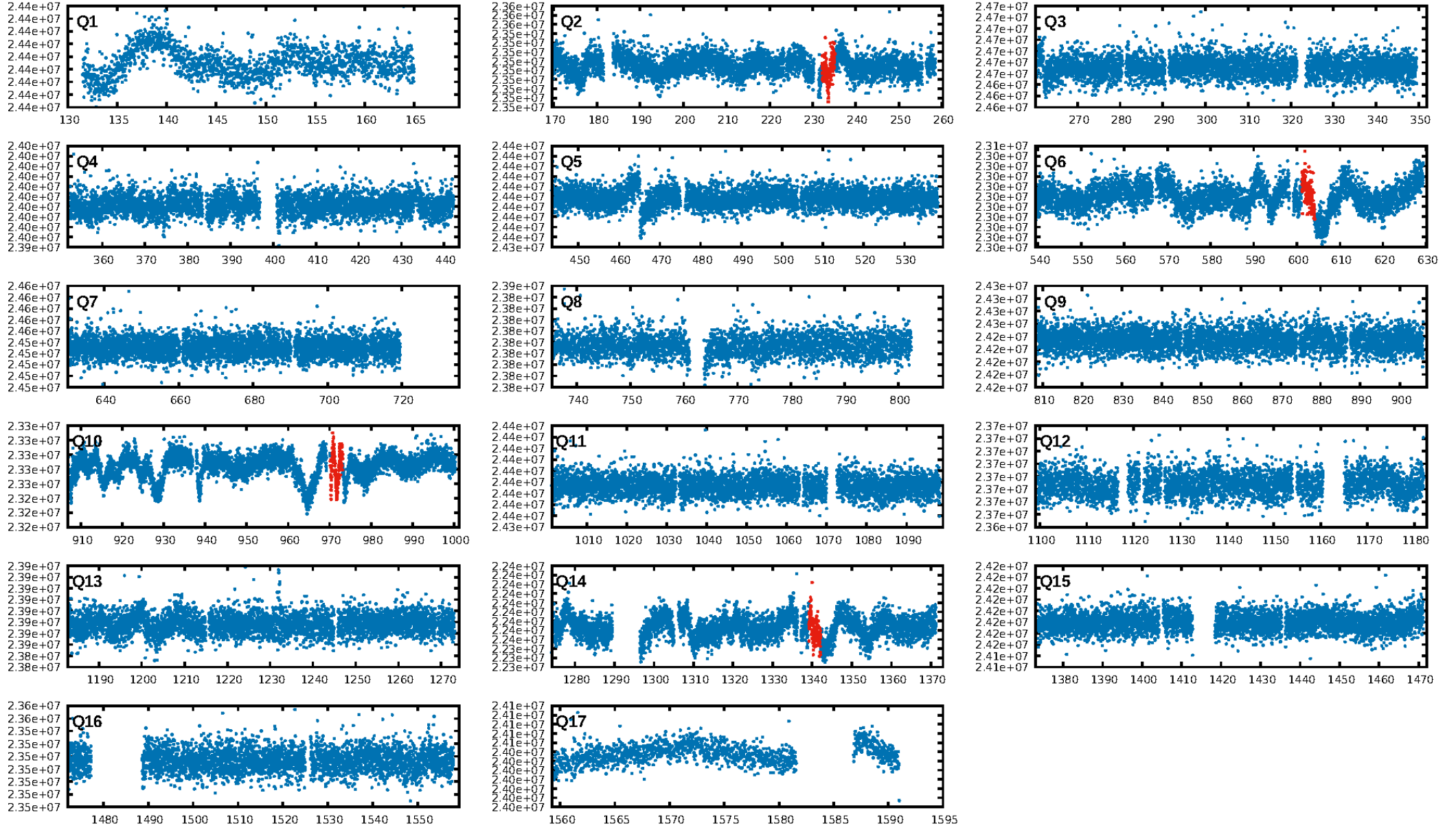
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [18.8 σ]
LongPeriod-sig: 100.0% [37.81 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 7.57e-11
RollingBand-fgt: 0.00 [0/4]
GhostDiagnostic-chr: 0.8973
Centroid-sig: 1.6%
Centroid-so: 3.234 arcsec [1.78 σ]
OotOffset-rm: 0.982 arcsec [0.43 σ]
OotOffset-st: 2/0/0/0 [2]
KicOffset-rm: 1.052 arcsec [0.46 σ]
KicOffset-st: 2/0/0/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 0.50 [1/2]

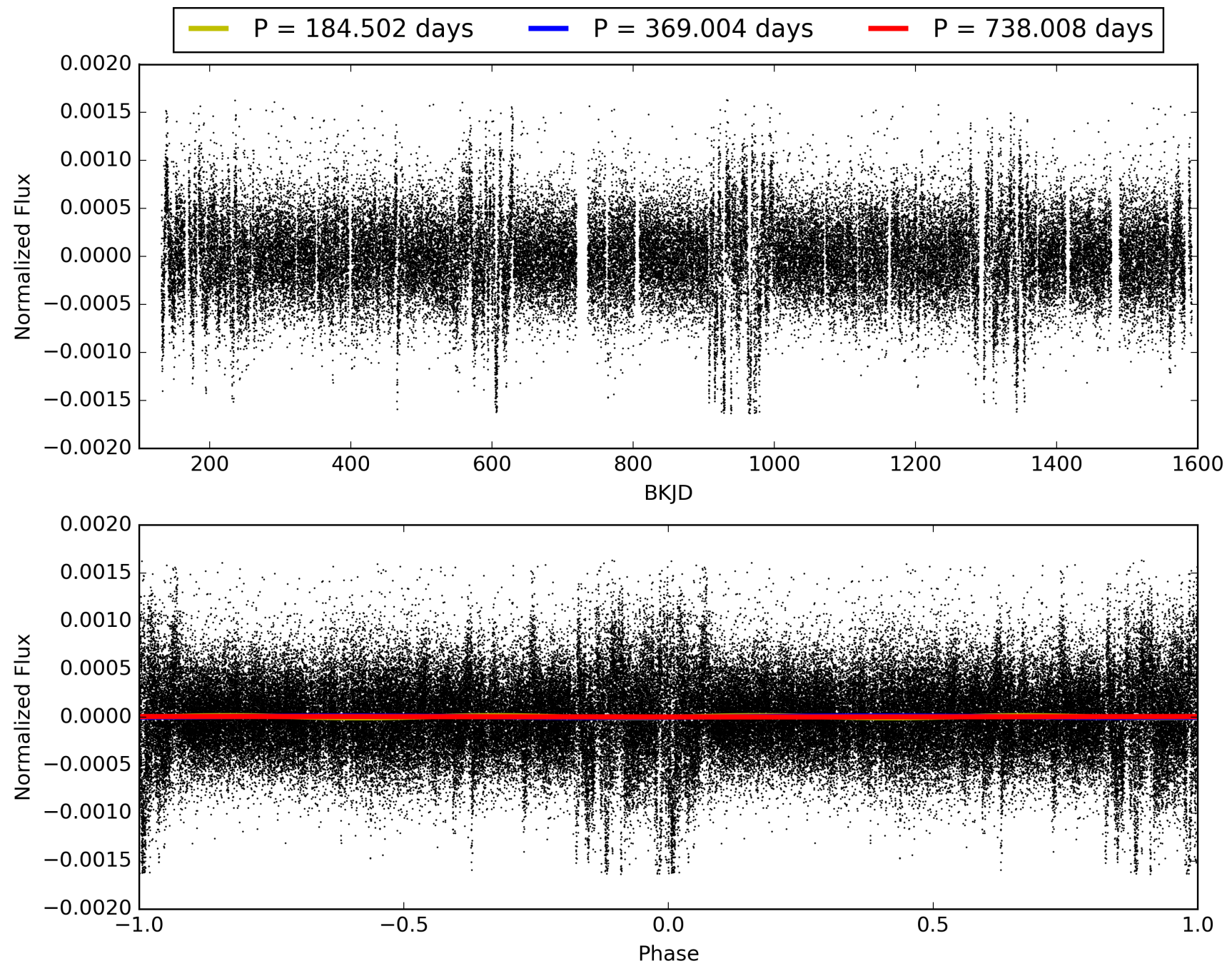
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 11:08:55 Z

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

TCE 007832787-03, PDC Light Curves

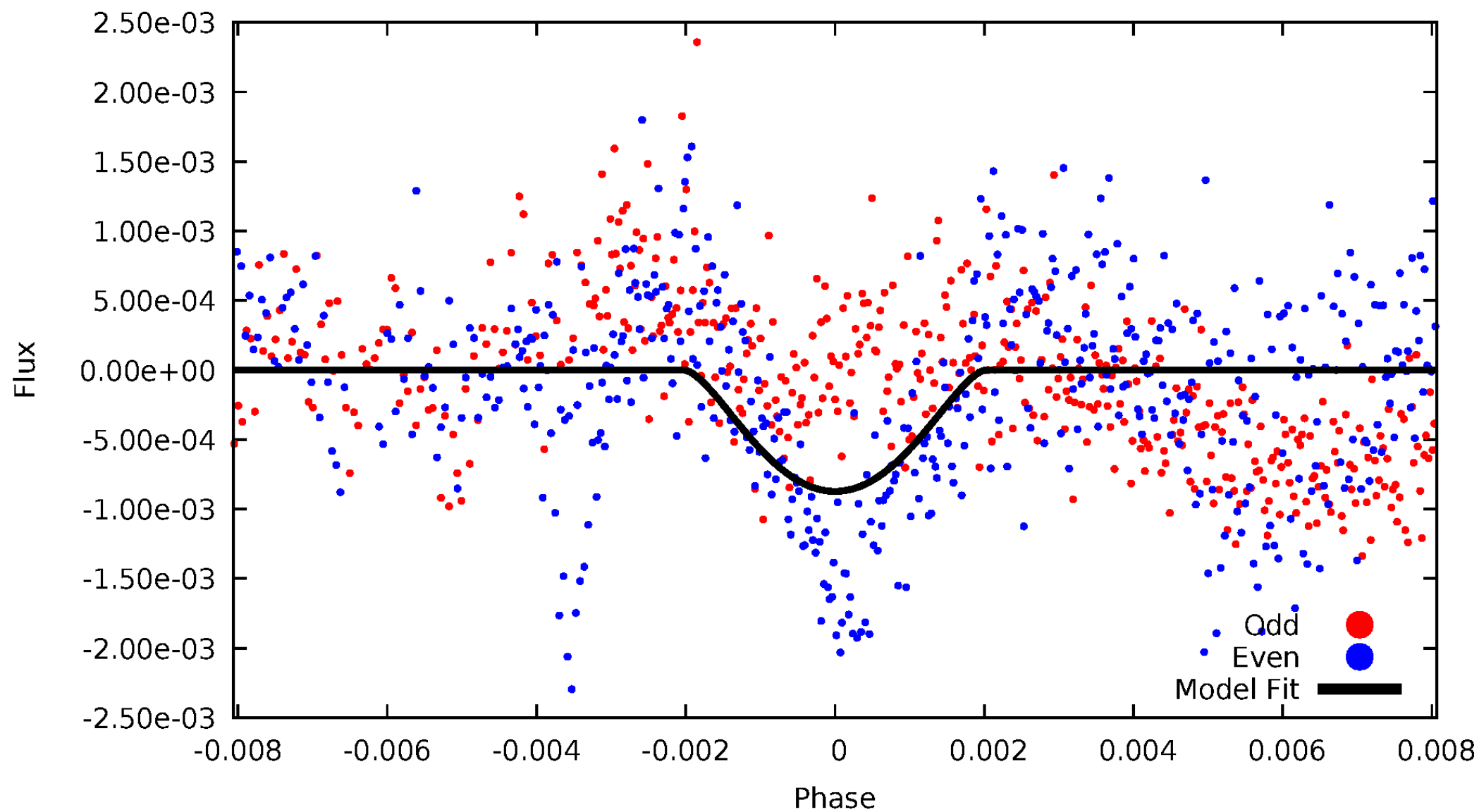


TCE 007832787-03



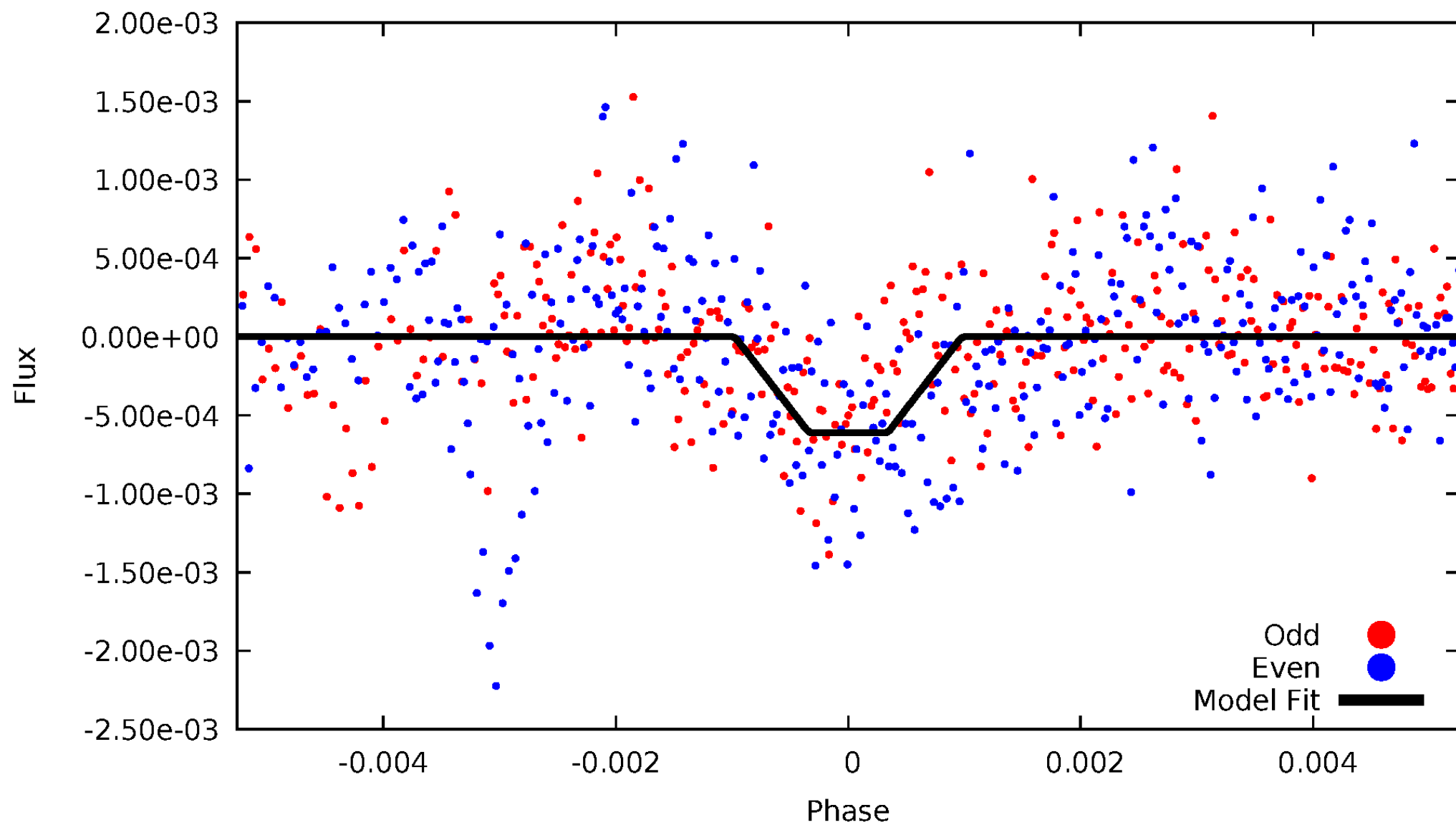
DV Odd/Even

TCE 007832787-03



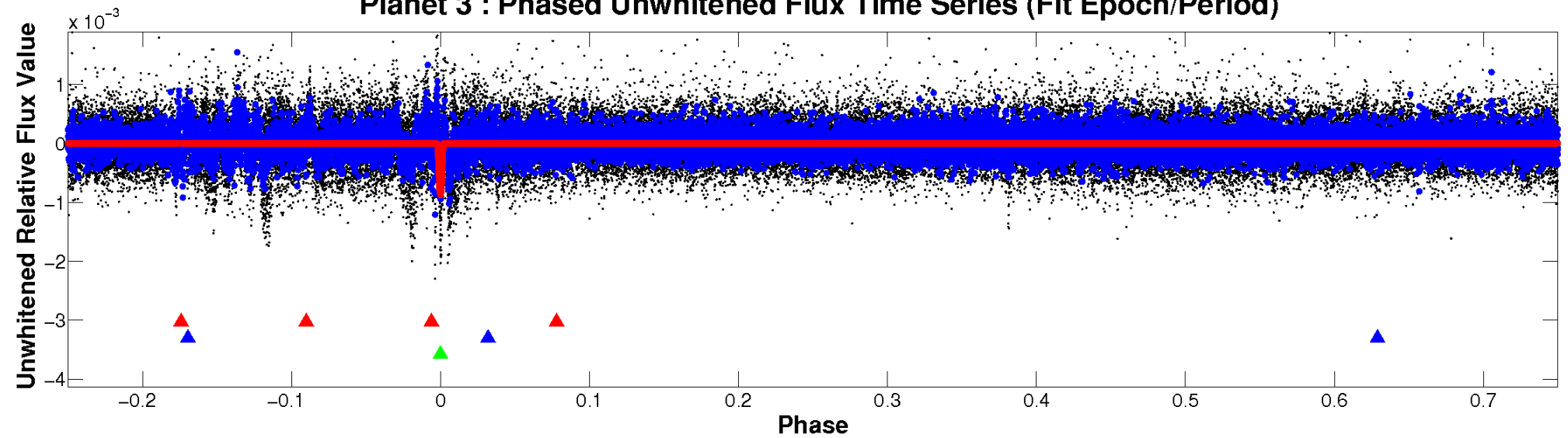
ALT Odd/Even

TCE 007832787-03

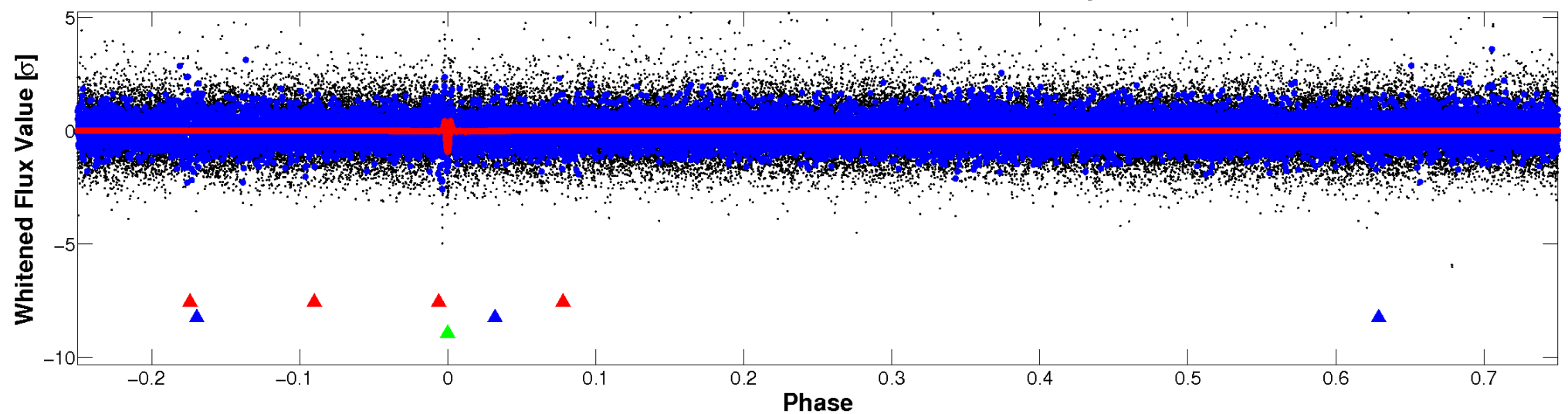


Non-Whitened Vs. Whitened Light Curve

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

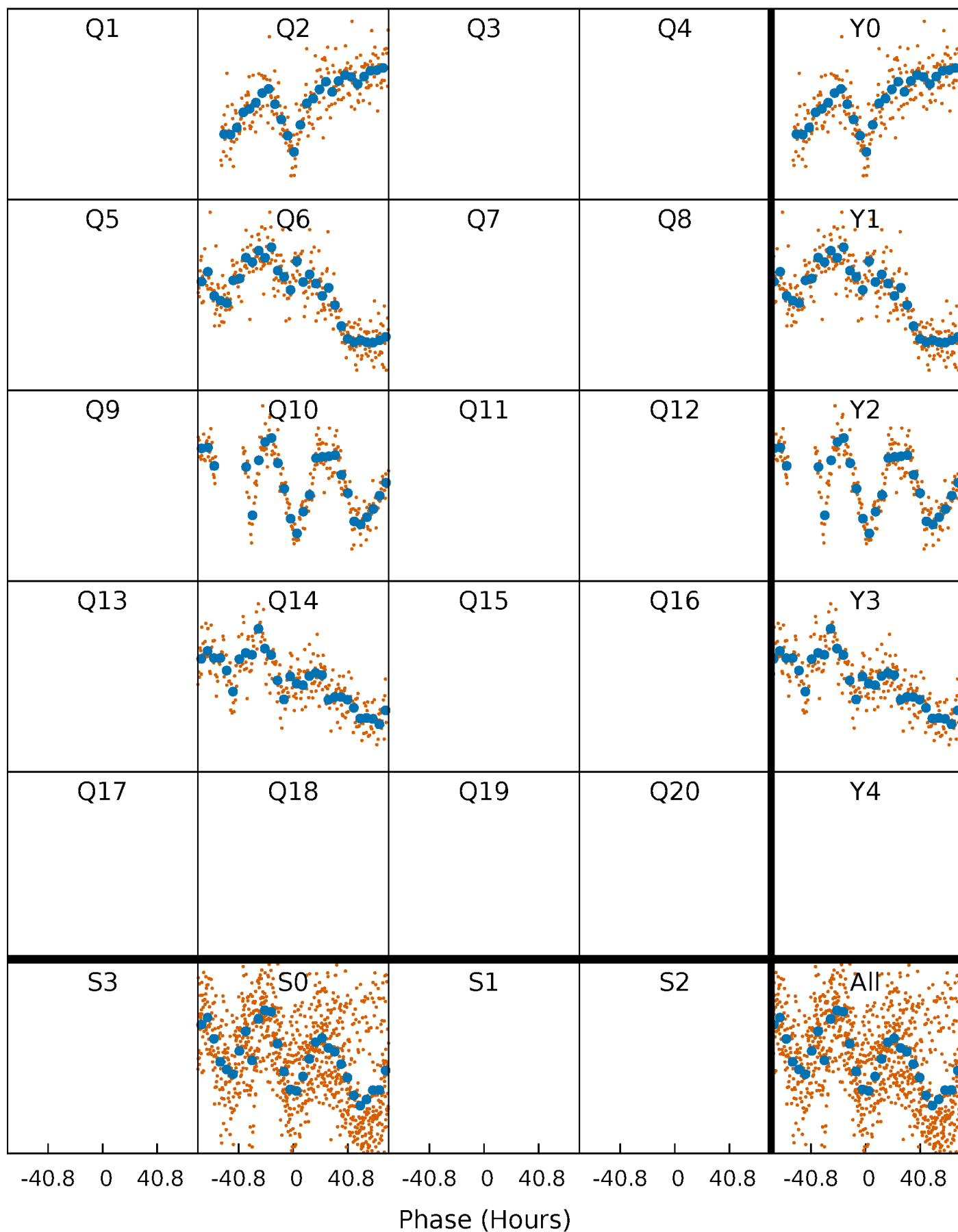


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



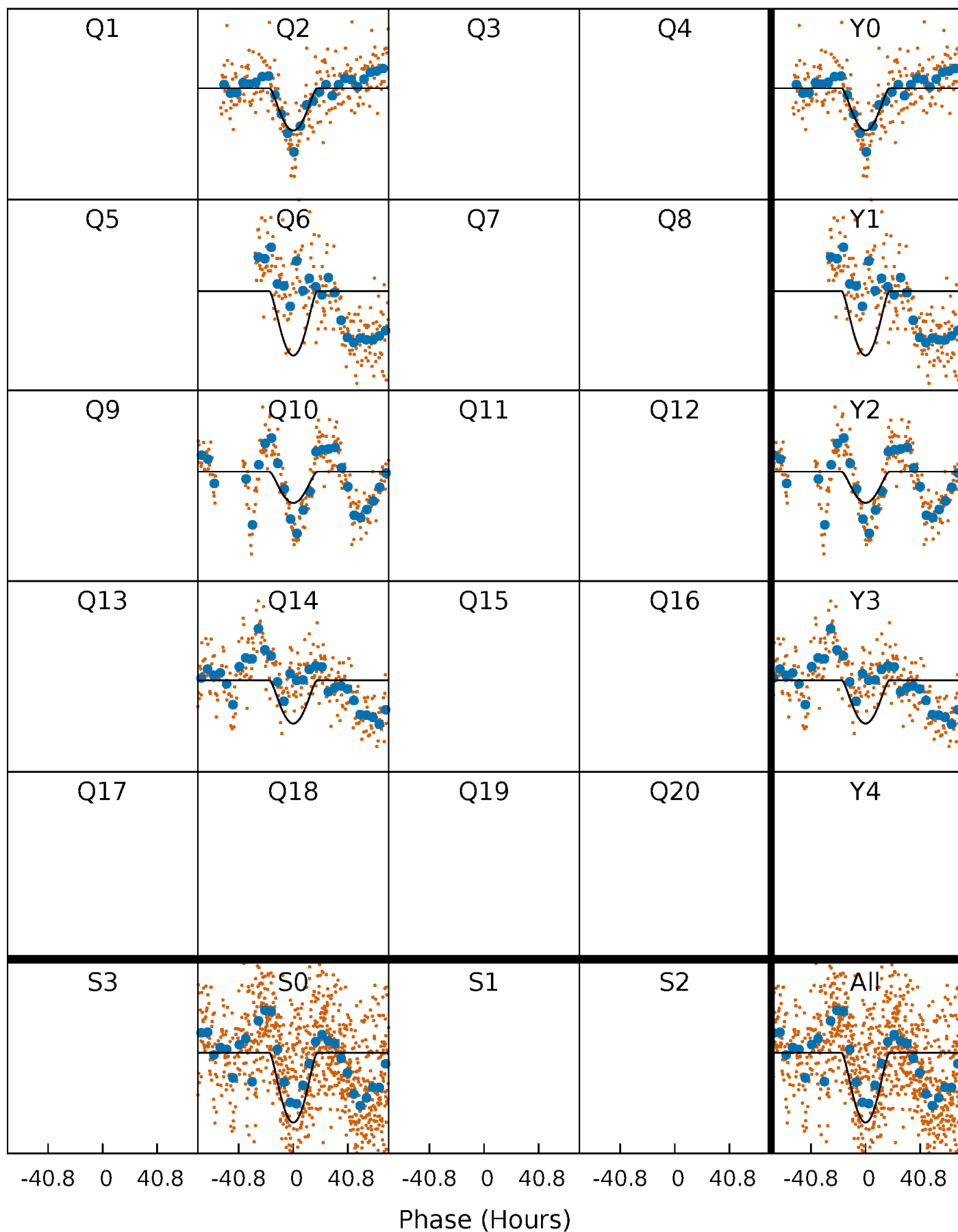
PDC Quarter-Phased Transit Curves

TCE 007832787-03 $P=369.003880$ Days $T_0=233.648417$ (BKJD)



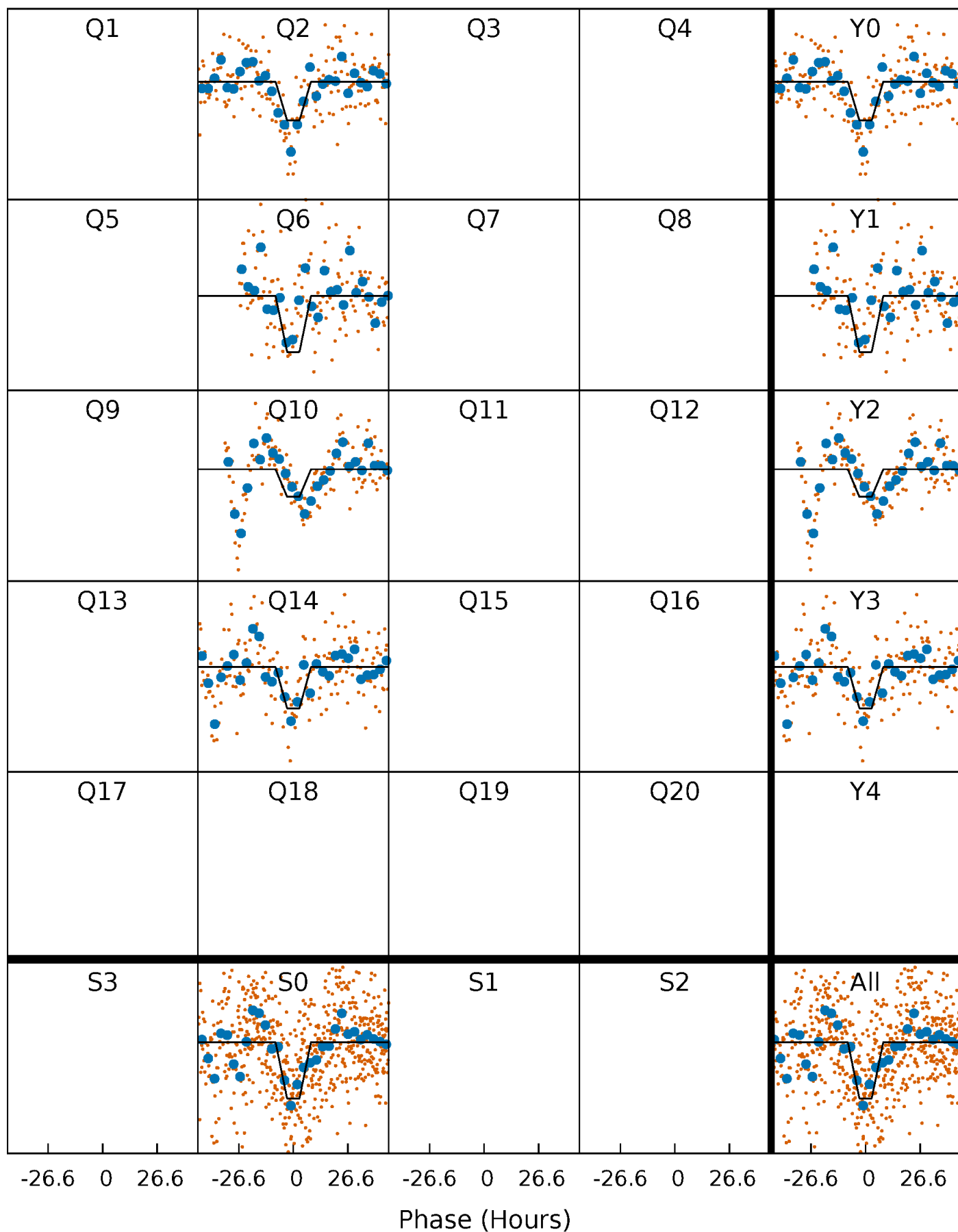
DV Quarter-Phased Transit Curves

TCE 007832787-03 $P=369.003880$ Days $T_0=233.648417$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

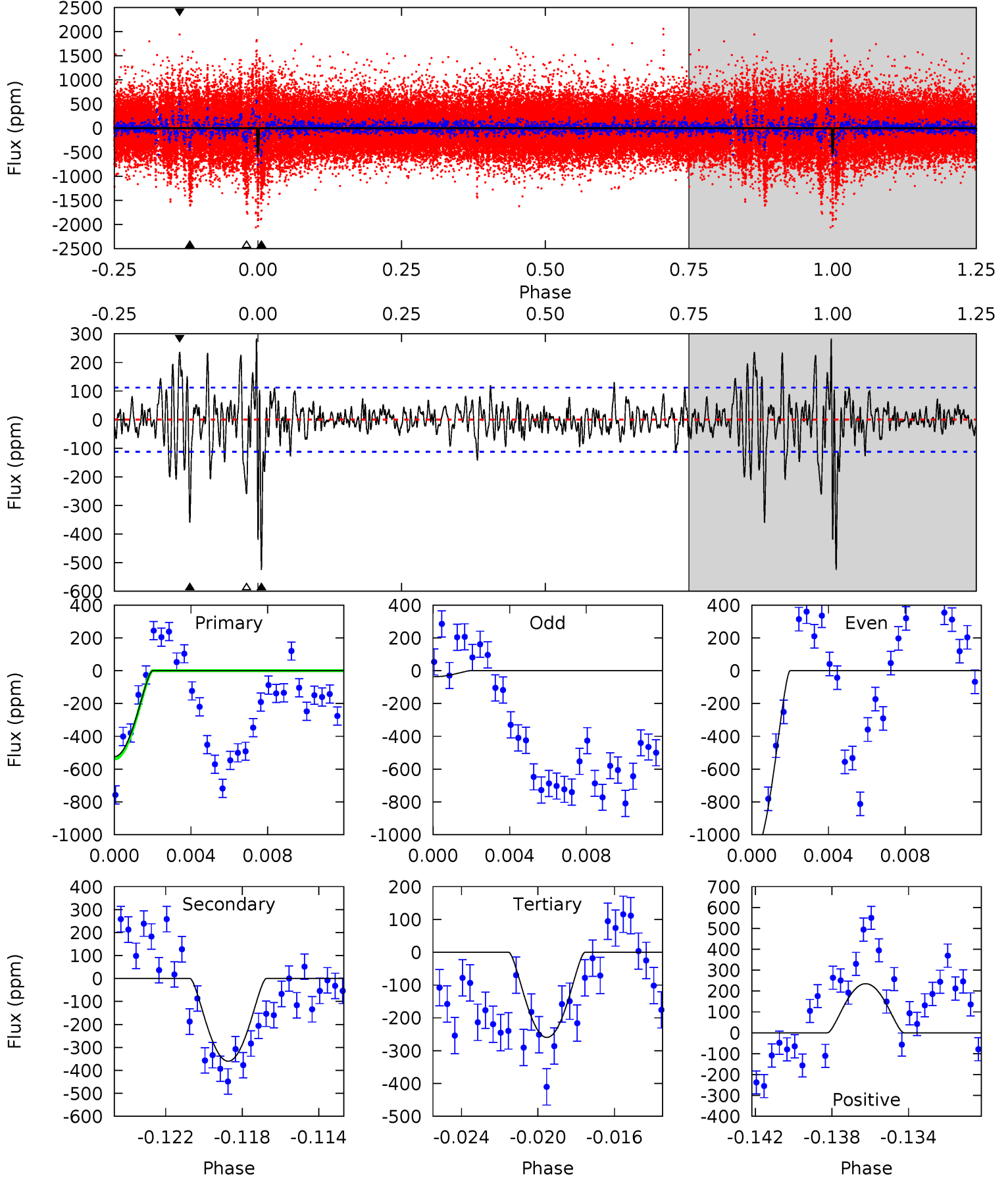
TCE 007832787-03 $P=368.893870$ Days $T_0=233.684726$ (BKJD)



DV Model-Shift Uniqueness Test

007832787-03, P = 369.003880 Days, E = 233.648417 Days

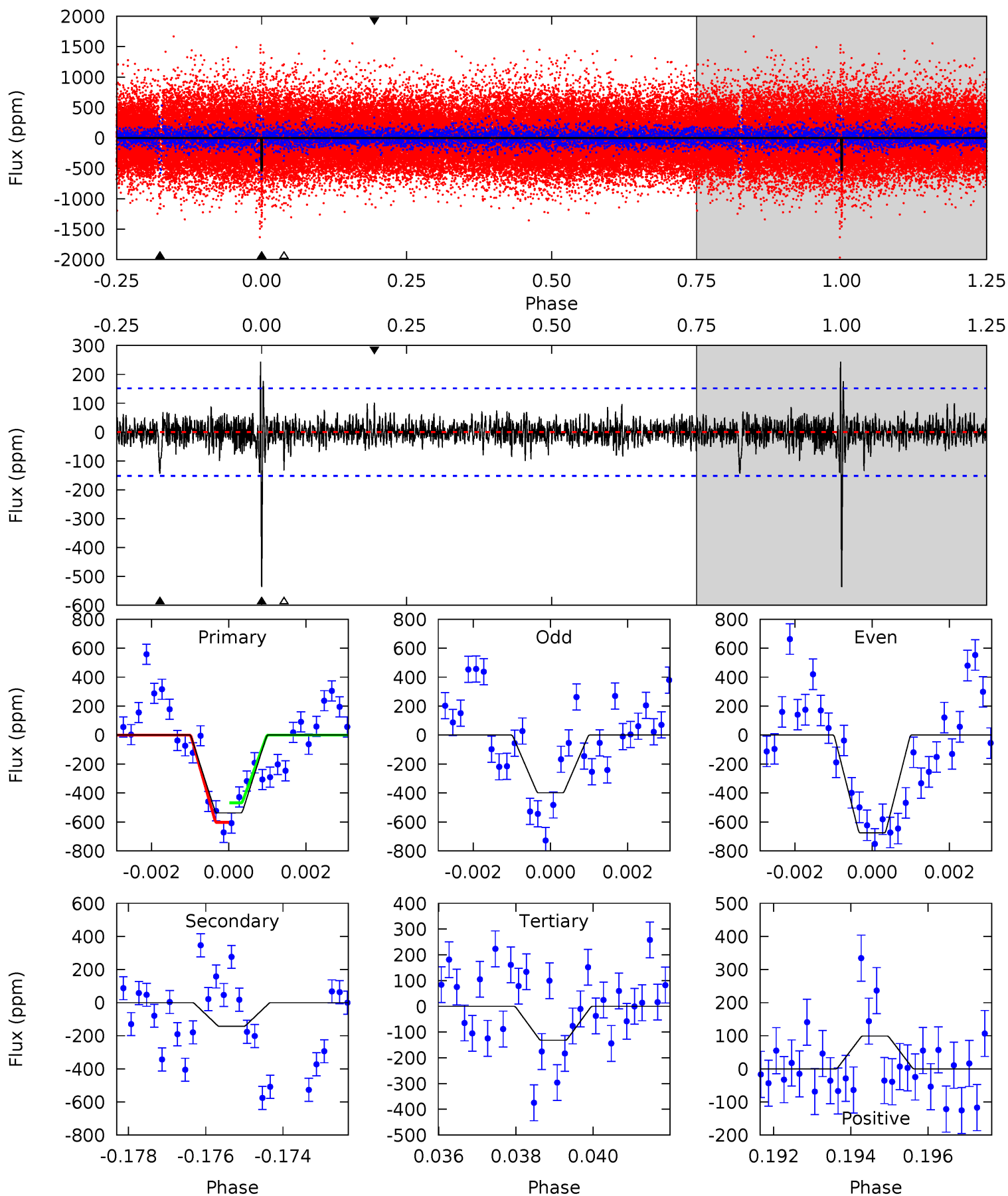
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.3	16.7	12.0	10.9	5.20	2.87	2.77	12.2	13.4	4.66	5.80	25.4	1.05	0.35	0.67



Alt Model-Shift Uniqueness Test

007832787-03, P = 368.893870 Days, E = 233.684726 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.9	5.04	4.64	3.49	5.33	3.09	1.05	14.3	15.4	0.40	1.55	4.89	1.02	0.31	2.37



Stellar Parameters For KIC 007832787

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5741^{+153}_{-170}	$4.502^{+0.062}_{-0.188}$	$-0.120^{+0.300}_{-0.300}$	$0.898^{+0.260}_{-0.087}$	$0.934^{+0.116}_{-0.095}$	$1.818^{+0.475}_{-0.864}$
	+3%/-3%	+1%/-4%	+250%/-250%	+29%/-10%	+12%/-10%	+26%/-47%
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 007832787-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-360 ± 22	$9.26^{+9.02}_{-6.28}$	343^{+24}_{-15}	3207^{+1531}_{-538}	2204^{+19129}_{-1648}
Alt.	-143 ± 28	$7.89^{+7.41}_{-5.48}$	343^{+22}_{-16}	2954^{+1356}_{-499}	1220^{+11662}_{-915}

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 $A_{obs} \gg 1.0$

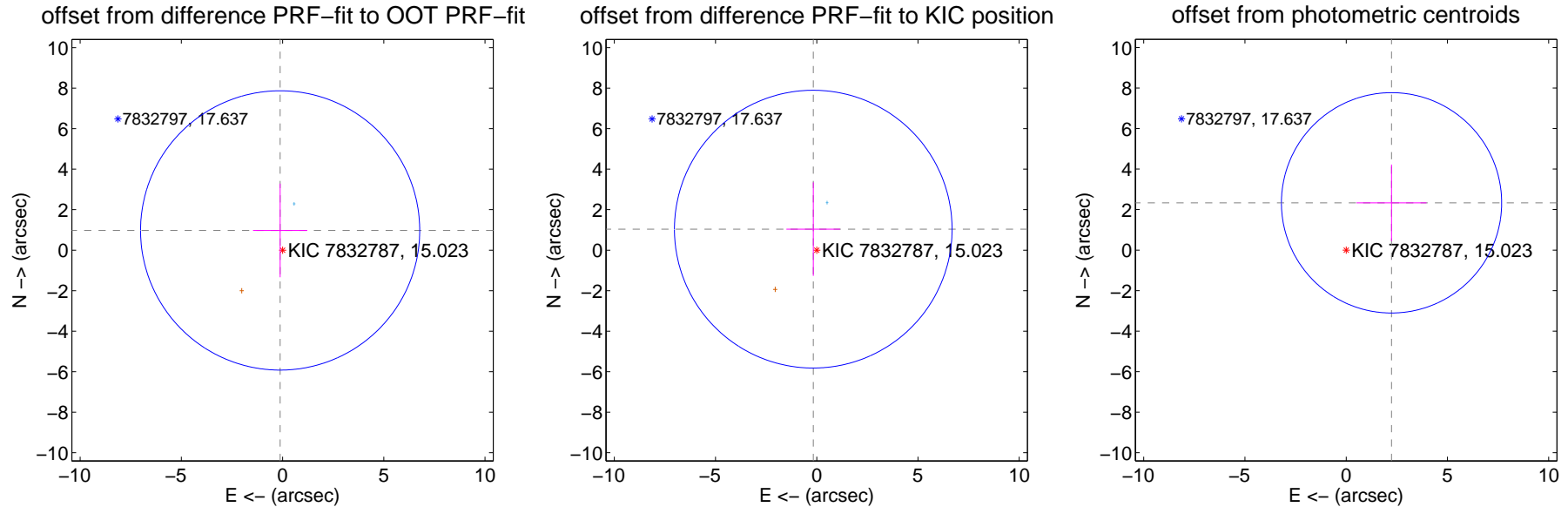
DV Centroid Data

Supplemental centroid analysis for 007832787-03. Kepler magnitude: 15.02. Transit SNR 10.14

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.982 ± 2.299	0.43	0.121 ± 1.339	0.974 ± 2.311
PRF-fit source offset from KIC position	1.052 ± 2.286	0.46	0.172 ± 1.327	1.038 ± 2.307
photometric centroid source offset	3.23 ± 1.81	1.78	-2.24 ± 1.73	2.33 ± 1.89

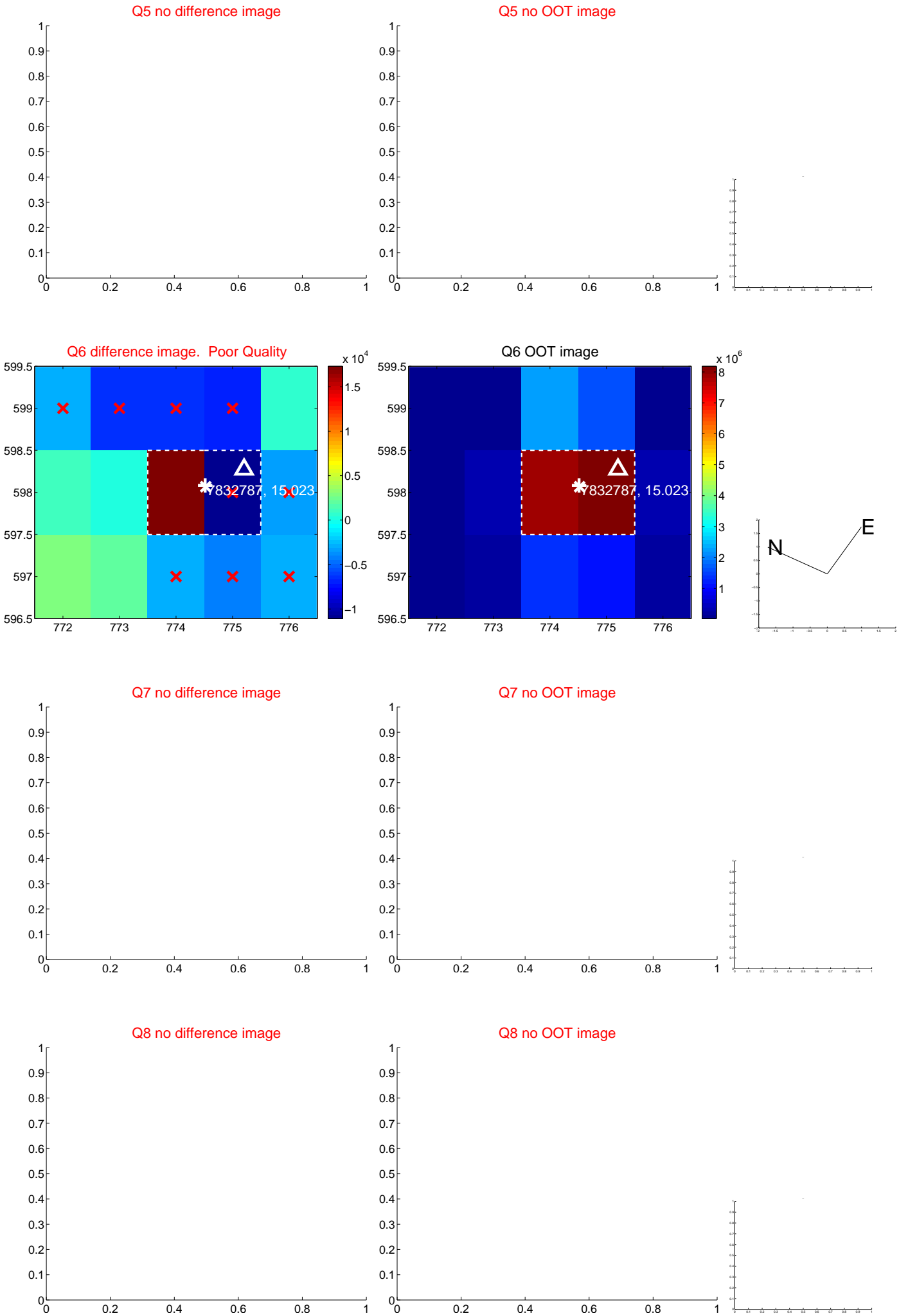


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

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



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

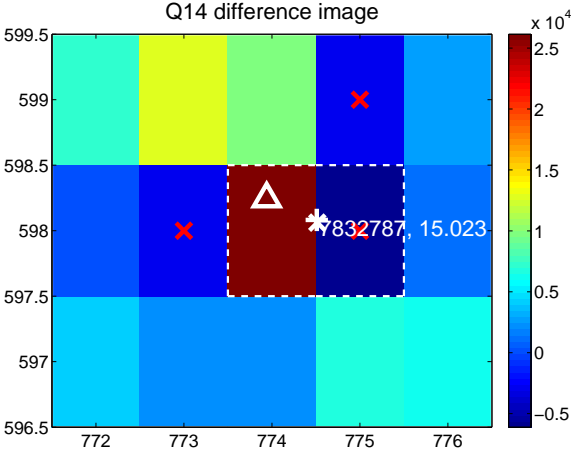
Q13 no difference image



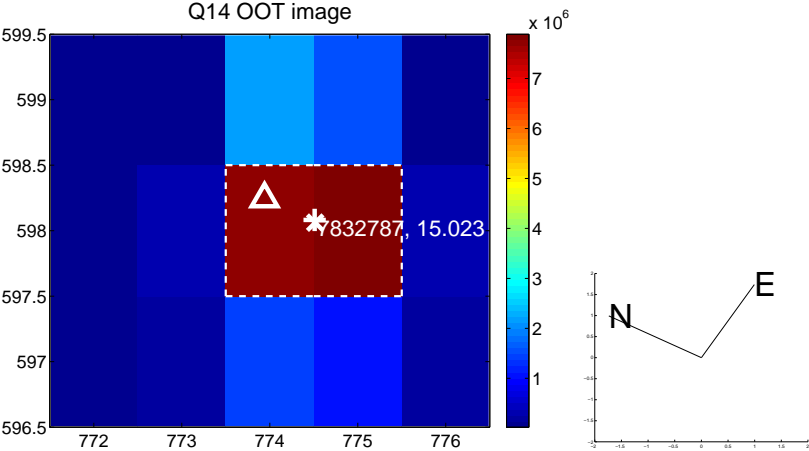
Q13 no OOT image



Q14 difference image



Q14 OOT image



Q15 no difference image



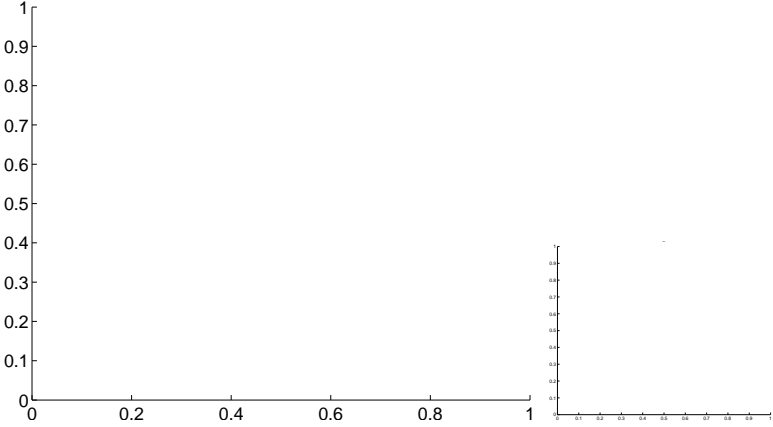
Q15 no OOT image



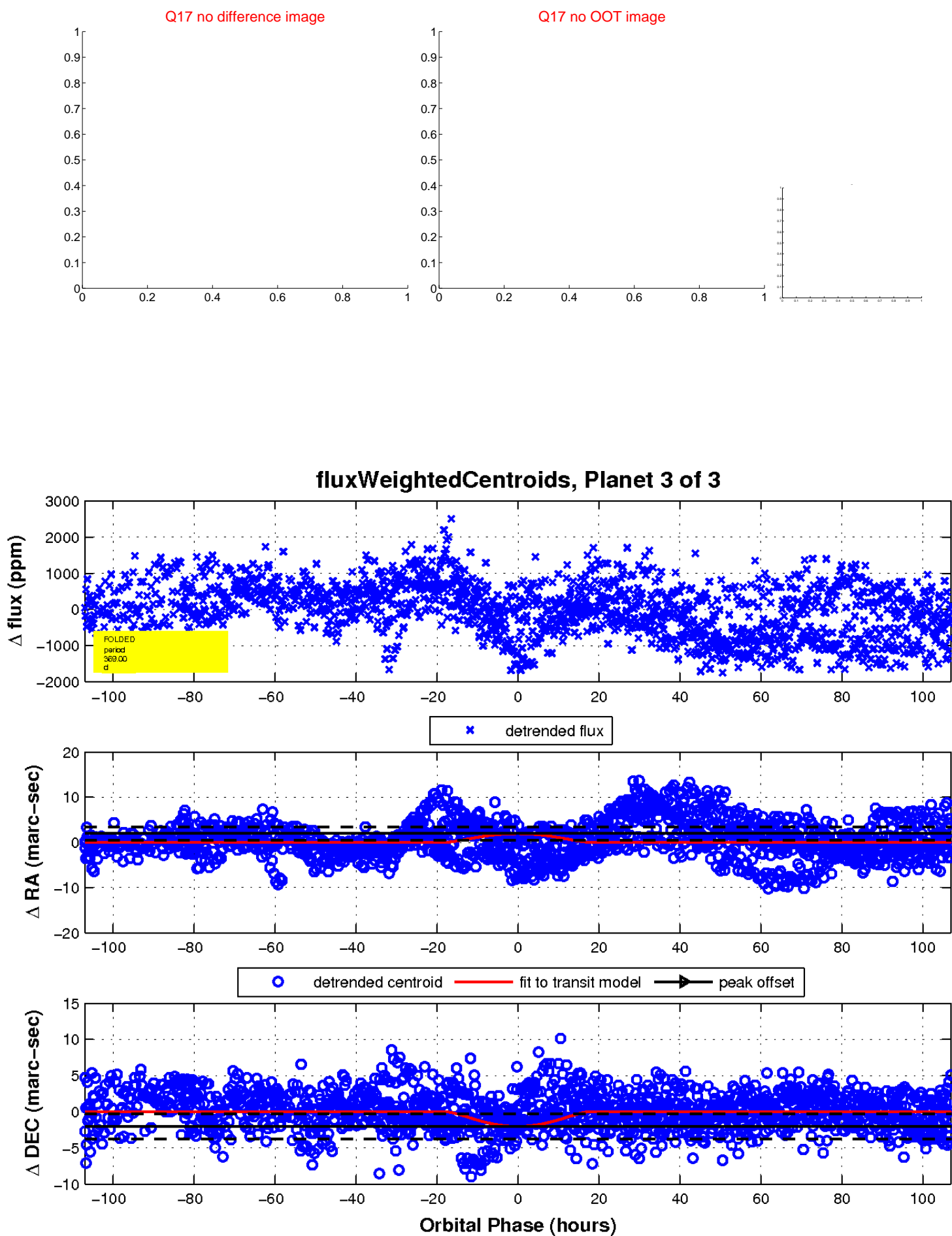
Q16 no difference image



Q16 no OOT image



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



UKIRT Image

Declination

